

BLDC
GL GEAR
MOTOR
无刷GL型减速电机

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2023

匠心制造·专注·用心



型号的阅读方法

PRODUCT NUMBER CODE

● 电机 Motor

5 B 90 - 24 GL - 25S

(1) (2) (3) (4) (5) (6)

①	机座号 Code	2	3	4	5	6	7
	电机外径 x 安装法兰 Mounting flange(mm)	60x60	60x70	80x80	90x90	104x104	120x120
②	马达系列 Motor Series	B: 无刷直流 BRUSHLESS DC Motor					
		D: 有刷直流 DC Motor					
③	输出功率 Output (W)	例 (Example) 90: 90W					
④	电源电压 Voltage	24:24V		36:36V			
		48:48V		220:220V			
⑤	转轴形状 Motor shaft ty	GL:GL 型齿轮轴 GL type pinion shaft					
		25S:2500RPM					
⑥	转速 Speed	18S:1800RPM					

● 减速机 Reducer

5 GL - 200 RC

(1) (2) (3) (4)

①	减速机的尺寸 Reducer frame size:	2:60mm 4:80mm 5:90mm 6:104mm
②	类型 type of pinion:	GL:GL 型减速器 GL-type reducer
③	减速比 Gear Ratio:	例 (Example) 200: 1:200
④	输出轴形式 Output Shaft Type	RC 空心轴输出: Hollow shaft output RT 实心轴输出: Solid shaft output

● 订购说明 Note

- 无刷直流电机系列产品参考国外优秀产品外形设计，产品使用方便，结构合理紧凑。安装方式分为通孔和不通孔，轴可定制，其他按常规参数匹配。
- 无刷直流电机系列的防护等级为 IP40。
- 无刷直流电机系列的使用寿命为 5000 小时。此寿命的定义为在目前样本册所表述的转速情况下达到。
- 无刷直流电机系列的控制器为 BX 系列，均为外置系列。
- 此产品通过 CE 高 / 低压认证。
- BLDC motor series refer to the foreign excellent product appearance design, the product is easy to use, the structure is reasonable and compact. FTG series can be divided into through-hole and through-hole, the shaft can be customized, and the rest can be matched according to the general parameters.
- The protection class of BLDC motor series is IP40.
- The service life of BLDC motor series is 5000 hours. This life is defined to be achieved at the speed described in the current sample book.
- The controller of BLDC motor series is BX series, both are external series.
- This product has passed the CE high/low pressure certification.

● 可选配电机 Optional Motor



交流电机, AC Motor
机座 Code: 60~120
功率 Power: 6~400W



直流电机 DC Motor
机座 Code: 60~104
功率 Power: 6~250W



无刷电机 BLDC Motor
机座 Code: 60~120
功率 Power: 25~750W

无刷GL型减速电机 BLDC GL GEAR MOTOR

60GL
BRUSHLESS无刷

无刷GL型减速电机
BLDC GL GEAR MOTOR



● 电机型号/性能 List of motor characteristics

电机型号 Motor Model	电压 Voltage	功率 Power	空载电流 No load Current	空载转速 No load Speed	额定电流 Rated Current	额定转速 Rated Speed	额定扭矩 Rated Torque	有否 Hall(Y/N)	电机寿命 Life(Hours)
2B40-24GL-30S	24	40	0.7	3800	2.5	3000	0.13	/	> 5000

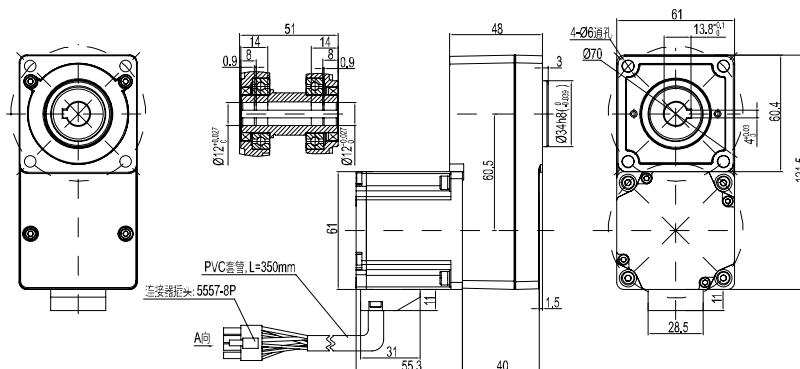
● 减速箱减速比 / 性能对照表 Gear reduction ratio/performance comparison---F2B40-24GL-30S

