

直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR

28BL



详细说明 General Specifications

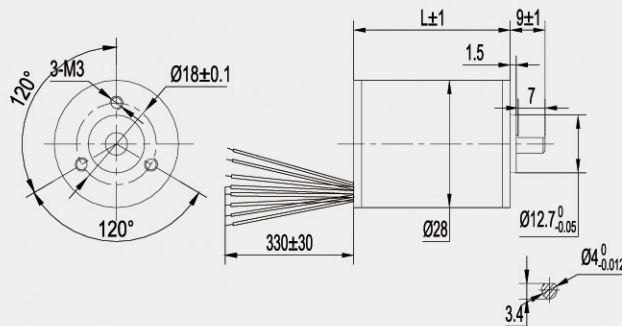
Winding Type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient temperature Range	-20°C~+50°C
Insulation Resistance	100M Ω Min.500V DC
Dielectric Strength	500V AC 1 minute

技术数据 Electrical Specifications

型号	Model	28BL01	28BL02	28BL03
磁极数	Number of Poles		4	
相数	Number of Phase		3	
额定电压	Rated Voltage (VDC)	12	24	24
额定转速	Rated speed (RPM)	3000	3000	3000
额定力矩	Rated Torque (N-m)	0.015	0.03	0.05
额定电流	Rated Current (Amps)	0.9	1	1.5
输出功率	Output Power (Watts)	11	22	33
峰值扭矩	Peak Torque1 (N-m)	0.045	0.09	0.15
峰值电流	Peak Current (Amps)	2.7	3	4.5
转矩常数	Torque constant (N-m/Amps)	0.035	0.058	0.057
反电势	Back EMF (V/kRPM)	3.37	6.1	6.1
转动惯量	Rotor inertia (g·cm ²)	1.5	2.5	6
机身长度	Body Length (L) (mm)	40.5	53	78
重量	Mass (kg)	0.08	0.1	0.3

*以上仅为代表产品, 派生产品可根据客户要求制作。We also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions

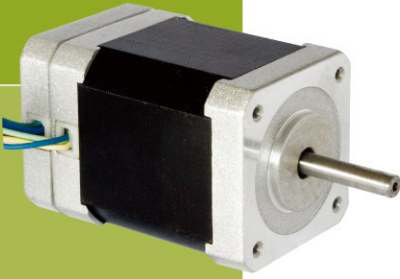


接线图 Wiring diagram

CONNECTION TABLE			
+5V	RED	红	AWG26 UL1007
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	

直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR

42BLF Series



详细说明 General Specifications

Winding Type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V DC
Dielectric Strength	500V AC 1minute

技术数据 Electrical Specifications

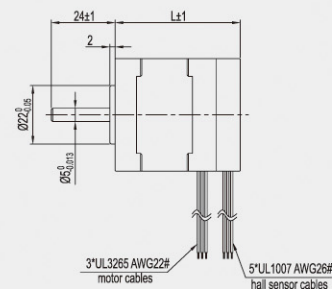
Model		42BLF01	42BLF02	42BLF03
Number of Poles			8	
Number of Phases			3	
Nominal Voltage	VDC		24	
Rated speed	RPM		4000	
Rated Torque	N-m	0.063	0.125	0.188
Rated Current	Amps	1.9	3.4	5.7
Output Power	Watts	26	52	78
Peak Torque1	N-m	0.18	0.38	0.75
Peak Current	Amps	5.7	10.2	18
Torque constant	N-m/Amps	0.035	0.036	0.036
Back EMF	V/kRPM	3.7	3.8	3.8
Rotor inertia	g·cm²	24	48	72
Body Length (L)	mm	47	63	79
Mass	kg	0.33	0.48	0.63

Caution 1: Peak Torque is provided for the purpose of performance calculations only.

Operate near, or at this condition will result in motor damaged.

