

QINGYAO
SYSTEMS

**PRECISION.
TRUST.
DIFFERENT PERSPECTIVE.**

Moving Forward Together.



微型交、直流减速电动机

AC & DC GEAR MOTOR

QINGYAO
SYSTEMS

Precision. Trust. Different Perspective.

以精准、信任与不同视角持续前行

▶ 欢迎来到上海卿耀实业有限公司。

自 2017 年在上海成立以来，QINGYAO 持续成长为工业自动化、运动控制、机器人相关电机、可再生能源部件及传感解决方案领域值得信赖的合作伙伴。

▶ 我们不仅仅是提供产品。

我们倾听客户需求，理解实际应用环境，并与可靠的制造合作伙伴紧密协作，为客户提供实用、稳定并可定制的方案。

▶ 在当今快速变化的工业市场中，

客户需要的不只是标准化供货，更需要灵活的沟通、专业的技术理解、可靠的品质以及长期稳定的支持。QINGYAO 将以真诚、速度与责任感回应客户需求。

▶ 展望未来，

我们将持续强化产品能力，提升服务质量，并以信任、品质和客户满意为基础，建立长期合作伙伴关系。

“ 始终以不同的视角
观察、思考并回应。 ”



AC&DC GEAR MOTOR CATALOGUE

003-180

ZD LEADER

AC GEAR MOTOR
交流减速电动机



安全注意事项

SAFETY CAUTIONS

总体 General	请不要在齿轮箱及电机铭牌或产品目录的规格以外使用，以免触电，受伤及损坏装置等。 Please don't use motor out of the range which is clarified in of nameplate of gear box and motor and the specification of product catalogue, avoiding getting an electric shock, hurting or damaging the device. 请不要把手指或物品进入齿轮或电机开口部分，以免触电、受伤、发生火灾及损坏装置等。 Please do not put your fingers into the opening part of gear motor, in order to prevent getting an electric shock, hurting catching a fire or damaging device etc. 请不要使用带伤的齿轮箱或电机，以免有可能受伤，发生火灾等。 Please do not use the injured gear head or motor, in order to prevent hurting, catching a fire etc. 请不要拆下铭牌。Please do not put off the nameplate. 若客户对产品私自进行改造的，不属于保修范围，本公司不承担任何责任。 If the products are reformed by the customers personally, it doesn't belong to the guarantee scope, and our company doesn't undertake any responsibility.
搬动/Moving	搬动时，若发生脱落或倾倒，是很危险的，请充分注意。 When you move it, if it shed off or fall to one side, it is very dangerous, please pay more attention.
安装 Assembly	请绝对不要在齿轮箱和电机周围放置可燃物，以免发生火灾。 Please never put the flammable thing near motor, avoid fire. 请不要在电机周围放置物品，影响电机通风、冷却，甚至因异常多热而烫伤或发生火灾。 Please don't put things around motor, otherwise it can effect ventilation and cooling, even burning or catching a fire because of too hot. 裸手请不要触碰齿轮及电机轴端部、齿轮部的键槽，以免受伤。 Please do not touch the gear, the motor shaft and the key slot of the gear with naked hand, or you may be hurt. 在食品机械等可能发生漏油的装置中，请在安装部分另加一个能盛油的油杯，防止万一漏油对产品有不良的影响。 Please add an oil cup at device which has possibility of oil leakage, like food machinery, to avoid oil entering into motor.
对主机械的连接 Assemble to the main machine	在旋转部分，请设安全罩等，防止受伤。 Please set a safe cover above rotating part, to prevent being hurt. 在与对方机械连接前，请确认旋转方向。若旋转方向不正确，有可能受伤或破坏装置。 Before linking to the other machine, please confirm rotating direction is right, it may hurt the gear motor or destroy the device. if it's wrong direction.
配线/Wiring	在测试绝缘电阻时，请不要接触端子，以免触电危险。 Please don't get in touch with terminal, when you measure insulated resistance, preventing danger of getting an electric shock.
运转 Operation	请按照接线图或使用说明书实施与电源的连接，以免触电或发生火灾。（无端子箱的，请确实加强连接部分的绝缘） Please link with the electric source according to wire diagram and usage manual, in order to prevent getting an electric shock or catching a fire. (No terminal box, please strengthen the insulation of the connection part surely) 对电源电缆和电机引线，请不要过分弯曲、拉伸、夹紧，以免触电危险。 Referring to the electrical cable and the motor wire, please do not bend, stretch, and clip tightly excessively, in order to prevent getting an electric shock. 接地端子应牢固接地，以免触电危险。务必使用符合铭牌要求的电源，以免烧毁电机、发生火灾。 The terminal box connecting to the ground must be firm, in order to prevent getting an electric shock. Please adopt the electrical source according to the nameplate, to avoid burning the motor and catching a fire.
日常检查保养 The daily check and maintain	在运转中，绝对不要接近或接触旋转物体（轴等）。有卷入受伤时，请马上切断电源开关，及时处理。 When operating, do not get close to or touch the rotating parts (shaft). If something or somebody engulfs or hurts, Please turn off the electrical power switch right away and handle at once. 停电时，请务必切断电源开关，防止来电后伤人或破坏装置。 Please turn off the electrical source switch when electricity stops, in order to prevent hurting the person and damaging the device. when electricity recovers. 请注意：带有热保护的电机，当电机温度异常时会自动切断电源，当电机温度下降到一定值时，电机会自动恢复工作。（注：电机在没有烧坏的情况下，会自动复原） Please note, motor with the thermal protector, when temperature of the motor is unusual, it will turn off the electrical source automatically, when the temperature of the motor fall down to a fixed data, the motor can work automatically. (Note: when the motor is not burned, the motor can work automatically)
接受货物时检查 Receiving confirm	在平常时，保持电机在正常的工作环境工作运转。（特殊型号除外） In daily, you should keep the motor operating in the normal work environment. (Except the special model) 检查时，请绝对不要接触旋转物体（轴等）。有可能被卷入、受伤。 While checking, please do not get close to or touch rotating parts (shaft). Something or somebody may engulf of hurt.
	请确认现货是否和订货一样。选择错误的产品，有可能导致电机受损或破坏装置等。 Please confirm if it is the right one to order when you get goods. Choosing wrong products probably leads to damage of motor device and etc.

型号的阅读方法 PRODUCT CODE

电动机 Motor

5 I K 40 R GN - C T
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	电动机的尺寸 Motor frame size	0: 42mm 2: 60mm 3: 70mm 4: 80mm 5: 90mm 6: 104mm
②	类型名称 Motor type	I : 感应电动机 Induction motor R : 可逆电动机 Reversible motor T : 转矩电动机 Torque motor
③	系列名称 Series	K : K系列 K series
④	输出功率 Output power (W)	(例 Example) 40 : 40W
⑤	R : 表示带调速电动机 ; 无 : 表示未带 “-R” after the output power means speed adjustable motor.	
⑥	转轴形状 Motor shaft type	GN : GN型齿轮轴 GN type pinion shaft GU : GU型齿轮轴 GU type pinion shat A : 圆轴型 Round shaft A1 : 键槽型 Keyway
⑦	电源电压-极数 Voltage-Poles	A : 单相Single-phase 110V50/60Hz 4P E : 单相Single-phase 110V/120V60Hz 4P S3 : 三相Three-phase 380/400/415V50/60Hz 4P B : 单相Single-phase 110V50Hz 2P H : 单相Single-phase 220/230V60Hz 4P T : 三相Three-phase 200/220/230V50/60Hz 2P C : 单相Single-phase 220/230V50Hz 4P S : 三相Three-phase 200/220/230V50/60Hz 4P T3 : 三相Three-phase 380/400/415V50/60Hz 2P D : 单相Single-phase 220V50Hz 2P
⑧	T : 带端子箱型 Terminal box type P : 热保护器 Thermal protector F : 带风扇 W/Fan FF : 带强制风扇 W/Forced fan M : 无励磁动作型电磁制动电动机 Power off activated type electromagnetic brake motor	

减速器型号说明 Description Of Reducer Model

5 GN 50 K
① ② ③ ④

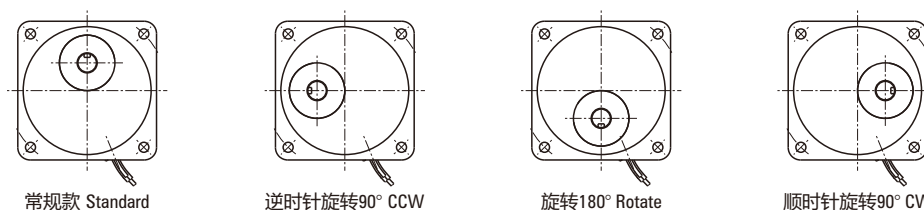
①	减速器安装尺寸 Gearhead frame size	0: 42mm 2: 60mm 3: 70mm 4: 80mm 5: 90mm 6: 104mm
②	类型 Type of pinion	GN : GN型齿轮轴 GN type gear GU : GU型齿轮轴 GU type gear
③	减速比 Gear ratio	(例.e.g) 50 : 减速比 Gear ratio of 1 : 50 10x(仅限减速器1 : 10的中间减速比, 10x denotes middle gearhead of ratio 1 : 10
④	轴承种类 Bearing type	K : 滚珠轴承 (对GU型方箱体标注为KB) Ball bearing (Mark KB for type GU square case)

如 : 电机配平行轴减速器时第5项省略, 如配直角减速器时第4项省略。

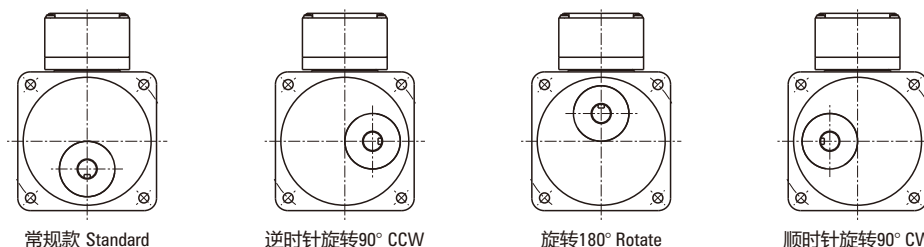
Note: If the motor assembly with parallel gear box pls cancel item no 5, if assembly with right angle gear box pls cancel item no 4.

平行轴系列 Parallel Shaft Series

引线款 Lead Style



接线盒款 Junction Box



电动机的一般规格

GENERAL SPECIFICATIONS OF MOTORS

3W~200W型、2极・高速型 6W~150W、2P・High Speed

项目 Item	规格 Specifications
绝缘电阻 Insulation Resistance	于常温·常湿下的电动机额定运行后，以DC500V电阻表测量线圈·外壳间时，测量值为100MΩ以上 In the circumstance of normal temperature and humidity, the resistance can be up to 100MΩ, measured DC 500V insulation resistance measurer between the motor wiring and motor shell while the motor is working.
绝缘耐压 Insulation Voltage	于常温·常湿下电动机额定运行后，在线圈·外壳间施加一分钟50Hz或60Hz、1.5kV（三相400V为2kV）的电压，亦无异常 In the circumstance of normal temperature and humidity, there will be no problem supplying the power of 1.5kV (three-phase 400V is 2kV) at 50Hz/60Hz between the metal wiring and motor shell for 1 minute while the motor is working.
温度上升 Temperature Rise	在装上减速机或同等散热板※并于常温·常湿下进行额定运行时，以电阻法测定其线圈温度上升值为80℃以下（三相型为70℃以下） The temperature rise of winding are 80℃ (it's 70℃ for 3 phase) or less measured by the resistance change method during rated operation under normal ambient temperature and humidity, with connecting a gearhead or equivalent heat radiation plate※.
绝缘等级 Insulation Class	UL/CSA规格: A种 (105℃)、EN规格: B种 (130℃) UL/CSA Standards: Class A (105℃) EN Standards: Class B (130℃)
过热保护装置 Overheat Protection	内藏热保护装置 (自动复位型) B种 (开放: 120℃±5℃、75℃±15℃) F种 (开放: 145℃±5℃、100℃±15℃) Thermal protector inside (automatic recover) Class B (opening: 120℃±5℃、75℃±15℃) Class F (opening: 145℃±5℃、100℃±15℃)
使用环境温度 Ambient Temperature	单相100V、三相200V: -10~+50℃ (无结冰) 其他电压: -10~+40℃ (无结冰) Single-phase 100VAC、Three-phase 200VAC: -10~+50℃ (Non Freezing) Others: -10~+40℃ (Non Freezing)
使用环境湿度 Ambient Humidity	85%以下 (无结露) ≤85% (Non condensing)
保护等级 Protection Class	导线型 Lead wire type: IP20 带端子箱型: Terminal box type 单相 Single-phase 100V50/60HZ、110/120V60HZ、220/230V50HZ、220/230V60HZ 25W-180W Type: IP54 (不包括圆轴安装面 Excluding the installation surface of the round shaft type) 三相 Three-phase 200/220/230V50/60HZ、380/400/415V50/60HZ 25W-180W Type: IP54 (不包括圆轴安装面 Excluding the installation surface of the round shaft type)