减速比 Gear Ratio	5	10	15	20	30	50	100	150	200
转速 r/min Speed	600	300	200	150	100	60	30	20	15
容许转矩 N.m Torque	0.46	0.93	1.4	1.9	2.8	4.6	9.3	13	13

- 表中转速是以电机的平均转速为基数除以减速比而算出的数值，实际转速将随负载大小而变化，变化范围 2-20%。
- 表中扭矩是以电机额定扭矩 × 减速比 × 传动效率计算而得。
- In the table, the speed is calculated from the base of the motor's average speed divided by the deceleration ratio. The actual speed will vary with the load, ranging from 2 to 20%.
- Table transfer torque is calculated from motor rated torque * deceleration ratio * transmission efficiency.

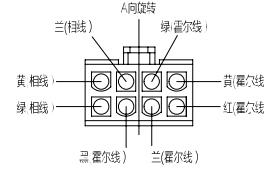
● 尺寸图 DIMENSIONAL DRAWING

重量 Weight: 1.37kg



● 线序图 Line Sequence Diagram

相线定义 引出线颜色	电机引出线(端)			信号引出线(组)				
	U 黄	V 绿	W 蓝	+	-	H _a 红 黑	H _b 绿 黑	H _c 蓝 黑
线规								



无刷GL型减速电机 BLDC GL GEAR MOTOR

80GL
BRUSHLESS无刷



● 电机型号/性能 List of motor characteristics

电机型号 Motor Model	电压 Voltage	功率 Power	空载电流 No load Current	空载转速 No load Speed	额定电流 Rated Current	额定转速 Rated Speed	额定扭矩 Rated Torque	有否 Hall(Y/N)	电机寿命 Life(Hours)
4B60-24GL-30S	24	60	0.6	3700	3.5	3000	0.19	/	> 5000

● 减速箱减速比 / 性能对照表 Gear reduction ratio/performance comparison---F4B60-24GL-30S

减速比 Gear Ratio	5	10	15	20	30	50	100	150	200
转速 r/min Speed	600	300	200	150	100	60	30	20	15
容许转矩 N.m Torque	0.70	1.39	2.1	2.8	4.2	7	13.9	21	28

● 表中转速是以电机的平均转速为基数除以减速比而算出的数值，实际转速将随负载大小而变化，变化范围 2-20%。

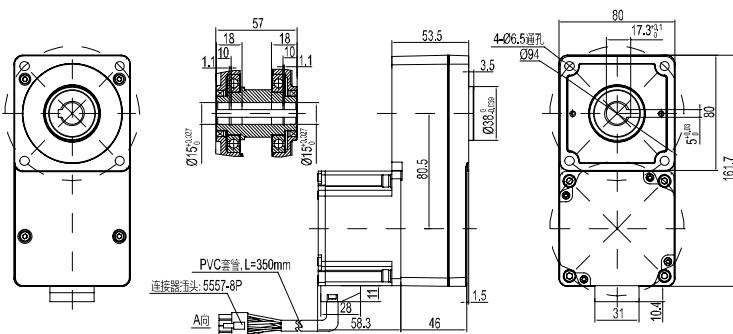
● 表中扭矩是以电机额定扭矩 \times 减速比 \times 传动效率计算而得。

● In the table, the speed is calculated from the base of the motor's average speed divided by the deceleration ratio. The actual speed will vary with the load, ranging from 2 to 20%.

● Table transfer torque is calculated from motor rated torque \times deceleration ratio \times transmission efficiency.