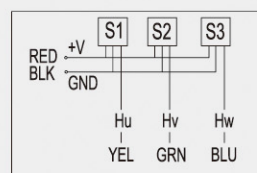
Note: We can also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions

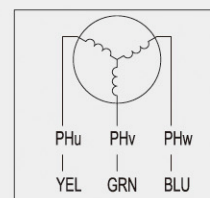


接线图 Wiring diagram

Connection diagram:



Hall sensor cables
Note: hall sensor power supply
voltage +5 to +20VDC



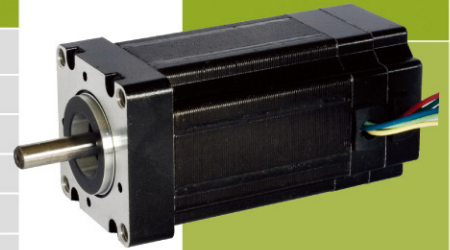
Wiring cables

直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR

42BLFX Series

详细说明 General Specifications

Winding Type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V DC
Dielectric Strength	500V AC 1minute



技术数据 Electrical Specifications

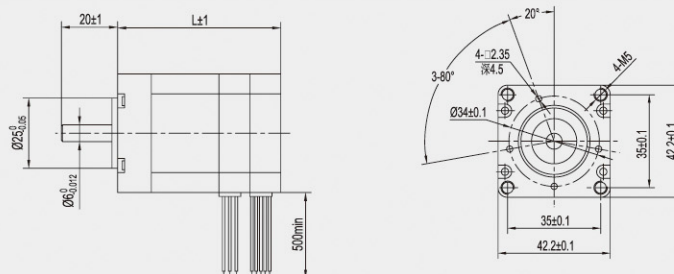
Model		42BLFX01	42BLFX02
Number of Poles		8	
Number of Phases		3	
Nominal Voltage	VDC	48	
Rated speed	RPM	4000	4000
Continuous Torque	N-m	0.12	0.2
Continuous Current	Amps	1.2	2.1
Output Power	Watts	50	84
Peak Torque1	N-m	0.36	0.6
Peak Current	Amps	3.6	6.3
Torque constant	N-m/Amps	0.108	0.104
Back EMF	V/kRPM	11.3	10.9
Rotor inertia	g · cm²	62	123
Body Length (L)	mm	59	84
Mass	kg	0.35	0.5

Caution 1: Peak Torque is provided for the purpose of performance calculations only.

Operate near, or at this condition will result in motor damaged.

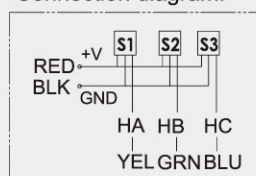
Note: We can also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions

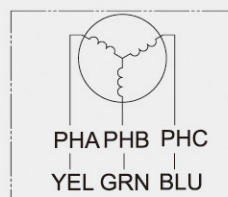


接线图 Wiring diagram

Connection diagram:



Hall sensor cable
Note: hall sensor power supply voltage +5 to +20VDC



Wiring cable

直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR

42BLY Series



详细说明 General Specifications

Winding Type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V DC
Dielectric Strength	500V AC 1minute

技术数据 Electrical Specifications

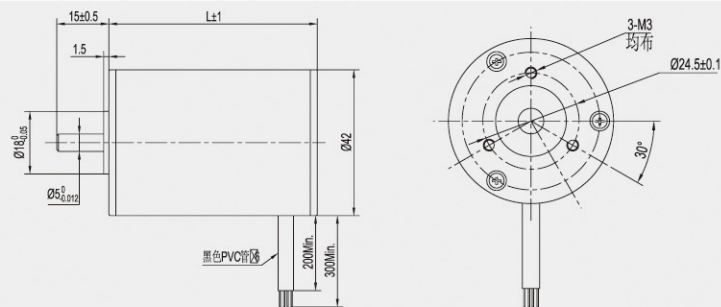
Model		42BLY01	42BLY02	42BLY03
Number of Poles			4	
Number of Phases			3	
Nominal Voltage	VDC		24	
Rated speed	RPM	3000	3000	3000
Rated Torque	N-m	0.035	0.07	0.105
Rated Current	Amps	0.9	2.1	3
Output Power	Watts	11	22	33
Peak Torque1	N-m	0.11	0.21	0.315
Peak Current	Amps	2.7	6.3	9
Torque constant	N-m/Amps	0.035	0.035	0.036
Back EMF	V/kRPM	3.37	3.37	3.38
Rotor inertia	g·cm ²	25	35	45
Body Length (L)	mm	42	60	78
Mass	kg	0.35	0.5	0.8

Caution 1: Peak Torque is provided for the purpose of performance calculations only.