散热板尺寸 (材质: 铝) Heat Radiation Plate (Material: Aluminum)

电动类型 Motor Type	尺寸 Size	厚度 Thickness (mm)
3W type	80X80	5
6W type	115X115	
15W type	125X125	
25W (2极·高速4IK40型、4IK60型) (2P-high-speed 4IK40 type, 4IK60 type)	135X135	
40W、60W type	165X165	
60W、90W、120W type (2极·高速5IK150型) (2P-High-speed 5IK150 type)	200X200	
120W、140W、200W type	230X230	

电动机的特性

MOTOR FEATURES

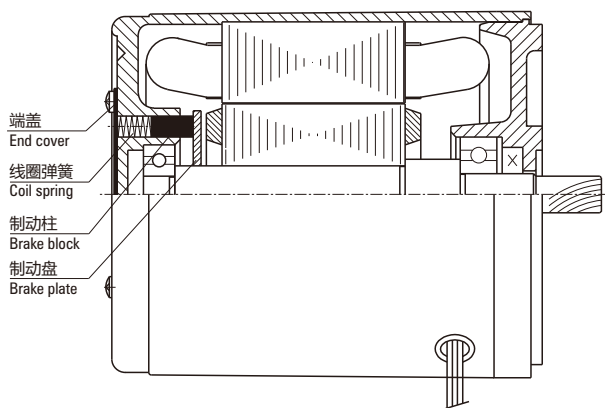
感应电动机的特性 Induction Motor Features

- 1、一般来说，微型感应电动机所指的是感应运转型感应电动机。这种电动机不只在启动时，在运转当中也使用电磁线圈和电容器。虽然启动转矩不是很大，但其结构简单，信赖度高，效率也比较高，可连续运转。
Generally, micro Induction motor refers to the motor rotated by the induction. Induction motor relies on capacitor and electromagnetism when starting and rotating. Though its starting torque is not very high, it has a simple structure, high efficiency and can rotate continuously.
- 2、单相电动机运转时，产生与运转方向逆方向的转矩，因此不可能在短时间内改变方向。请在电动机完全停止以后，再转换其运转方向。
There's a opposite torque when a single phase motor is running. So we can change rotation direction in short time. In this case, please change direction when it stops.
- 3、三相电动机以三相电源驱动感应电动机，其效率很高，启动力矩也比较大，信赖度高。
Three-phase motor relies on three-phase supply. It has a high efficiency and can get a high starting torque.

可逆电动机的特性 Reversible Motor Features

- 1、可逆电动机，在电动机后部设有简易制动器，是适用于短时间内频繁正反转用途的电机。简易制动器的构造，如图1所示，带弹簧压力的制动柱作用在转动的制动盘上并保持连续压力。可逆电动机的简易制动器如下作用：
Reversible motor has a friction brake at the back of the motor body, which is designed for applications where reversal of direction is frequently required. For the friction brake, pls check draw 1. The damp with spring impacts the rotating brake disk and supplies with continuous press. The functions of the friction brake are as following:

- ① 加摩擦负荷，提高瞬间可逆特性。
With friction load, increasing the instant reversal.
- ② 缩小超程。
Shorten over-run.
- ③ 具有某种程度的保持力矩。（额定力矩10%左右）
Keep the torque in some way. (About 10% of the rated torque)

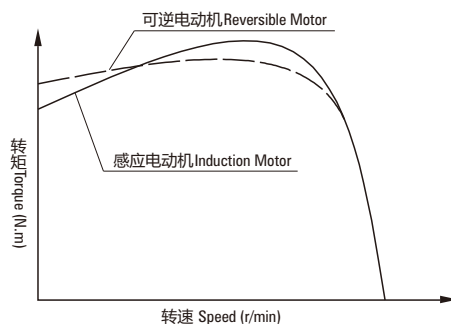


如图 /Fig.1

- 2、简易制动器的保持力矩及超程表示在表1，但随转动时间的长短或温度高低，也会有变化，仅供参考。且初期使用，其保持力矩比表1的值低的情况也会发生，请注意。
The keeping torque of the friction brake and over-run are listed in the table 1. It is only for reference. As it will change according to the rotating period as well as the temperature. Pls also note that the torque may be a little lower than the one listed in the table when being operated initially.
- 3、可逆电动机和感应电动机相同，都是电容动转单相电机，转矩力矩特性与感应电机特性相同。但是，为了提高瞬间可逆特性，如图2所示，设计为加大启动力矩。受此影响，加大了输入的损耗，温升比感应电动机高，因此，时间定额为30分钟。特性表中的额定力矩，启动力矩，电流特性等是在电机上装上有制动柱状态下的特性值。
The reversible motor, like induction motor, is started by the capacitor and has a same torque characteristic with the induction motor. But the Reversible Motor is designed with a higher starting torque to increase the instant reversal features. Pls check drawing 2.

表1.保持力矩和超程 Table 1. Keep Torque And Over-run

相数 Phase	尺寸 Size	输出功率 Output	电机型号 Motor Model	保持力矩 Keep Torque		超程 Over-run 圈数 Cycles
	mm			N.cm	Kgf.cm	
单相 Sing-phase	60	6	2RK6	0.5	0.05	4
	70	15	3RK15	1.3	0.13	5
	80	25	4RK25	1.5	0.14	5
	90	40	5RK40	4.0	0.40	6
		60	5RK60			
		90	5RK90			
		120	5RK120			



如图 /Fig.2

■ 无励磁动作型电磁制动电动机特性 Power Off Activated Type Electromagnetic Brake Motor Features

1、构造及运行原理 Structure and operation principle

图3是带电磁制动的电机的构造图。本公司生产的电磁制动电动机是无励磁动作型，在线圈上施加电压，则立即吸引被弹簧压着的可动衔铁，在可动衔铁和制动衬垫之间产生间隙，使电机处于运转状态。一旦线圈电压被切断，在弹簧力的作用下，可动衔铁压向制动衬垫，产生制动力，电机停止。

Fig 3 is the structure for the electromagnetic brake motor. We produce the power off activated type. Exerting the voltage on the winding, it will magnetize the armature pressed by the spring. The motor will be in a stage of rotating, when there is a backlash between the armature and brake rim. Once the winding voltage is cut down, under the influence of spring, the armature press the brake rim, which will create a brake force. Then the motor gets to a stop.

2、电磁制动器的特点 The characteristics of the electromagnetic brake

该制动器是交流无励磁动作型电磁制动器，与电机直接连接。在切断电源的同时，即瞬间停止，保持负荷。保持力矩0.05~2.0N.m（参照表2）。由于是电源切断时的保持力动作型，故最适合于作为无意间切断电源时的安全制动器使用。电磁可以进行频繁的瞬间正反转。简单的切换，1分钟内可停止6次。但是时间必须确保3秒以上。

It is an AC power off activated type electromagnetic brake which is connected directly with the motor. It will get to a blink stop and keep load when the supply is power off. It will keep the torque between 0.05~2.0Nm. It is especially suitable for the safety brake in the circumstance of unconsciously power off. The electromagnetic can change its direction frequently. It can be stopped 6 times in a minute. But be sure that it lasts for 3 seconds or more.

电机和制动器可以使用同一个电源。制动器内设置整流回路，可和电机使用同一个交流电源。

After we set a commutating loop in the brake, it can share the power supply with the motor.

※这个数值是标准的，根据使用条件的不同，以这个频率连续使用不能进行制动器操作的情况也有，实际使用时，必须在电机表面温度为90℃以下的条件下使用。

※The value is standard. It will be change in different condition. When actually use, be sure to make the surface temperature of the motor less than 90℃.

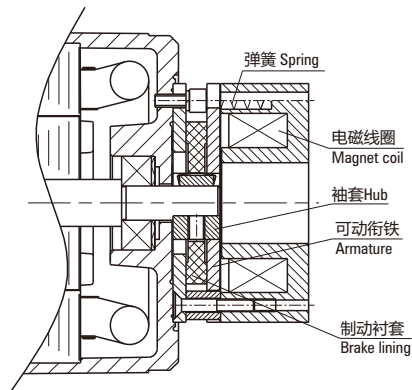
3、起动时间，制动时间的特性 The features for the starting time and brake time

电磁制动电机的起动时间是电机自身的起动时间加上电磁制动器的释放时间，制动时间是从电源切断开始至电机完全停止的时间。电磁制动电机的超程、起动时间、制动时间应用场合而不同。

The starting time means the time for the motor's starting time plus the electromagnetic brake release time. The brake time means the time from power cut off to the time of motor completely stop. The over-run, starting time and brake time will be different according to the different applications.

■ 表2.电磁制动部分（无励磁动作型） Electromagnetic Brake (Power Off Activated Type)

相数 Phase	基座 尺寸 Size MM	输出 功率 Output W	电压 Voltage V	频率 Frequency Hz	电流 Current A	输入 功率 Input W	保持力矩 Keep Torque		超程 Over-run			
							N.m	Kgf.cm	圈数 Cycles			
1Phase	70	15	110 120 220 230	50/60	0.091	8.20	0.50	5	3.5			
	80	25										
	90	40			0.111	10.0	1.00	10				
		60										
		90										
	100	120			0.144	13.0	2.00	20				
		140										
		200										
3Phase	60	6	220~230	50/60	0.073	6.60	0.25	2.5				
	70	15	380~415		0.037	6.60	0.25	2.5				
	80	25	200~230 380~415		0.091	8.20	0.50	5				
	90	40			0.111	10.0	1.00	10				
		60										
		90	200~230 380~415							0.056	10.0	1.00
	120											
	100	140			0.144	13.0	2.00	20				
		200	200~230 380~415						0.144	13.0	2.00	20



如图 /Fig.3

■ 调速电机特性 The Features Of The Speed Control Motor

1、是控制器和电机组合的单元产品，由于电机和控制品只需一次连接，故不需要单独接线。速度调节由安装在外部的电位器便可简单进行。在控制器上安装了速度控制器回路、电机用的电容，速度设定器等。其中单元式速度控制器无瞬间停止功能。

It is a unit of the controller and motor. It only needs to connect one time. The speed can be easily adjusted by the potentiometer. The controller is fixed with speed-control loop, capacitor, speed enactment and etc. There is no function of instant stop in the unit.

2、用控制器的速度调节器进行速度调节。可以在50Hz为90~1400r/min，60Hz为90~1700r/min范围内，调节电机的速度。

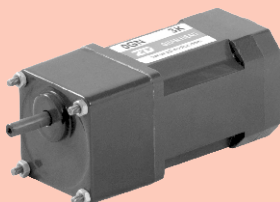
The controller can make the speed variable between 90-1400r/min at 50Hz and 90-1700r/min at 60Hz.

3、电机不允许长时间在低转速下运行，以免电机过热。

Please don't run motor at low speed for long time avoiding overheat.

感应电动机 INDUCTION MOTORS

■ 3W □ 42mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 导线型 Lead Wire Type		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft								
0IK3GN-B	0IK3A-B	3	1ph 110	50	0.120	5	11	2500	1.50
				60	0.130		10	3000	
0IK3GN-D	0IK3A-D	3	1ph 220	50	0.060	5	11	2500	0.35
				60	0.064		10	3000	

●各种安全规格以电动机铭牌上的型号名取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	0IK3GN-B	0IK3A-B
	0IK3GN-D	0IK3A-D

● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	0GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、25、30、 36、50、60

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器无另售品。
Gearhead are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（2极型 50Hz：3000r/min、60Hz：3600r/min）为基准除以减速比而算出来的数值。
实际转速将随负载大小变化所示数值减少2%~33%左右。
The speed is calculated by dividing the motor's synchronous speed (2P Type 50Hz：3000r/min、60Hz：3600r/min) by the gear ratio. The actual speed is 2%~33% less than the displayed value, depending on the size of the load.