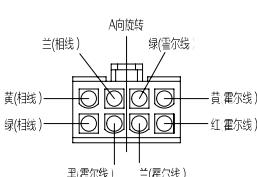
● 尺寸图 DIMENSIONAL DRAWING

重量 Weight: 2.73kg



● 线序图 Line Sequence Diagram

线缆定义	电机引出线(粗)			信号引出线(细)			
	U	V	W	+	-	Ha	Hb
引出线颜色	黄	绿	蓝	红	黑	黄	绿
线规							



无刷GL型减速电机 BLDC GL GEAR MOTOR

90GL
BRUSHLESS无刷

无刷GL型减速电机
BLDC GL GEAR MOTOR



● 电机型号/性能 List of motor characteristics

电机型号 Motor Model	电压 Voltage	功率 Power	空载电流 No load Current	空载转速 No load Speed	额定电流 Rated Current	额定转速 Rated Speed	额定扭矩 Rated Torque	有否 Hall(Y/N)	电机寿命 Life(Hours)
F55B150-24GL-30S	24	150	1.4	4000	8.0	3000	0.48	/	> 5000

● 减速箱减速比 / 性能对照表 Gear reduction ratio/performance comparison---F55B150-24GL-30S

减速比 Gear Ratio	5	10	15	20	30	50	100	150	200
转速 r/min Speed	600	300	200	150	100	60	30	20	15
容许转矩 N.m Torque	1.7	3.5	5.2	7	10.5	17.4	35	50	50

● 表中转速是以电机的平均转速为基数除以减速比而算出的数值，实际转速将随负载大小而变化，变化范围 2-20%。

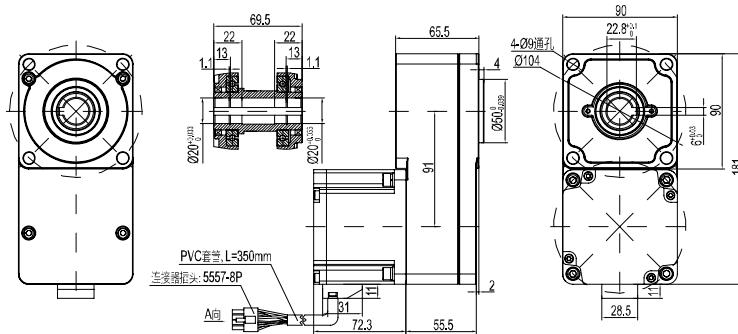
● 表中扭矩是以电机额定扭矩 × 减速比 × 传动效率计算而得。

● In the table, the speed is calculated from the base of the motor's average speed divided by the deceleration ratio. The actual speed will vary with the load, ranging from 2 to 20%.

● Table transfer torque is calculated from motor rated torque * deceleration ratio * transmission efficiency.

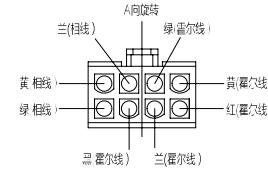
● 尺寸图 DIMENSIONAL DRAWING

重量 Weight: 3.98kg



● 线序图 Line Sequence Diagram

相线定义	电机引出线(端)			信号引出线(组)				
	U	V	W	+	-	H _a	H _b	H _c
引出线颜色	黄	绿	蓝	红	黑	黄	绿	蓝
线规								



无刷GL型减速电机

BLDC GL GEAR MOTOR

104GL
BRUSHLESS无刷



● 电机动态/性能 List of motor characteristics

电机动态 Motor Model	电压 Voltage	功率 Power	空载电流 No load Current	空载转速 No load Speed	额定电流 Rated Current	额定转速 Rated Speed	额定扭矩 Rated Torque	有否 Hall(Y/N)	电机寿命 Life(Hours)
6B200-24GL-30S	24	200	2.2	3400	10.5	3000	0.64	/	> 5000
6B300-24GL-30S	24	300	2.5	3500	16	3000	0.96	/	> 5000

● 减速箱减速比 / 性能对照表 Gear reduction ratio/performance comparison--F6B300-24GL-30S(5-100) F6B200-24GL-30S(150-200)

减速比 Gear Ratio	5	10	15	20	30	50	100	150	200
转速 r/min Speed	600	300	200	150	100	60	30	20	15
容许转矩 N.m Torque	3.5	7	10.5	13.9	21	35	70	70	93