Operate near, or at this condition will result in motor damaged.

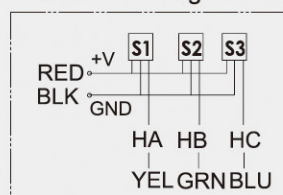
Note: We can also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions



接线图 Wiring diagram

Connection diagram:



Hall sensor cable

Note: hall sensor power supply voltage +5 to +20VDC



Wiring cable

12V内置驱动无刷直流电机 BUILT-IN DRIVER BRUSHLESS DC MOTOR

57BID



详细说明 General Specifications

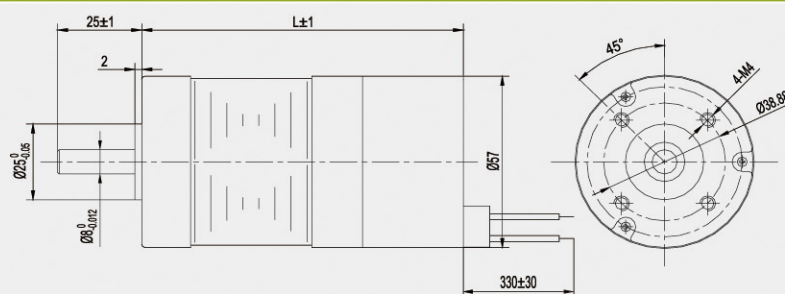
Winding Type	Star
Insulation Class	B
Ambient temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V
Dielectric Strength	500V AC 1 minute

技术数据 Electrical Specifications

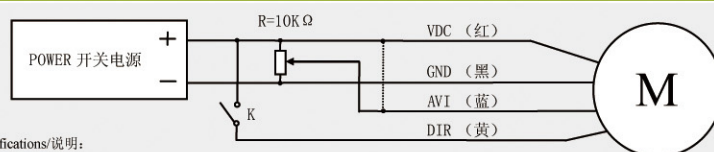
型号	Model	57BID01-12	57BID02-12	57BID03-12	57BID04-12
磁极数	Poles	4			
相数	Phase	3			
额定电压	Rated Voltage (VDC)	12VDC ± 10%			
额定转速	Rated speed (RPM)	3000	3000	3000	3000
额定力矩	Rated Torque (N-m)	0.057	0.11	0.165	0.22
额定电流	Rated Current (Amps)	2.4	4.6	6	8.8
输出功率	Output Power (Watts)	15	34	52	69
峰值转矩	Peak Torque1 (N-m)	0.18	0.38	0.58	0.8
峰值电流	Peak Current (Amps)	7.5	14	18	24
转矩常数	Torque constant (N-m/Amps)	0.023	0.022	0.023	0.022
反电势	Back EMF (V/kRPM)	2.4	2.3	2.4	2.3
转动惯量	Rotor inertia (g · cm ²)	32	42	58	72
机身长度	Body Length (L) (mm)	71	76	86	96
重量	Mass (kg)	0.45	0.6	0.75	0.9

*以上仅为代表产品, 派生产品可根据客户要求制作。We also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions



接线图 Wiring diagram



Specifications/说明:

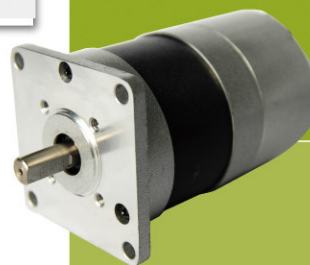
Switching power supply output current shall be not less than the motor peak current; through AVI terminals can be governor; if the governor does not need, it can short VDC and then motor running at rated speed; DIR terminals can be controlled the motor rotation direction, when k switch off, the motor anti-clockwise rotation, when linking-up, the motor rotating clockwise/开关电源输出电流不得小于电机运行时的峰值电流; 通过 AVI 端子可进行调速, 如果不需要调速, 可直接与 VDC 短接, 电机以额定转速运行; 通过 DIR 端子可控制电机旋转方向, 开关 K 断开时, 电机逆时针旋转, 闭合时, 电机顺时针旋转。