■ 容许力矩 Allowance Torque

单位 Unit：N.m

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	25	30	36	50	60
	转 速 Speed r/min		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	60Hz
0IK3GN-B 0IK3GN-D	0GN□K	50Hz	0.027	0.032	0.045	0.053	0.067	0.08	0.096	0.10	0.12	0.14	0.18	0.22	0.26	0.36	0.44
		60Hz	0.024	0.029	0.041	0.049	0.061	0.073	0.076	0.091	0.10	0.13	0.17	0.20	0.24	0.33	0.40

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

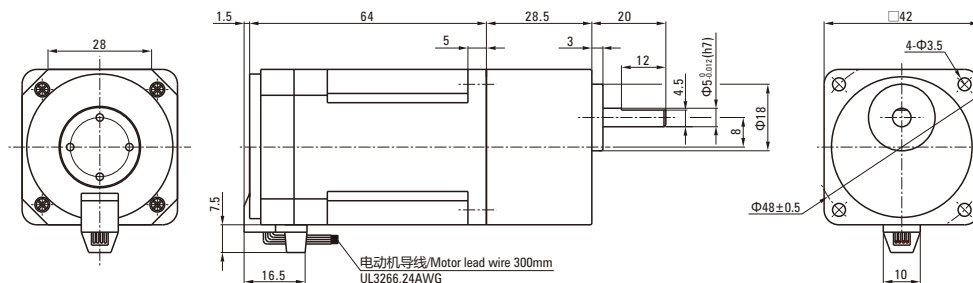
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

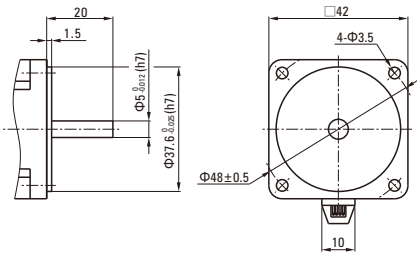
重量 Weight：电动机 Motor：0.3kg

减速机 Gearhead：0.2kg



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

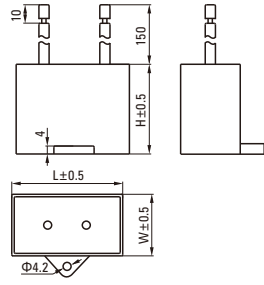
除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



■ 电容器外形尺寸 Dimension Of Capacitor

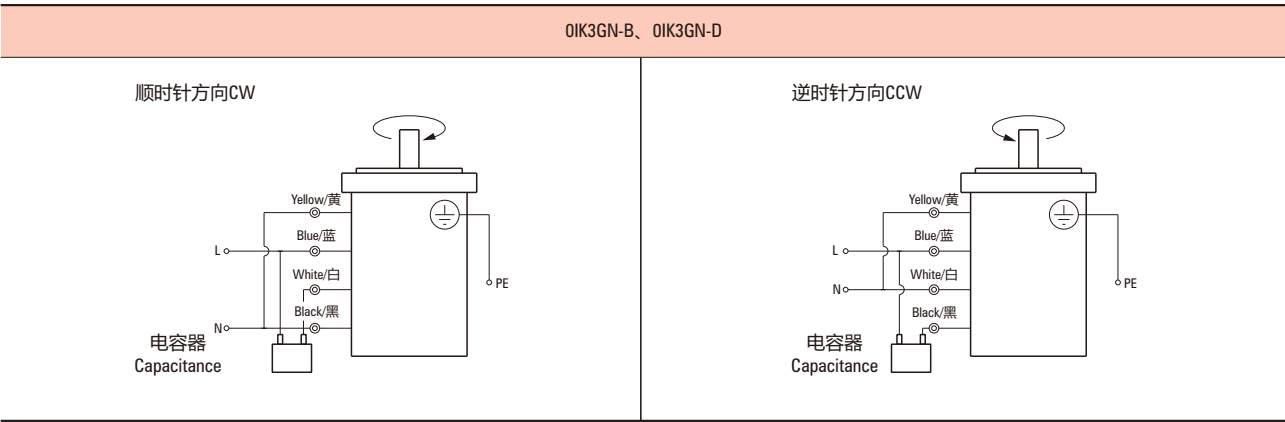
型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
OIK3GN-B	OIK3A-B	ZD15CFAUL	36	12.5	24
OIK3GN-D	OIK3A-D	ZD035CFAUL	26	8.00	17

- 常规电容器出线为引线, 也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



■ 连接图 Wiring Diagram

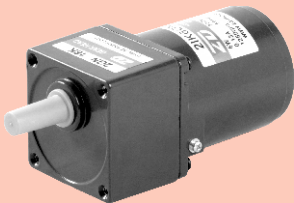
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向, CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型, 圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.



请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向, 可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

6W 60mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 导线型 Lead Wire Type		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft								
2IK6GN-A	2IK6A-A	6	1ph 100	50	0.240	55	48	1200	3.5
				60	0.250	50	40	1450	
2IK6GN-E	2IK6A-E	6	1ph 110	60	0.160	40	40	1450	2.0
			1ph 120		0.180				
2IK6GN-C	2IK6A-C	6	1ph 220	50	0.130	50	48	1200	0.8
			1ph 230		0.140		40	1450	
2IK6GN-H	2IK6A-H	6	1ph 220	60	0.130	55	40	1450	0.8
			1ph 230		0.140				
2IK6GN-S	2IK6A-S	6	3ph 220	50	0.076	85	48	1200	-
				60	0.065	70	40	1450	
2IK6GN-S3	2IK6A-S3	6	3ph 380	50	0.044	85	48	1200	-
				60	0.038	70	40	1450	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	2IK6GN-A	2IK6A-A
	2IK6GN-E	2IK6A-E
	2IK6GN-C	2IK6A-C
	2IK6GN-H	2IK6A-H
	2IK6GN-S	2IK6A-S
	2IK6GN-S3	2IK6A-S3

平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	2GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	2GN10XK（中间减速器 Middle Gearhead）	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为3N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 3N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio	转速 Speed r/min	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
			50Hz	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
2IK6GN-A 2IK6GN-E 2IK6GN-C 2IK6GN-H 2IK6GN-S 2IK6GN-S3	2GN□K	50Hz	0.12	0.14	0.19	0.23	0.29	0.35	0.39	0.49	0.58	0.70	0.75	0.88	1.10	1.30	1.39	1.60	1.90	2.40	2.90	3.00	3.00	3.00	3.00	3.00
			1.22	1.43	1.94	2.35	2.96	3.57	3.98	5.00	5.92	7.14	7.65	8.98	11.2	13.3	14.2	16.3	19.4	24.5	29.6	30.0	30.0	30.0	30.0	30.0
		60Hz	0.10	0.12	0.16	0.19	0.24	0.29	0.32	0.41	0.49	0.58	0.62	0.73	0.88	1.10	1.15	1.30	1.60	2.00	2.40	2.60	3.00	3.00	3.00	3.00
			1.02	1.22	1.63	1.94	2.45	2.96	3.26	4.18	5.00	5.92	6.32	7.45	8.98	11.2	11.7	13.3	16.3	20.4	24.5	26.5	30.0	30.0	30.0	30.0

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

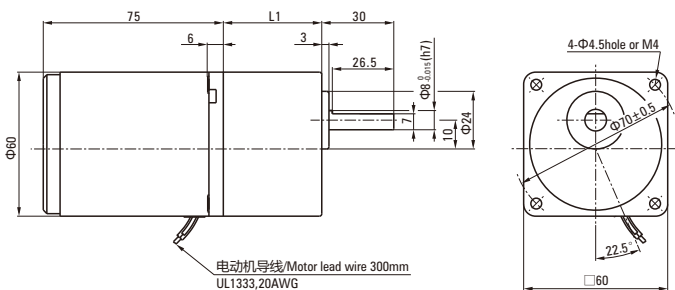
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：0.75kg

减速机 Gearhead：0.4kg

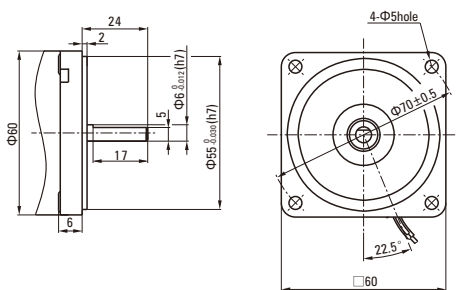


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
2IK6GN-A 2IK6GN-E 2IK6GN-C 2IK6GN-H 2IK6GN-S 2IK6GN-S3	2GN□K	3~200	41.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成长箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

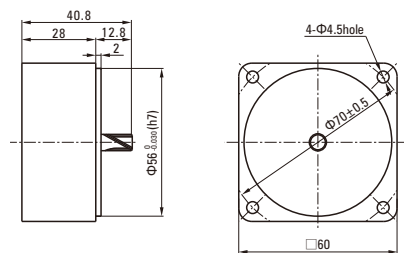
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



● 中间减速器 Middle Gearhead

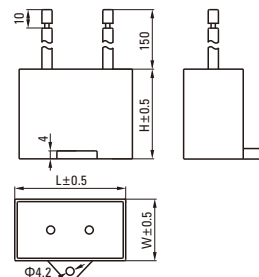
可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
2GN10XK
重量 Weight : 0.2kg



■ 电容器外形尺寸 Dimension Of Capacitor

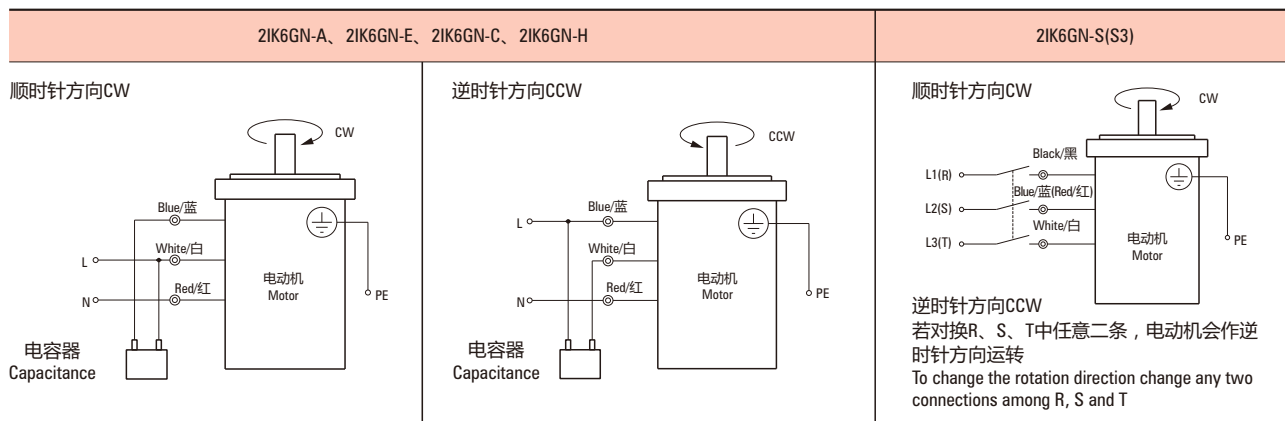
型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
2IK6GN-A	2IK6A-A	ZD35CFAUL	38	19.5	31
2IK6GN-E	2IK6A-E	ZD20CFAUL	36	15.0	25
2IK6GN-C	2IK6A-C	ZD08CFAUL	36	10.5	20

- 常规电容器出线为引线, 也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



■ 连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向, CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型, 圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.



请注意 Note:

单相电动机运转方向的转换应在电动机停止后进行。

Change the direction of single-phase motor rotation only after motor stop.