● 表中转速是以电机的平均转速为基数除以减速比而算出的数值，实际转速将随负载大小而变化，变化范围 2-20%。

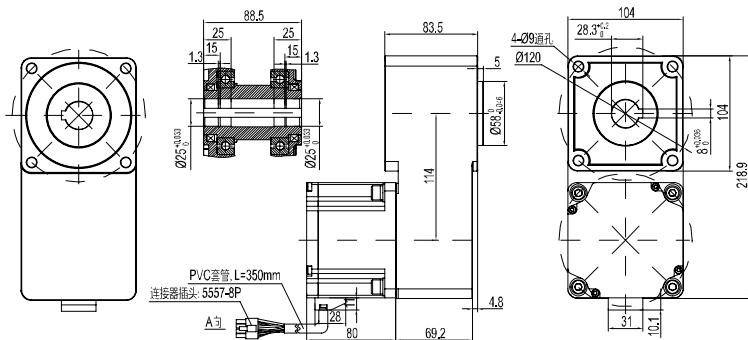
● 表中扭矩是以电机额定扭矩 \times 减速比 \times 传动效率计算而得。

● In the table, the speed is calculated from the base of the motor's average speed divided by the deceleration ratio. The actual speed will vary with the load, ranging from 2 to 20%.

● Table transfer torque is calculated from motor rated torque \times deceleration ratio \times transmission efficiency.

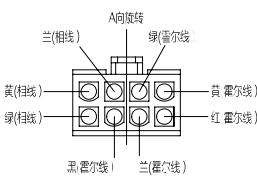
● 尺寸图 DIMENSIONAL DRAWING

重量 Weight: 7.19kg



● 线序图 Line Sequence Diagram

线缆定义	电机引出线(粗)			信号引出线(细)			
	U	V	W	+	-	Ha	Hb
引出线颜色	黄	绿	蓝	红	黑	黄	绿
线规							



无刷GL型减速电机 BLDC GL GEAR MOTOR

120GL
BRUSHLESS无刷

无刷GL型减速电机
BLDC GL GEAR MOTOR



● 电机型号/性能 List of motor characteristics

电机型号 Motor Model	电压 Voltage	功率 Power	空载电流 No load Current	空载转速 No load Speed	额定电流 Rated Current	额定转速 Rated Speed	额定扭矩 Rated Torque	有否 Hall(Y/N)	电机寿命 Life(Hours)
7B750-220GL-30S	220	750	1.5	4500	4.2	3000	2.39	/	> 5000

● 减速箱减速比 / 性能对照表 Gear reduction ratio/performance comparison---F7B750-220GL-30S

减速比 Gear Ratio	5	10	15	20	30	50	100	150	200
转速 r/min Speed	600	300	200	150	100	60	30	20	15
容许转矩 N.m Torque	8.71	17.43	26.1	34.9	52.3	87.1	174.3	200	200

● 表中转速是以电机的平均转速为基数除以减速比而算出的数值，实际转速将随负载大小而变化，变化范围 2-20%。

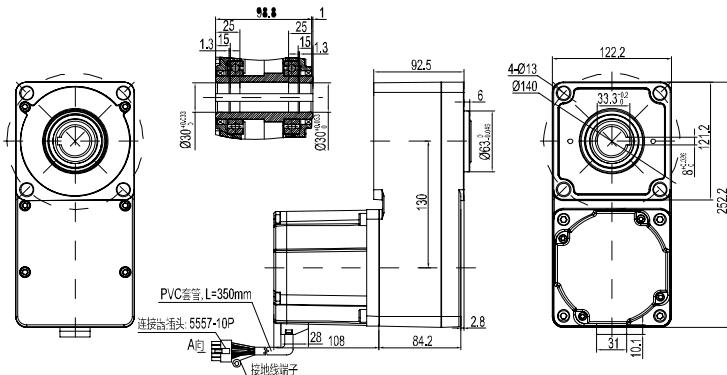
● 表中扭矩是以电机额定扭矩 × 减速比 × 传动效率计算而得。

● In the table, the speed is calculated from the base of the motor's average speed divided by the deceleration ratio. The actual speed will vary with the load, ranging from 2 to 20%.

● Table transfer torque is calculated from motor rated torque * deceleration ratio * transmission efficiency.

● 尺寸图 DIMENSIONAL DRAWING

重量 Weight: 9.1kg



● 线序图 Line Sequence Diagram

相线定义	电机引出线(粗)			信号引出线(细)		
	U	V	W	+	-	H _a H _b H _c
引出线颜色	黄	绿	蓝	红	黑	黄 绿 蓝