24V内置驱动无刷直流电机 BUILT-IN DRIVER BRUSHLESS DC MOTOR

57BID

详细说明 General Specifications

Winding Type	Star
Insulation Class	B
Ambient temperature	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V
Dielectric Strength	500V AC 1 minute

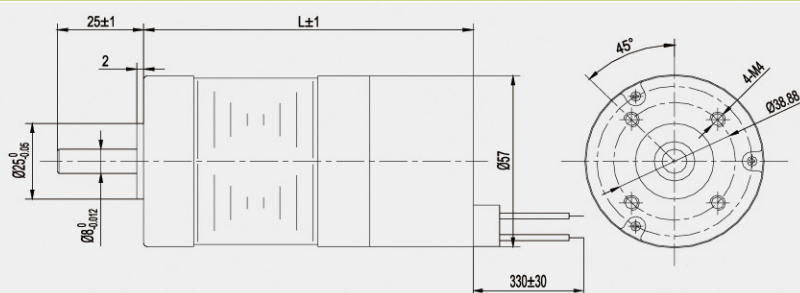


技术数据 Electrical Specifications

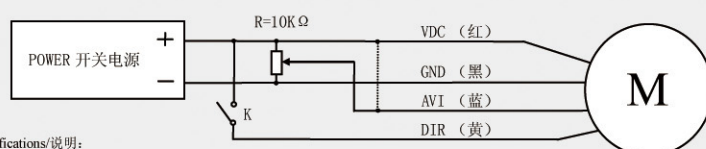
型号	Model	57BID01-24	57BID02-24	57BID03-24	57BID04-24	57BID05-24	57BID06-24
磁极数	Poles	4					
相数	Phase	3					
额定电压	Rated Voltage (VDC)	24VDC ± 10%					
额定转速	Rated speed (RPM)	3000	3000	3000	3000	3000	3000
额定转矩	Rated Torque (N·m)	0.057	0.11	0.165	0.22	0.33	0.44
额定电流	Rated Current (Amps)	1.2	2.3	3	4.4	6.1	8.5
输出功率	Output Power (Watts)	15	34	52	69	103	138
峰值扭矩	Peak Torque1 (N·m)	0.18	0.38	0.58	0.8	1.2	1.6
峰值电流	Peak Current (Amps)	3.6	6.9	9	13	19.8	25.8
转矩常数	Torque constant (N·m/Amps)	0.062	0.06	0.06	0.062	0.06	0.062
反电势	Back EMF (V/kRPM)	6.3	6.3	6.3	6.3	6.3	6.3
转动惯量	Rotor inertia (g·cm²)	32	42	58	72	106	140
机身长度	Body Length (L) (mm)	71	76	86	96	116	136
重量	Mass (kg)	0.6	0.7	0.85	0.95	1.25	1.6

•以上仅为代表产品，派生产品可根据客户要求制作。We also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions



接线图 Wiring diagram



Specifications/说明:

Switching power supply output current shall be not less than the motor peak current; through AVI terminals can be governor; if the governor does not need, it can short VDC and then motor running at rated speed; DIR terminals can be controlled the motor rotation direction, when K switch off, the motor anti-clockwise rotation, when linking-up, the motor rotating clockwise/开关电源输出电流不得小于电机运行时的峰值电流; 通过 AVI 端子可进行调速, 如果不需要调速, 可直接与 VDC 短接, 电机以额定转速运行; 通过 DIR 端子可控制电机旋转方向, 开关 K 断开时, 电机逆时针旋转, 闭合时, 电机顺时针旋转。

57BL Series

Winding Type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V DC
Dielectric Strength	700V AC 1minute

Model		57BL01	57BL02	57BL03	57BL04	57BL05	57BL06
Number of Poles		4					
Number of Phases		3					
Nominal Voltage		VDC					
Rated speed		RPM	2500	3000	3000	3000	3000
Rated Torque		N-m	0.057	0.11	0.165	0.22	0.33
Rated Current		Amps	1.2	2.3	3.0	4.4	6.6
Output Power		Watts	15	34	52	69	103
Peak Torque1		N-m	0.18	0.38	0.58	0.8	1.2
Peak Current		Amps	3.6	6.8	9	13.2	19.8
Torque constant		N-m/Amps	0.074	0.059	0.06	0.062	0.062
Back EMF		V/kRPM	7.75	6.2	6.3	6.5	6.5
Rotor inertia		g·cm²	32	42	58	72	106
Body Length (L)		mm	37	47	57	67	87
Mass		kg	0.43	0.5	0.67	0.75	1.0