若在电动机运转时转换运转方向, 可能发生无法转换运转方向或须费时较久的情况。

If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

■ 15W □ 70mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 导线型 Lead Wire Type		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft								
3IK15GN-A	3IK15A-A	15	1ph 100	50	0.35	90	125	1200	6.0
				60	0.33	85	105	1450	
3IK15GN-E	3IK15A-E	15	1ph 110	60	0.30	65	105	1450	5.0
			1ph 120		0.32				
3IK15GN-C	3IK15A-C	15	1ph 220	50	0.18	90	125	1200	1.2
			1ph 230		0.20				
3IK15GN-H	3IK15A-H	15	1ph 220	60	0.16	65	105	1450	1.2
			1ph 230		0.15	70			
3IK15GN-S	3IK15A-S	15	3ph 220	50	0.14	220	125	1200	-
				60	0.12	180	105	1450	
3IK15GN-S3	3IK15A-S3	15	3ph 380	50	0.08	220	125	1200	-
				60	0.07	180	105	1450	

- 各种安全规格以电动机铭牌上的型号名取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	3IK15GN-A	3IK15A-A
	3IK15GN-E	3IK15A-E
	3IK15GN-C	3IK15A-C
	3IK15GN-H	3IK15A-H
	3IK15GN-S	3IK15A-S
	3IK15GN-S3	3IK15A-S3

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	3GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	3GN10XK（中间减速器）（Middle Gearhead）	

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速器。这时的容许转矩为5N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 5N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
3IK15GN-A 3IK15GN-E 3IK15GN-C 3IK15GN-H 3IK15GN-S 3IK15GN-S3	3GN□K	50Hz	0.30	0.36	0.51	0.61	0.76	0.91	0.97	1.30	1.50	1.80	1.94	2.30	2.70	3.30	3.48	4.10	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
			3.06	3.67	5.20	6.22	7.75	9.28	9.90	13.2	15.3	18.3	19.8	23.4	27.5	33.7	35.5	41.8	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
		60Hz	0.26	0.31	0.43	0.51	0.64	0.77	0.80	1.10	1.30	1.50	1.64	1.90	2.30	2.80	2.88	3.50	4.20	5.00	5.00	5.00	5.00	5.00	5.00	5.00
			2.65	3.16	4.38	5.20	6.53	7.85	8.16	11.2	13.2	15.3	16.7	19.3	23.4	28.5	29.4	35.7	42.8	50.0	50.0	50.0	50.0	50.0	50.0	50.0

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

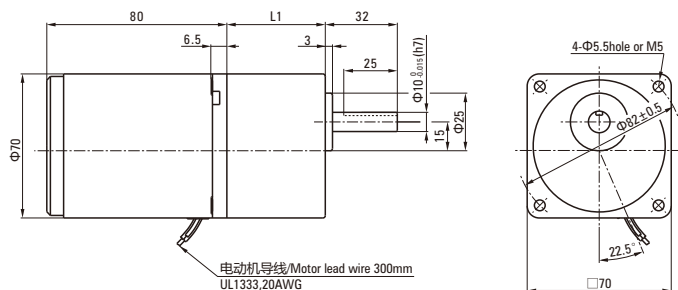
■ 外形图（单位 mm）Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：1.1kg

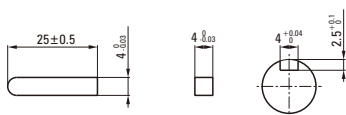
减速器 Gearhead：0.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
3IK15GN-A 3IK15GN-E 3IK15GN-C 3IK15GN-H 3IK15GN-S 3IK15GN-S3	3GN□K	3~200	42

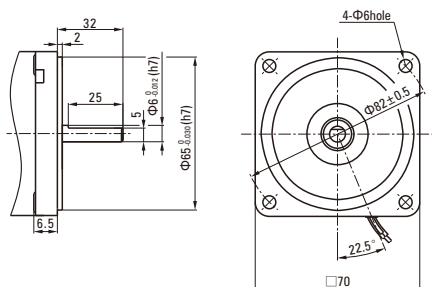
- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 键·键槽（减速器附件）Key·Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

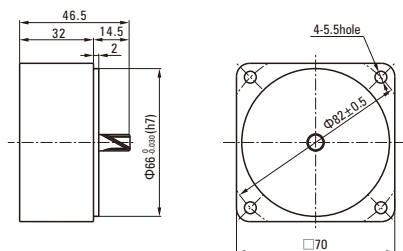
除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
3GN10XK

重量 Weight : 0.3kg

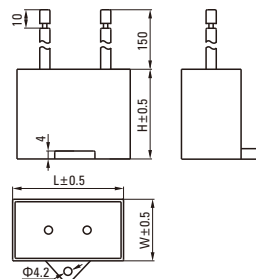


■ 电容器外形尺寸 Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
3IK15GN-A	3IK15A-A	ZD60CFAUL	48	23	32
3IK15GN-E	3IK15A-E	ZD50CFAUL	47	20	31
3IK15GN-C	3IK15A-C	ZD12BFAUL	36	12	22

● 常规电容器出线为引线, 也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



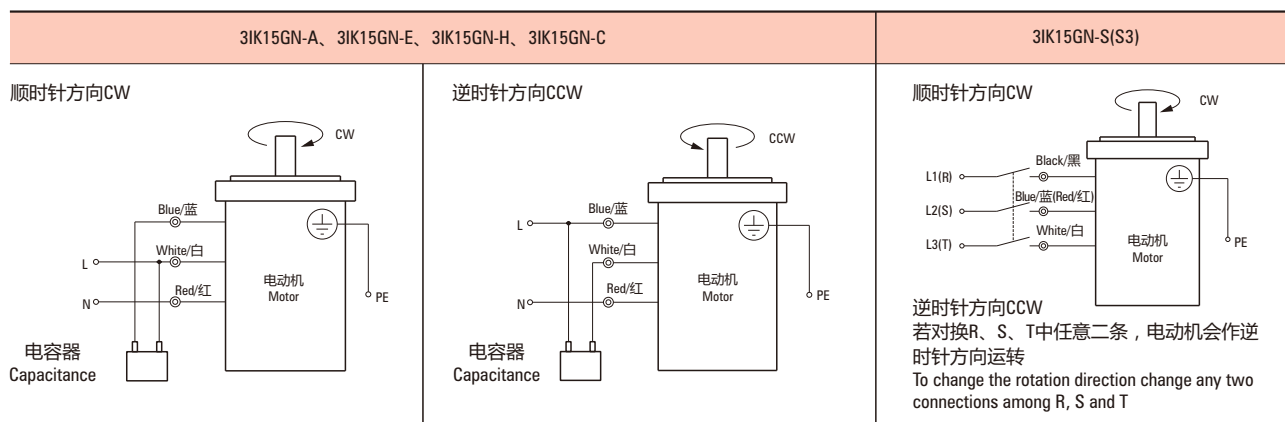
■ 连接图 Wiring Diagram

● 运转方向指从电动机轴看来的方向。CW表示顺时针方向, CCW表示逆时针方向。

The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.

● 表中所记品名为齿轮轴型, 圆轴型亦同。

Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.



请注意 Note:

单相电动机运转方向的转换应在电动机停止后进行。

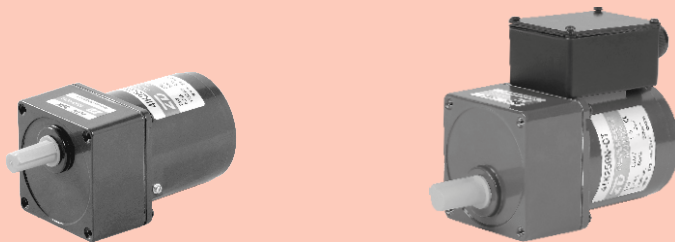
Change the direction of single-phase motor rotation only after motor stop.

若在电动机运转时转换运转方向, 可能发生无法转换运转方向或须费时较久的情况。

If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

25W 80mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
4IK25GN-A (4IK25A-A)	4IK25GN-AT (4IK25A-AT)	25	1ph 100	50	0.500	120	200	1250	8.0
				60	0.550		165	1550	
4IK25GN-E (4IK25A-E)	4IK25GN-ET (4IK25A-ET)	25	1ph 110	60	0.450	120	165	1550	7.0
			1ph 120		0.500				
4IK25GN-C (4IK25A-C)	4IK25GN-CT (4IK25A-CT)	25	1ph 220	50	0.250	120	200	1250	1.8
			1ph 230		0.230				
4IK25GN-H (4IK25A-H)	4IK25GN-HT (4IK25A-HT)	25	1ph 220	60	0.230	120	165	1550	1.8
			1ph 230						
4IK25GN-S (4IK25A-S)	4IK25GN-ST (4IK25A-ST)	25	3ph 220	50	0.185	350	200	1250	-
				60	0.170	250	165	1550	
4IK25GN-S3 (4IK25A-S3)	4IK25GN-S3T (4IK25A-S3T)	25	3ph 380	50	0.106	350	200	1250	-
				60	0.098	250	165	1550	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	4IK25GN-A	4IK25A-A
	4IK25GN-E	4IK25A-E
	4IK25GN-C	4IK25A-C
	4IK25GN-H	4IK25A-H
	4IK25GN-S	4IK25A-S
	4IK25GN-S3	4IK25A-S3
带端子箱型 Terminal Box Type	4IK25GN-AT	4IK25A-AT
	4IK25GN-ET	4IK25A-ET
	4IK25GN-CT	4IK25A-CT
	4IK25GN-HT	4IK25A-HT
	4IK25GN-ST	4IK25A-ST
	4IK25GN-S3T	4IK25A-S3T

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	4GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	4GN10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速器。这时的容许转矩为8N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 8N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio																				
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20
4IK25GN-A□ 4IK25GN-E□ 4IK25GN-C□ 4IK25GN-H□ 4IK25GN-S□ 4IK25GN-S3□	4GN□K	50Hz	0.49	0.58	0.81	0.97	1.20	1.50	1.55	2.00	2.40	2.90	3.17	3.70	4.40	5.30	5.57	6.60	7.90	8.00	8.00
			5.00	5.91	8.26	9.89	12.2	15.3	15.8	20.4	24.4	29.6	32.3	37.7	44.9	54.1	56.8	67.3	80.0	80.0	80.0
		60Hz	0.40	0.48	0.67	0.80	1.00	1.20	1.25	1.70	2.00	2.40	2.64	3.00	3.60	4.30	4.49	5.40	6.50	8.00	8.00
			4.08	4.89	6.83	8.16	10.2	12.2	12.8	17.3	20.4	24.4	26.9	30.6	36.7	43.8	45.8	55.1	66.3	80.0	80.0

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页

Motor (Round shaft) →P215

减速机→215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215页→P215

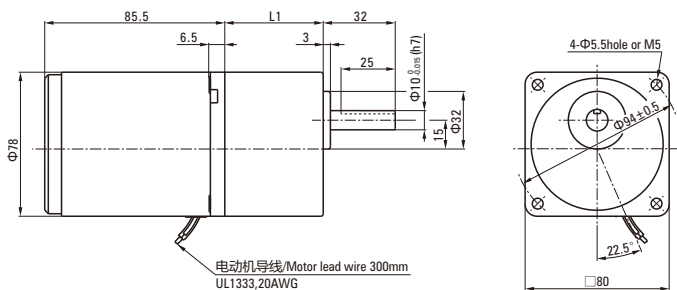
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：1.6kg

减速机 Gearhead：0.80kg



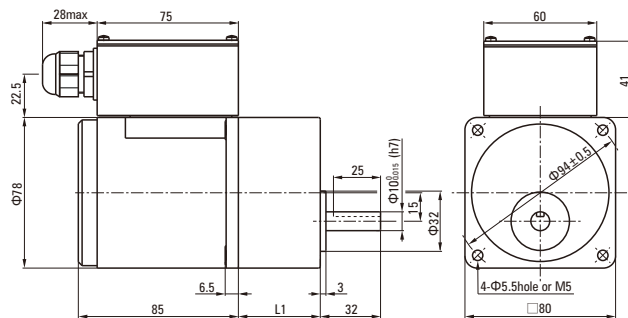
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
4IK25GN-A 4IK25GN-E 4IK25GN-C 4IK25GN-H 4IK25GN-S 4IK25GN-S3	4GN□K	3~200	43.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成长箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 带端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 1.75kg

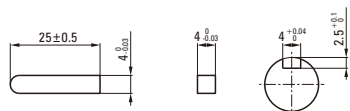
减速器 Gearhead : 0.8kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
4IK25GN-AT 4IK25GN-ET 4IK25GN-CT 4IK25GN-HT 4IK25GN-ST 4IK25GN-S3T	4GN□K	3~200	43.5

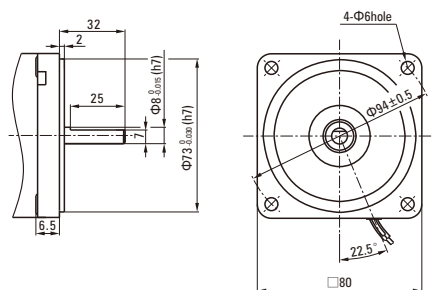
- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 键·键槽 (减速器附件) Key · Keyway (Accessory Of Gearhead)



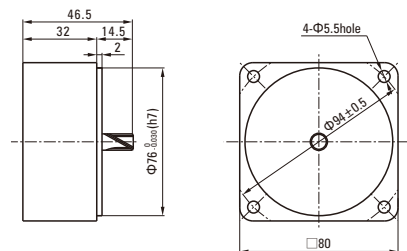
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



● 中间减速器 Middle Gearhead

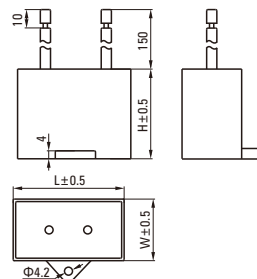
可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
4GN10XK
重量 Weight : 0.41kg



■ 电容器外形尺寸 Dimension Of Capacitor

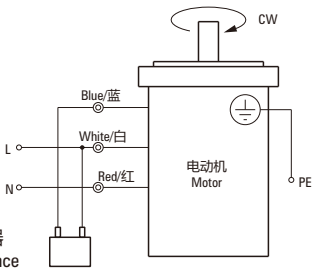
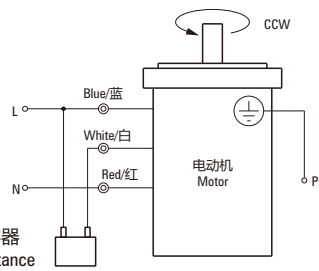
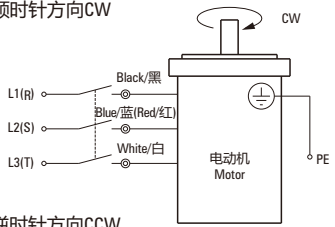
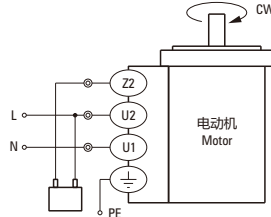
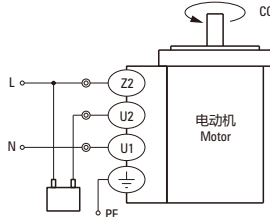
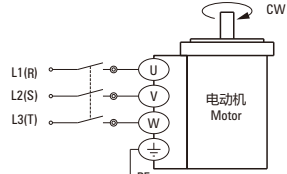
型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
4IK25GN-A□	4IK25A-A□	ZD80CFAUL	48	26.5	38
4IK25GN-E□	4IK25A-E□	ZD70CFAUL	47	24.0	37
4IK25GN-C□	4IK25A-C□	ZD18BFAUL	36	13.5	24

- 常规电容器出线为引线, 也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional
- 电动机型号的□中为表示带端子箱型的记号(T)
Enter the code that represents the terminal box type "T" in the box (□) within the model name



连接图 Wiring Diagram

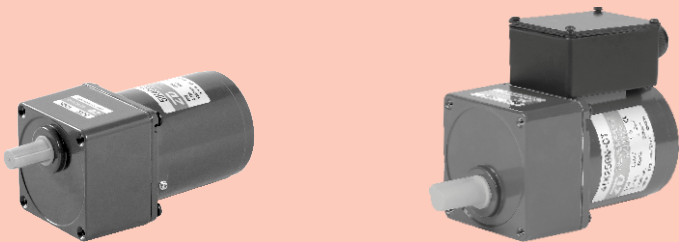
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
4IK25GN-A、4IK25GN-E、4IK25GN-H、4IK25GN-C		4IK25GN-S(S3)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
4IK25GN-AT、4IK25GN-ET、4IK25GN-HT、4IK25GN-CT		4IK25GN-ST(S3T)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

40W 90mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5IK40GN-A (5IK40A-A)	5IK40GN-AT (5IK40A-AT)	40	1ph 100	50	0.65	220	315	1250	12.0
				60	0.70		260	1550	
5IK40GN-E (5IK40A-E)	5IK40GN-ET (5IK40A-ET)	40	1ph 110	60	0.55	200	260	1550	8.0
			1ph 120		0.60				
5IK40GN-C (5IK40A-C)	5IK40GN-CT (5IK40A-CT)	40	1ph 220	50	0.35	220	315	1250	2.5
			1ph 230		0.40				
5IK40GN-H (5IK40A-H)	5IK40GN-HT (5IK40A-HT)	40	1ph 220	60	0.35	200	260	1550	2.5
			1ph 230		0.40				
5IK40GN-S (5IK40A-S)	5IK40GN-ST (5IK40A-ST)	40	3ph 220	50	0.30	800	315	1250	-
				60	0.25	660	250	1550	
5IK40GN-S3 (5IK40A-S3)	5IK40GN-S3T (5IK40A-S3T)	40	3ph 380	50	0.17	800	315	1250	-
				60	0.14	660	250	1550	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：90-40W直角减速电机均为（GU）加强型。 Note: 90-40W right angle gear motor all motor is (GU) strength type.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。 Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

●电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5IK40GN-A	5IK40A-A
	5IK40GN-E	5IK40A-E
	5IK40GN-C	5IK40A-C
	5IK40GN-H	5IK40A-H
	5IK40GN-S	5IK40A-S
	5IK40GN-S3	5IK40A-S3
带端子箱型 Terminal Box Type	5IK40GN-AT	5IK40A-AT
	5IK40GN-ET	5IK40A-ET
	5IK40GN-CT	5IK40A-CT
	5IK40GN-HT	5IK40A-HT
	5IK40GN-ST	5IK40A-ST
	5IK40GN-S3T	5IK40A-S3T

●平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GN10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速器。这时的容许转矩为10N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 10N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio																				
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20
5IK40GN-A□ 5IK40GN-E□ 5IK40GN-C□ 5IK40GN-H□ 5IK40GN-S□ 5IK40GN-S3□	5GN□K	50Hz	0.77	0.92	1.30	1.50	1.90	2.30	2.38	3.20	3.80	4.60	4.88	5.70	6.90	8.30	8.57	10.0	10.0	10.0	10.0
			7.85	9.38	13.2	15.3	19.4	23.4	24.3	32.6	38.7	46.9	49.8	58.1	70.4	84.7	87.4	100	100	100	100
		60Hz	0.63	0.76	1.10	1.30	1.60	1.90	2.00	2.60	3.20	3.80	4.07	4.70	5.70	6.80	7.19	8.60	10.0	10.0	10.0
			6.42	7.75	11.2	13.2	16.3	19.3	20.4	26.5	32.6	38.7	41.5	47.9	58.1	69.3	73.4	87.7	100	100	100

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页

Motor (Round shaft) →P215

减速机→215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215页→P215

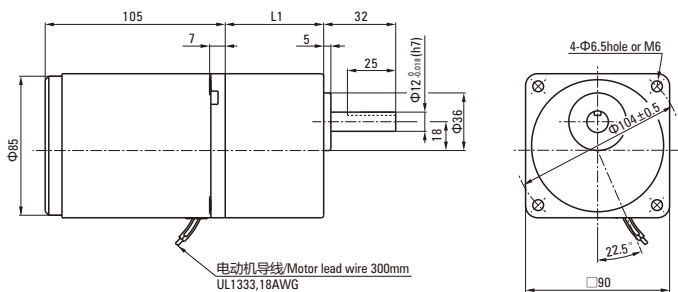
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：2.4kg

减速机 Gearhead：1.35kg



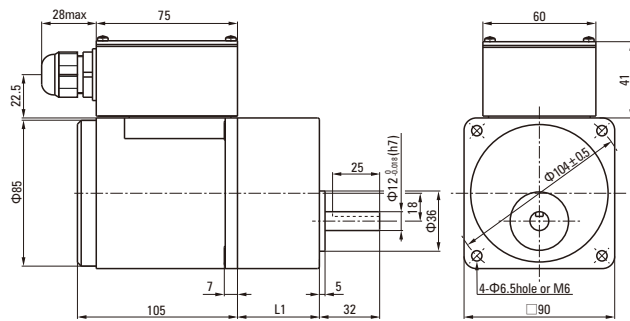
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK40GN-A 5IK40GN-E 5IK40GN-C 5IK40GN-H 5IK40GN-S 5IK40GN-S3	5GN□K	3~200	60

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做短箱体 (L1=42)
Gear ratio 3~18, short case is possible (L1=42)

带端子箱型 Terminal Box Type ②

重量 Weight：电动机 Motor：2.55kg

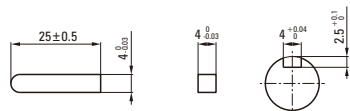
减速器 Gearhead：1.35kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK40GN-AT 5IK40GN-ET 5IK40GN-CT 5IK40GN-HT 5IK40GN-ST 5IK40GN-S3T	5GN□K	3~200	60

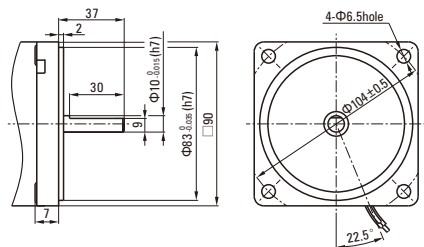
- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=42)
Gear ratio 3~18, short case is possible (L1=42)

键·键槽 (减速器附件) Key·Keyway (Accessory Of Gearhead)



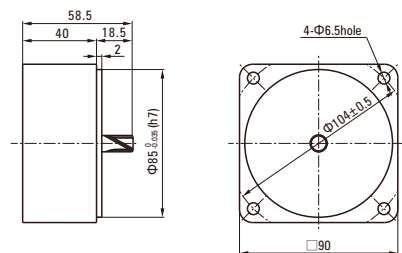
圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



中间减速器 Middle Gearhead

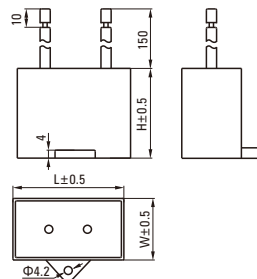
可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
5GN10XK
重量 Weight：0.6kg



电容器外形尺寸 Dimension Of Capacitor

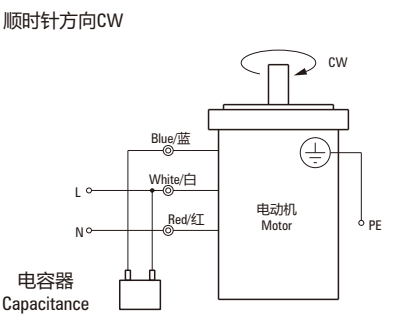
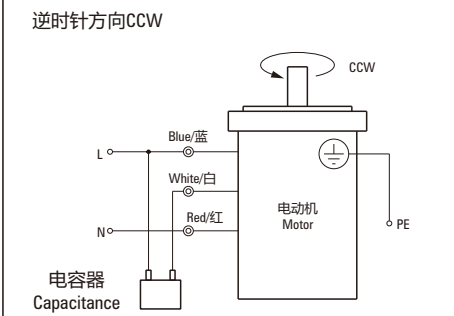
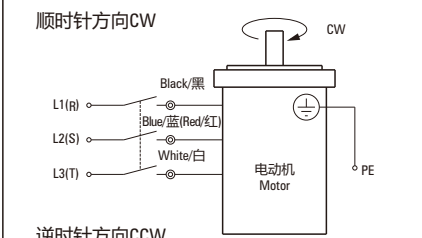
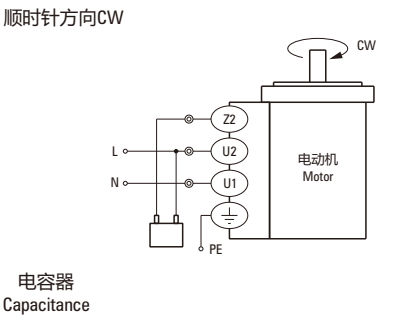
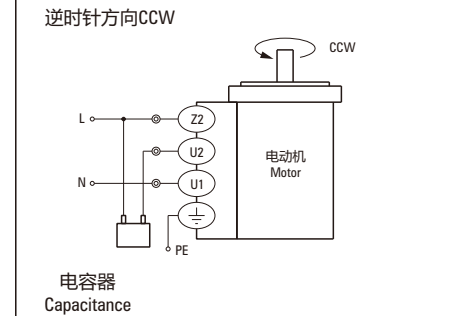
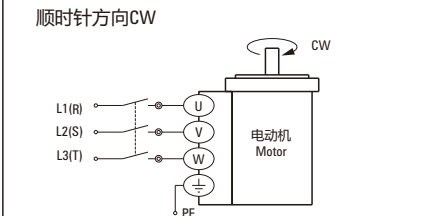
型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5IK40GN-A□	5IK40A-A□	ZD120CFAUL	47	17.0	31
5IK40GN-E□	5IK40A-E□	ZD80CFAUL	48	26.5	38
5IK40GN-C□	5IK40A-C□	ZD25BFAUL	38	17.0	28