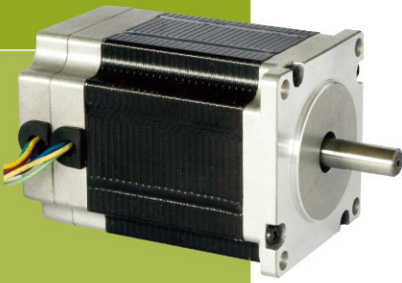
Note: We can also manufacture products according to customer's requirements.

PHA PHB PHC
YEL GRN BLU

Wiring cable

直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR

57BLF Series



详细说明 General Specifications

Winding Type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V DC
Dielectric Strength	700V AC 1minute

技术数据 Electrical Specifications

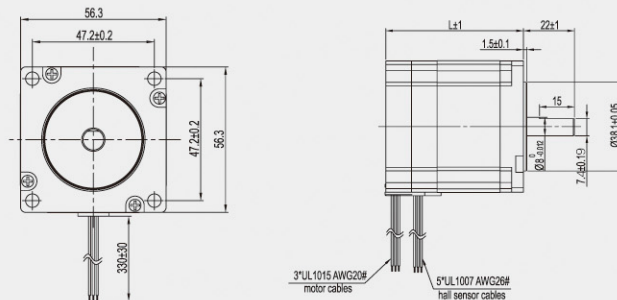
Model		57BLF01	57BLF02	57BLF03	57BLF04
Number of Poles				8	
Number of Phases				3	
Nominal Voltage	VDC			24	
Rated speed	RPM			3000	
Rated Torque	N-m	0.2	0.4	0.6	0.8
Rated Current	Amps	4	7.8	12	15
Output Power	Watts	63	125	188	250
Peak (Stall) Torque1	N-m	0.6	1.2	1.8	2.4
Peak Current	Amps	12	23.5	36	45
Torque constant	N-m/Amps	0.065	0.066	0.066	0.066
Back EMF	V/kRPM	6.23	6.3	6.3	6.3
Rotor inertia	g·cm ²	120	170	220	270
Body Length (L)	mm	59	80	101	122
Mass	kg	0.65	1.0	1.4	2.0

Caution 1: Peak (Stall) Torque is provided for the purpose of performance calculations only.

Operate near, or at, a stalled condition will result in motor damaged.

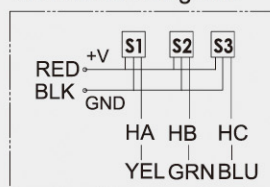
Note: We can also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions



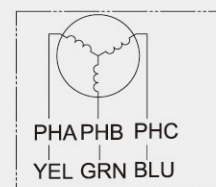
接线图 Wiring diagram

Connection diagram:



Hall sensor cable

Note: hall sensor power supply voltage +5 to +20VDC



Wiring cable

直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR

62BL Series

详细说明 General Specifications

Winding Type	Delta
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V DC
Dielectric Strength	700V AC 1minute



技术数据 Electrical Specifications

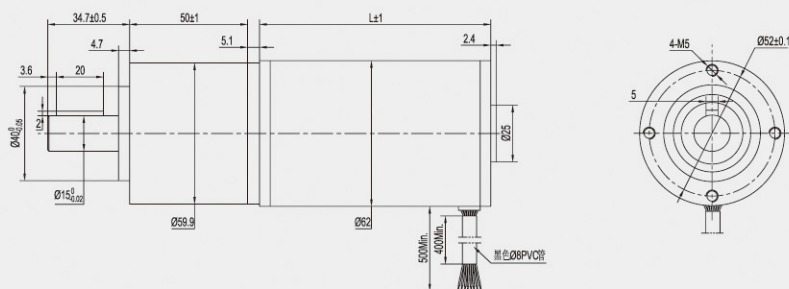
Model		62BL01	62BL02
Number of Poles			4
Number of Phases			3
Nominal Voltage	VDC		24
Rated speed	RPM	3200	3200
Rated Torque	N-m	0.17	0.28
Rated Current	Amps	3.5	6.2
Output Power	Watts	57	94
Peak Torque1	N-m	0.51	0.84
Peak Current	Amps	11.1	19.2
Torque constant	N-m/Amps	0.046	0.046
Back EMF	V/kRPM	4.81	4.81
Rotor inertia	g·cm ²	185	353
Body Length (L)	mm	98	128
Gear Ratio			7:1
Mass	kg	1.15	1.65