- 常规电容器出线为引线, 也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional
- 电动机型号的□中为表示带端子箱型的记号(T)
Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

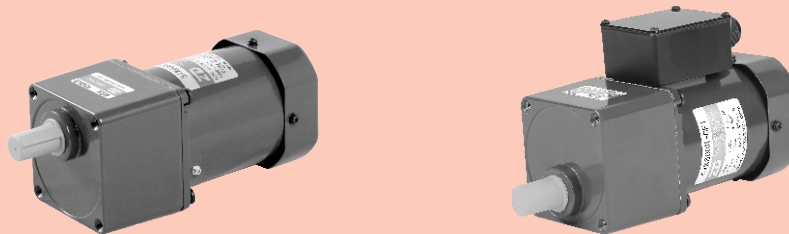
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
5IK40GN-A、5IK40GN-E、5IK40GN-H、5IK40GN-C		5IK40GN-S(S3)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
5IK40GN-AT、5IK40GN-ET、5IK40GN-HT、5IK40GN-CT		5IK40GN-ST(S3T)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

60W 90mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5IK60GN-AF (5IK60A-AF)	5IK60GN-AFT (5IK60A-AFT)	60	1ph 100	50	1.00	320	470	1250	20.0
				60	1.10		380	1550	
5IK60GN-EF (5IK40A-EF)	5IK60GN-EFT (5IK60A-EFT)	60	1ph 110	60	0.80	300	380	1550	12.0
			1ph 120		0.85				
5IK60GN-CF (5IK60A-CF)	5IK60GN-CFT (5IK60A-CFT)	60	1ph 220	50	0.50	340	470	1250	4.0
			1ph 230		0.55				
5IK60GN-HF (5IK60A-HF)	5IK60GN-HFT (5IK60A-HFT)	60	1ph 220	60	0.50	340	380	1550	4.0
			1ph 230		0.55				
5IK60GN-SF (5IK60A-SF)	5IK60GN-SFT (5IK60A-SFT)	60	3ph 220	50	0.45	1000	470	1250	-
				60	0.40	800	380	1550	
5IK60GN-S3F (5IK60A-S3F)	5IK60GN-S3FT (5IK60A-S3FT)	60	3ph 380	50	0.26	1000	470	1250	-
				60	0.23	800	380	1550	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5IK60GN-AF	5IK60A-AF
	5IK60GN-EF	5IK60A-EF
	5IK60GN-CF	5IK60A-CF
	5IK60GN-HF	5IK60A-HF
	5IK60GN-SF	5IK60A-SF
	5IK60GN-S3F	5IK60A-S3F
带端子箱型 Terminal Box Type	5IK60GN-AFT	5IK60A-AFT
	5IK60GN-EFT	5IK60A-EFT
	5IK60GN-CFT	5IK60A-CFT
	5IK60GN-HFT	5IK60A-HFT
	5IK60GN-SFT	5IK60A-SFT
	5IK60GN-S3FT	5IK60A-S3FT

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GN10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为10N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 10N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
5IK60GN-AF□ 5IK60GN-EF□ 5IK60GN-CF□ 5IK60GN-HF□ 5IK60GN-SF□ 5IK60GN-S3F□	5GN□K	60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
		50Hz	1.10	1.40	1.90	2.30	2.90	3.40	3.57	4.80	5.70	6.80	7.03	8.60	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
		60Hz	0.92	1.10	1.50	1.80	2.30	2.80	2.99	3.80	4.60	5.50	5.70	6.90	8.30	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			9.38	11.2	15.3	18.3	23.4	28.5	30.5	38.7	46.9	56.1	58.2	70.1	84.7	100	100	100	100	100	100	100	100	100	100	100

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页

Motor (Round shaft) →P215

减速机→215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215页→P215

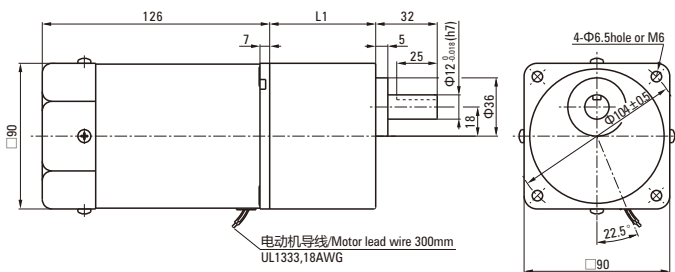
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：2.7kg

减速机 Gearhead：1.35kg

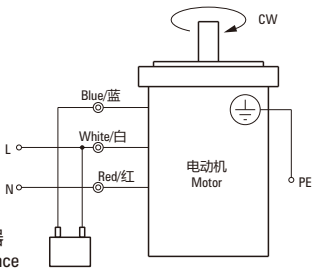
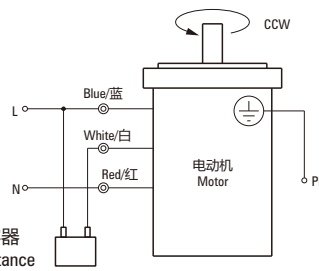
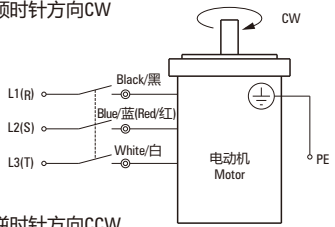
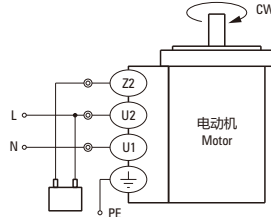
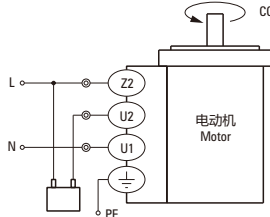
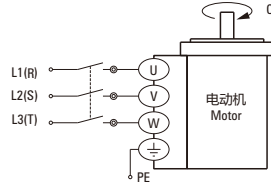


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK60GN-AF 5IK60GN-EF 5IK60GN-CF 5IK60GN-HF 5IK60GN-SF 5IK60GN-S3F	5GN□K	3~200	60

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做短箱体 (L1=42)
Gear ratio 3~18, short case is possible (L1=42)

连接图 Wiring Diagram

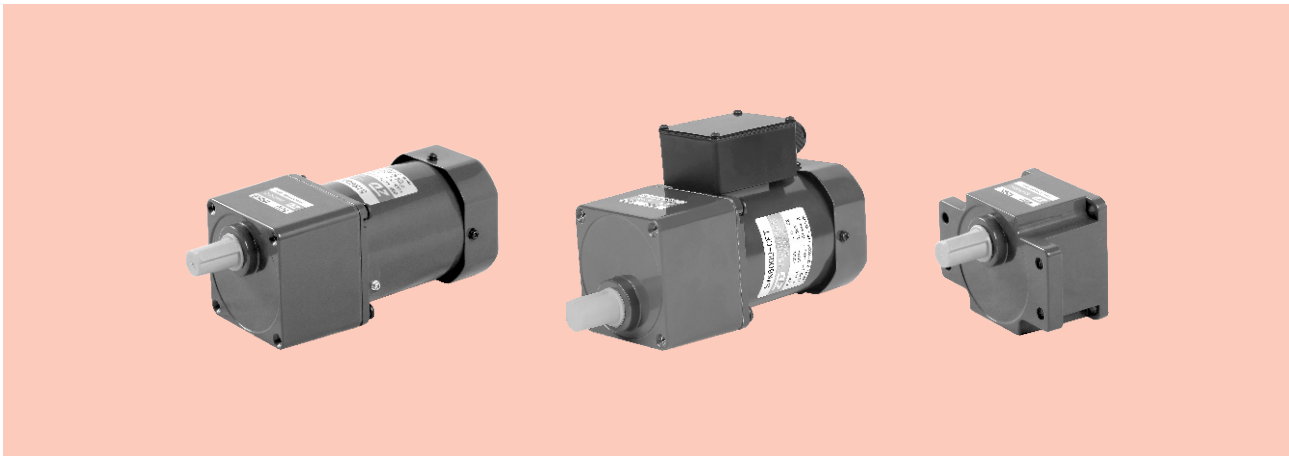
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
5IK60GN-AF、5IK60GN-EF、5IK60GN-HF、5IK60GN-CF		5IK60GN-SF(S3F)
顺时针方向CW  电容器 Capacitance	逆时针方向CCW  电容器 Capacitance	顺时针方向CW  电动机 Motor 逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
5IK60GN-AFT、5IK60GN-EFT、5IK60GN-HFT、5IK60GN-CFT		5IK60GN-SFT(S3FT)
顺时针方向CW  电动机 Motor 电容器 Capacitance	逆时针方向CCW  电动机 Motor 电容器 Capacitance	顺时针方向CW  电动机 Motor 逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

60W 90mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5IK60GU-AF	5IK60GU-AFT	60	1ph 100	50	1.00	320	470	1250	20.0
				60	1.10		380	1550	
5IK60GU-EF	5IK60GU-EFT	60	1ph 110	60	0.80	300	380	1550	12.0
			1ph 120		0.85				
5IK60GU-CF	5IK60GU-CFT	60	1ph 220	50	0.50	340	470	1250	4.0
			1ph 230		0.55				
5IK60GU-HF	5IK60GU-HFT	60	1ph 220	60	0.50	340	380	1550	4.0
			1ph 230		0.55				
5IK60GU-SF	5IK60GU-SFT	60	3ph 220	50	0.45	1000	470	1250	-
				60	0.40	800	380	1550	
5IK60GU-S3F	5IK60GU-S3FT	60	3ph 380	50	0.26	1000	470	1250	-
				60	0.23	800	380	1550	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

●电动机 Motor

机型 Type	型号 Model
	齿轮轴型 Pinion Shaft
导线型 Lead Wire Type	5IK60GU-AF
	5IK60GU-EF
	5IK60GU-CF
	5IK60GU-HF
	5IK60GU-SF
	5IK60GU-S3F
带端子箱型 Terminal Box Type	5IK60GU-AFT
	5IK60GU-EFT
	5IK60GU-CFT
	5IK60GU-HFT
	5IK60GU-SFT
	5IK60GU-S3FT

●平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK（中间减速器 Middle Gearhead）	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio																				
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100
5IK60GU-AF□ 5IK60GU-EF□ 5IK60GU-CF□ 5IK60GU-HF□ 5IK60GU-SF□ 5IK60GU-S3F□	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16
	60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18
5GU□KB 5GU□K	50Hz	1.10	1.40	1.90	2.30	2.90	3.40	3.61	4.80	5.70	6.80	7.12	8.60	10.0	10.3	11.6	12.4	15.5	18.6	20.0	20.0
		11.2	14.2	19.3	23.4	29.6	34.7	36.8	48.9	58.1	69.3	72.6	87.7	100	105	118	126	158	189	200	200
	60Hz	0.92	1.10	1.50	1.80	2.30	2.80	3.01	3.80	4.60	5.50	5.73	6.90	8.30	8.30	9.70	10.0	12.5	15.0	18.8	20.0
		9.38	11.2	15.3	18.3	23.4	28.5	30.7	38.7	46.9	56.1	58.4	70.1	84.7	84.6	98.9	102	127	153	192	200

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

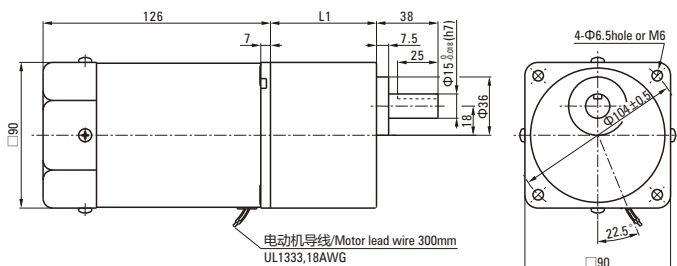
→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：2.7kg 减速机 Gearhead：1.35kg

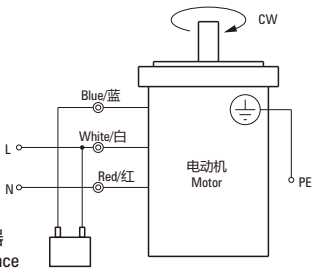
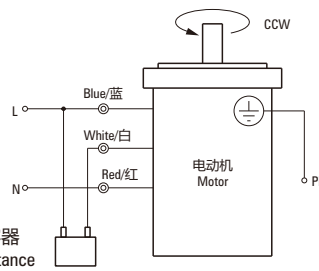
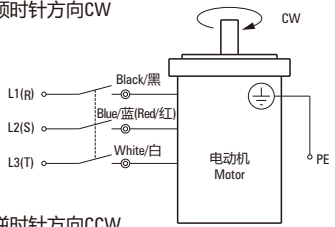
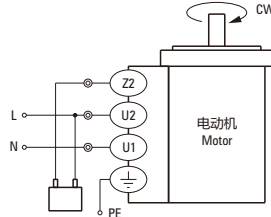
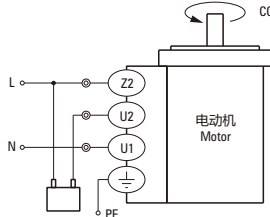
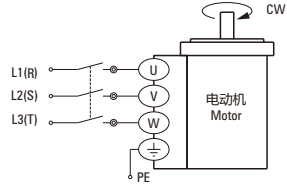


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK60GU-AF 5IK60GU-EF 5IK60GU-CF 5IK60GU-HF 5IK60GU-SF 5IK60GU-S3F	5GU□KB	3~200	65.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

连接图 Wiring Diagram

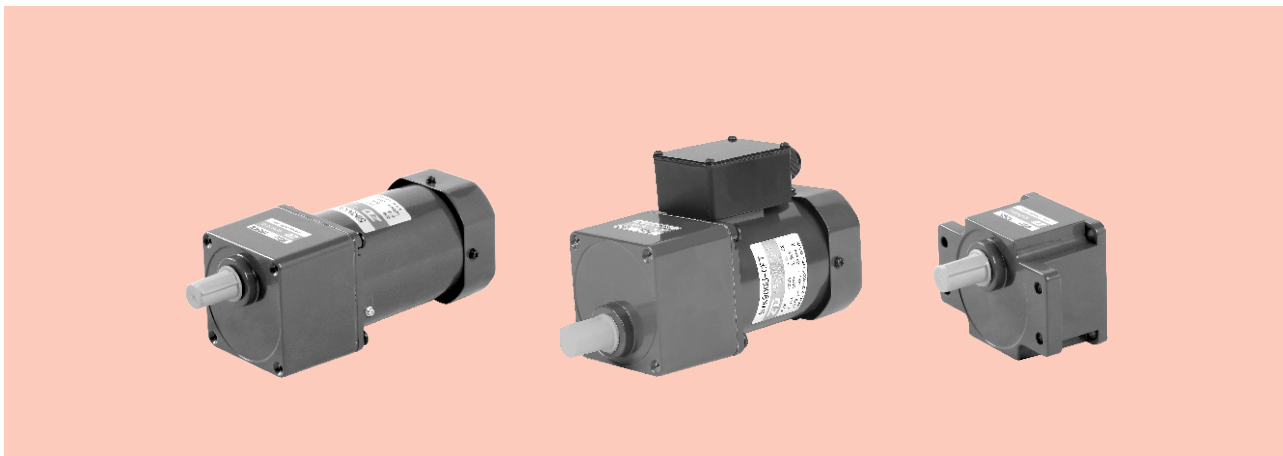
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
5IK60GU-AF、5IK60GU-EF、5IK60GU-HF、5IK60GU-CF		5IK60GU-SF(S3F)
顺时针方向CW  电容器 Capacitance	逆时针方向CCW  电容器 Capacitance	顺时针方向CW  逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
5IK60GU-AFT、5IK60GU-EFT、5IK60GU-HFT、5IK60GU-CFT		5IK60GU-SFT(S3FT)
顺时针方向CW  电容器 Capacitance	逆时针方向CCW  电容器 Capacitance	顺时针方向CW  逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

■ 90W □ 90mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5IK90GU-AF (5IK90A-AF)	5IK90GU-AFT (5IK90A-AFT)	90	1ph 100	50	1.55	450	700	1250	25.0
				60	1.85		570	1550	
5IK90GU-EF (5IK90A-EF)	5IK90GU-EFT (5IK90A-EFT)	90	1ph 110	60	1.40	500	570	1550	20.0
			1ph 120		1.45				
5IK90GU-CF (5IK90A-CF)	5IK90GU-CFT (5IK90A-CFT)	90	1ph 220	50	0.72	450	700	1250	5.0
			1ph 230		0.70				
5IK90GU-HF (5IK90A-HF)	5IK90GU-HFT (5IK90A-HFT)	90	1ph 220	60	0.71	450	570	1550	5.0
			1ph 230		0.75				
5IK90GU-SF (5IK90A-SF)	5IK90GU-SFT (5IK90A-SFT)	90	3ph 220	50	0.60	1350	700	1250	-
				60	0.55	1100	570	1550	
5IK90GU-S3F (5IK90A-S3F)	5IK90GU-S3FT (5IK90A-S3FT)	90	3ph 380	50	0.35	1350	700	1250	-
				60	0.32	1100	570	1550	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5IK90GU-AF	5IK90A-AF
	5IK90GU-EF	5IK90A-EF
	5IK90GU-CF	5IK90A-CF
	5IK90GU-HF	5IK90A-HF
	5IK90GU-SF	5IK90A-SF
	5IK90GU-S3F	5IK90A-S3F
带端子箱型 Terminal Box Type	5IK90GU-AFT	5IK90A-AFT
	5IK90GU-EFT	5IK90A-EFT
	5IK90GU-CFT	5IK90A-CFT
	5IK90GU-HFT	5IK90A-HFT
	5IK90GU-SFT	5IK90A-SFT
	5IK90GU-S3FT	5IK90A-S3FT

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	
	转 速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5	
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9	
5IK90GU-AF□	5GU□KB 5GU□K	50Hz	1.10	2.00	2.80	3.40	4.30	5.10	5.31	6.40	7.70	9.20	9.55	11.6	13.6	16.6	18.1	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
5IK90GU-EF□			17.3	20.4	28.6	34.7	43.9	52.0	54.2	65.3	78.6	93.3	97.4	118	142	169	184	200	200	200	200	200	200	200	200	200	200
5IK90GU-CF□		60Hz	1.40	1.70	2.30	2.80	3.50	4.20	4.43	5.20	6.20	7.50	7.81	9.40	11.3	13.5	14.5	18.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
5IK90GU-HF□			14.3	17.3	23.5	28.6	35.7	42.9	45.2	53.1	63.3	76.5	79.6	95.9	115	138	148	192	200	200	200	200	200	200	200	200	
5IK90GU-SF□																											

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

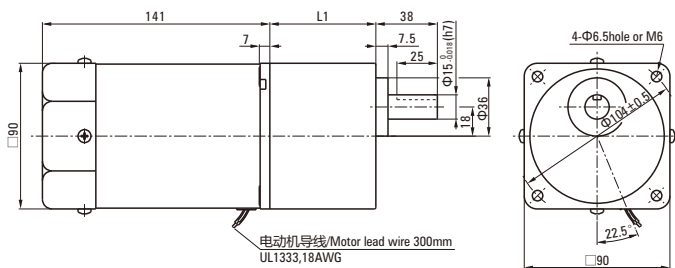
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：3.2kg

减速机 Gearhead：1.5kg



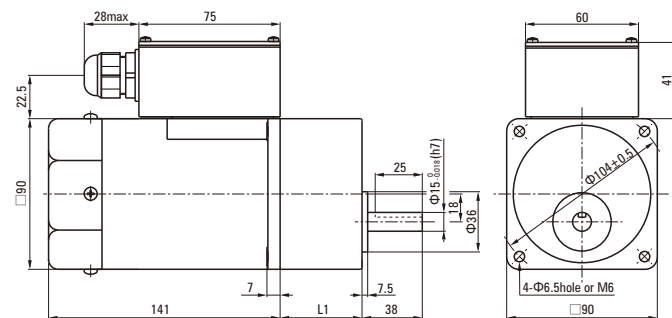
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK90GU-AF 5IK90GU-EF 5IK90GU-CF 5IK90GU-HF 5IK90GU-SF 5IK90GU-S3F	5GU□KB	3~200	65.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

● 帶端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 3.35kg

減速器 Gearhead : 1.5kg



- 适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12 \text{mm}$

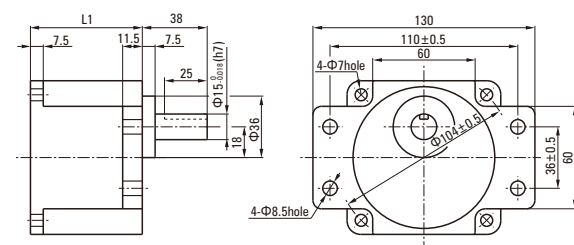
● 凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

5GU□K

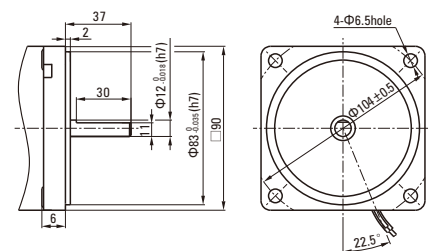
重量Weight:1.5kg



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

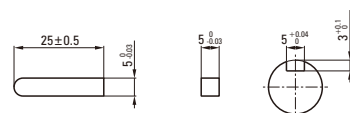


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK90GU-AFT	5GU□KB	3~200	65.5
5IK90GU-EFT			
5IK90GU-CFT			
5IK90GU-HFT			
5IK90GU-SFT			
5IK90GU-S3FT			

- 減速器型號的□中為減速比的數值
Enter the gear ratio in the box (□) within the model name

● 键・键槽（减速器附件）

Key • Keyway (Accessory Of Gearhead)