Caution 1: Peak Torque is provided for the purpose of performance calculations only.

Operate near, or at this condition will result in motor damaged.

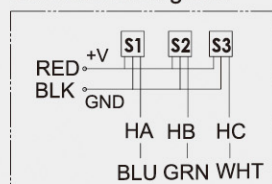
Note: We can also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions



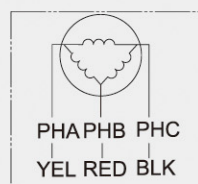
接线图 Wiring diagram

Connection diagram:



Hall sensor cable

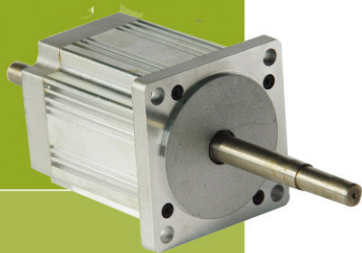
Note: hall sensor power supply voltage +5 to +20VDC



Wiring cable

直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR

80BLDC



详细说明 General Specifications

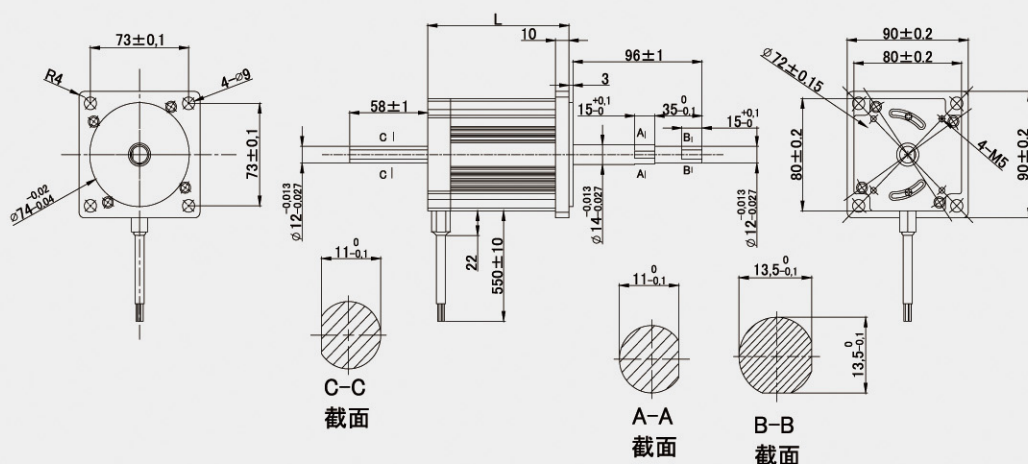
Insulation Class 绝缘等级	B 130°C /F 155°C
Temperature Rise 温升	75 K MAX,
Environment Temperature and Humidity 环境温度及湿度	+15°C~+35°C, 45%~75%,
Protection&Cooling 防护等级&冷却	IP40及以下&IC00
Installation 安装方式	IM B5大凸缘
Shaft OD 出轴直径	φ15.0 mm MAX
Bearing 轴承	Ball 滚动轴承
Components 配件	Magnetic encoder 磁编码器

技术数据 Electrical Specifications

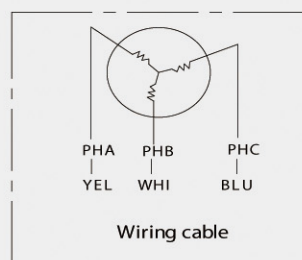
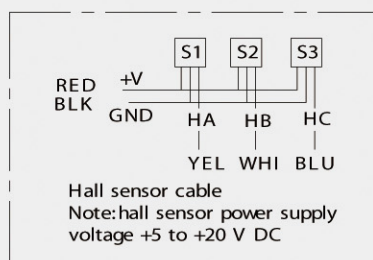
电机型号 Model	额定电压 Rated Voltage (V)	空载转速 NoLoad speed (RPM)	空载电流 NoLoad Current (A)	额定转速 Rated Speed (RPM)	额定电流 Rated Current (A)	额定转矩 Rated Torque (N.M)	额定功率 Rated Power (W)	机身长度 Length L (MM)
80BLD36-001	36.0	3500	1.2	3000	10.5	0.8	250	110
80BLD220-001	220.0	6000	0.4	5000	3.5	1.0	500	110
80BLD48-001	48.0	5500	1.0	4500	11.0	1.2	350	145
80BLD310-001	310.0	5000	0.3	4000	3.6	1.8	750	145

•以上仅为代表产品, 派生产品可根据客户要求制作。We also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions



接线图 Wiring diagram

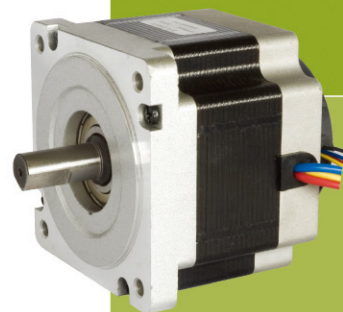


直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR

86BLF Series

详细说明 General Specifications

Winding Type	Star
Hall Effect angle	120° electrical angle
Insulation Class	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	100M Ω Min.500V DC
Dielectric Strength	700V AC 1minute



技术数据 Electrical Specifications

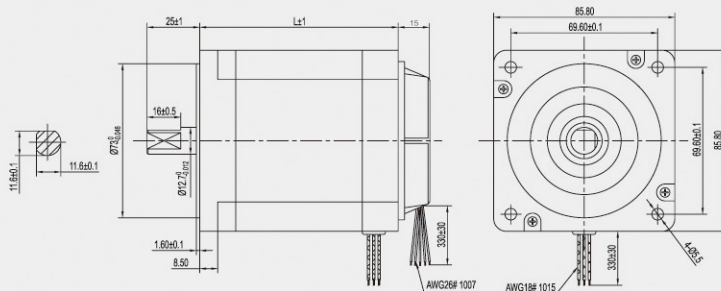
Model		86BLF07	86BLF06	86BLF01	86BLF02	86BLF03	86BLF04
Number of Poles		8					
Number of Phases		3					
Nominal Voltage	VDC	48					
Rated speed	RPM	3000					
Rated Torque	N-m	2.1	1.8	1.4	1.05	0.7	0.35
Rated Current	Amps	22	18	14	9.6	6.6	3.9
Output Power	Watts	660	550	440	330	220	110
Peak Torque1	N-m	6.3	5.4	4.2	3.2	2.1	1.05
Peak Current	Amps	55	46	38.0	29.0	19.8	10.8
Torque constant	N-m/A	0.116	0.115	0.115	0.115	0.112	0.11
Back EMF	V/kRPM	12.2	12.0	12.0	12.0	11.8	11.5
Rotor inertia	g·cm²	1850	1550	1250	950	650	350
Body Length (L)	mm	124	109	94	81	67	57
Mass	kg	4.8	3.2	2.75	2.2	1.75	1.1

Caution 1: Peak Torque is provided for the purpose of performance calculations only.

Operate near, or at this condition will result in motor damaged.

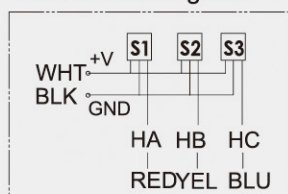
Note: We can also manufacture products according to customer's requirements.

外型图 Mechanical Dimensions



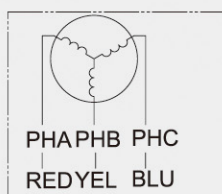
接线图 Wiring diagram

Connection diagram:



Hall sensor cable

Note: hall sensor power supply voltage +5 to +20VDC



Wiring cable