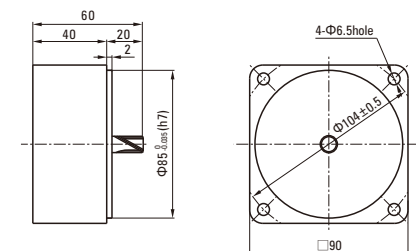


● **中间减速器** Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type

电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
5G110XK

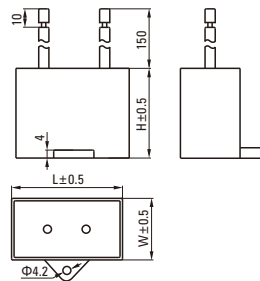
重量 Weight : 0.65kg



■ 电容器外形尺寸 Dimension Of Capacitor

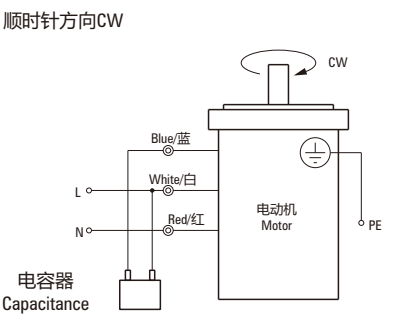
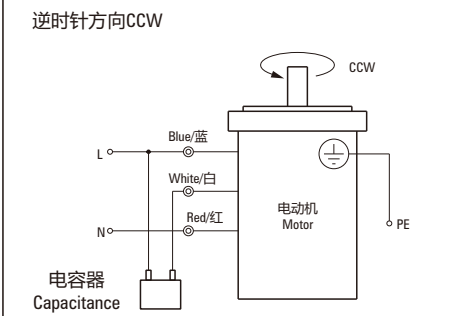
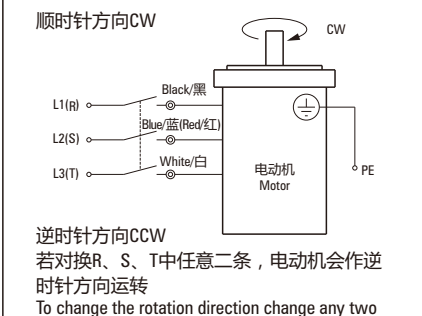
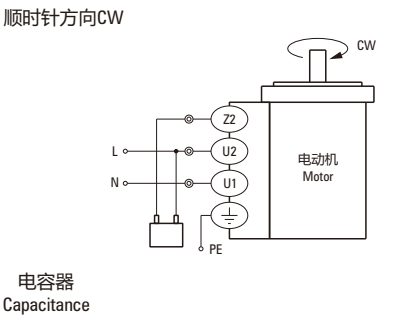
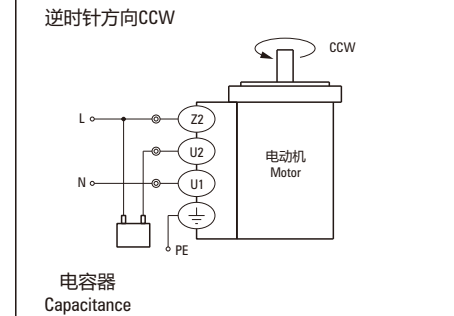
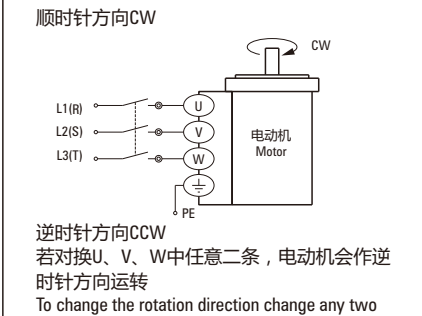
型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5IK90GU-AF□	5IK90A-AF□	ZD250CFAUL	47	27	37
5IK90GU-EF□	5IK90A-EF□	ZD200CFAUL	47	23	35
5IK90GU-CF□	5IK90A-CF□	ZD50BFAUL	47	20	31

- 常规电容器出线为引线, 也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional
- 电动机型号的□中为表示带端子箱型的记号(T)
Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

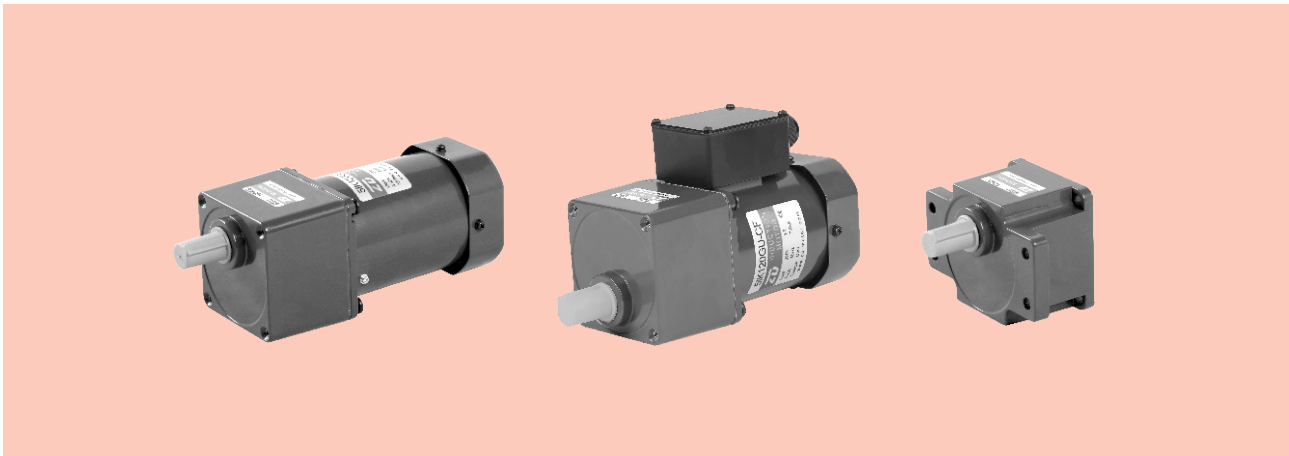
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
5IK90GU-AF、5IK90GU-EF、5IK90GU-HF、5IK90GU-CF		5IK90GU-SF(S3F)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
5IK90GU-AFT、5IK90GU-EFT、5IK90GU-HFT、5IK90GU-CFT		5IK90GU-SFT(S3FT)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

120W 90mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5IK120GU-AF (5IK120A-AF)	5IK120GU-AFT (5IK120A-AFT)	120	1ph 100	50	2.10	600	930	1250	30.0
				60	2.50		750	1550	
5IK120GU-EF (5IK120A-EF)	5IK120GU-EFT (5IK120A-EFT)	120	1ph 110	60	1.65	600	750	1550	25.0
			1ph 120		1.80				
5IK120GU-CF (5IK120A-CF)	5IK120GU-CFT (5IK120A-CFT)	120	1ph 220	50	1.00	650	930	1250	7.0
			1ph 230		0.95				
5IK120GU-HF (5IK120A-HF)	5IK120GU-HFT (5IK120A-HFT)	120	1ph 220	60	1.00	600	750	1550	7.0
			1ph 230		0.95				
5IK120GU-SF (5IK120A-SF)	5IK120GU-SFT (5IK120A-SFT)	120	3ph 220	50	0.70	1850	930	1250	-
				60	0.60	1600	750	1550	
5IK120GU-S3F (5IK120A-S3F)	5IK120GU-S3FT (5IK120A-S3FT)	120	3ph 380	50	0.40	1850	930	1250	-
				60	0.35	1600	750	1550	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A” 型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5IK120GU-AF	5IK120A-AF
	5IK120GU-EF	5IK120A-EF
	5IK120GU-CF	5IK120A-CF
	5IK120GU-HF	5IK120A-HF
	5IK120GU-SF	5IK120A-SF
	5IK120GU-S3F	5IK120A-S3F
带端子箱型 Terminal Box Type	5IK120GU-AFT	5IK120A-AFT
	5IK120GU-EFT	5IK120A-EFT
	5IK120GU-CFT	5IK120A-CFT
	5IK120GU-HFT	5IK120A-HFT
	5IK120GU-SFT	5IK120A-SFT
	5IK120GU-S3FT	5IK120A-S3FT

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。

Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.

- 减速品型号的□中为减速比的数值。

Enter the gear ratio in the box (□) within the model name.

- 色表示与电动机同一方向运转，其他则为相反方向。

The colored background indicates the same rotating direction of the motor while the rotating direction of others are opposite.

- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。

The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。

To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio																				
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100
5IK120GU-AF□ 5IK120GU-EF□ 5IK120GU-CF□ 5IK120GU-HF□ 5IK120GU-SF□	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16
	60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	15
5GU□KB 5GU□K	50Hz	2.30	2.70	3.80	4.50	5.60	6.80	7.01	8.50	10.2	12.2	12.5	15.3	18.4	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	60Hz	23.4	27.5	38.7	45.9	57.1	69.3	71.5	86.7	104	124	128	156	187	200	200	200	200	200	200	20.0
	50Hz	1.80	2.20	3.00	3.60	4.60	5.50	5.73	6.80	8.20	9.80	10.1	12.4	14.9	17.8	19.5	20.0	20.0	20.0	20.0	20.0
	60Hz	18.3	22.4	30.6	36.7	46.9	56.1	58.5	69.5	83.6	100	103	126	152	181	199	200	200	200	200	20.0

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

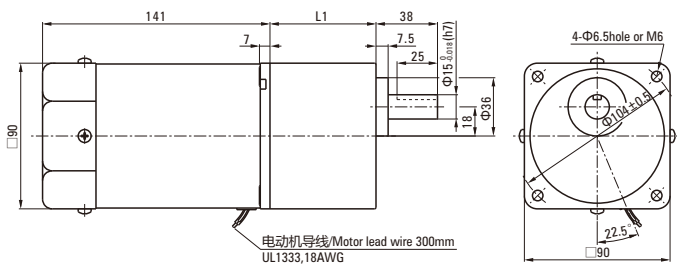
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：3.4kg

减速机 Gearhead：1.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK120GU-AF 5IK120GU-EF 5IK120GU-CF 5IK120GU-HF 5IK120GU-SF 5IK120GU-S3F	5GU□KB	3~200	65.5

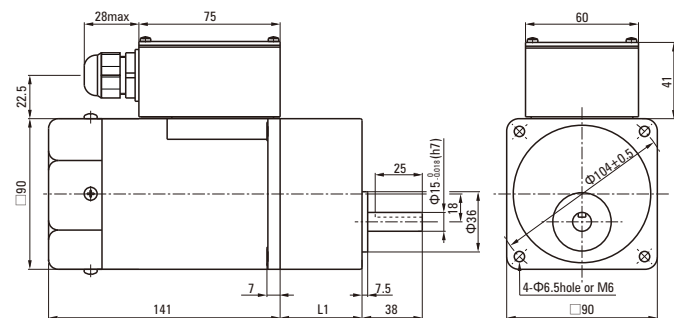
- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 帶端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 3.55kg

減速器 Gearhead : 1.5kg



- 适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12 \text{mm}$

电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK120GU-AFT	5GU□KB	3~200	65.5
5IK120GU-EFT			
5IK120GU-CFT			
5IK120GU-HFT			
5IK120GU-SFT			
5IK120GU-S3FT			

- 減速器型号的□中为減速比的数值
Enter the gear ratio in the box (□) within the model name

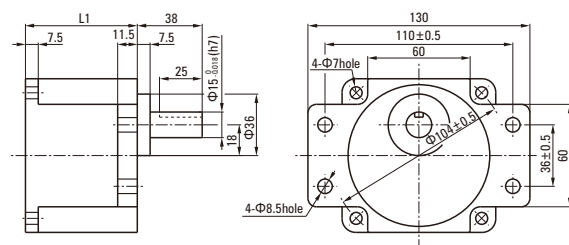
● 凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

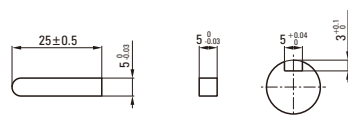
5GU□K

重量Weight:1.5kg



● 键·键槽（减速器附件）

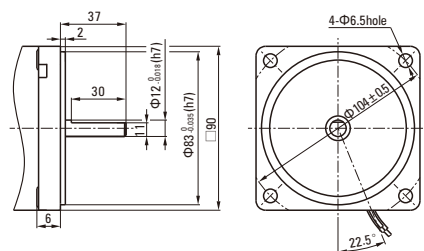
Key • Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



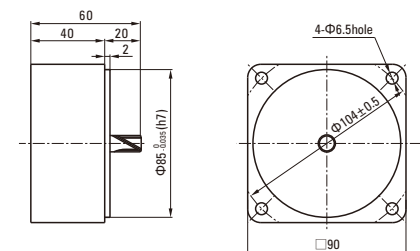
● **中间减速器** Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type

电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GU10XK

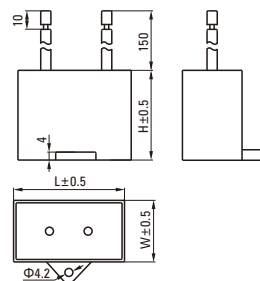
重量 Weight : 0.65kg



■ 电容器外形尺寸 Dimension Of Capacitor

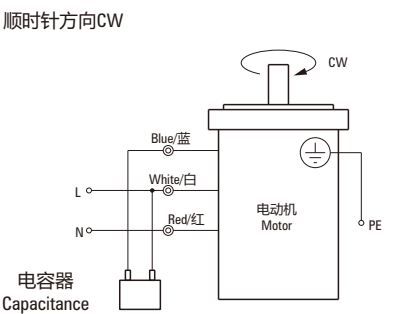
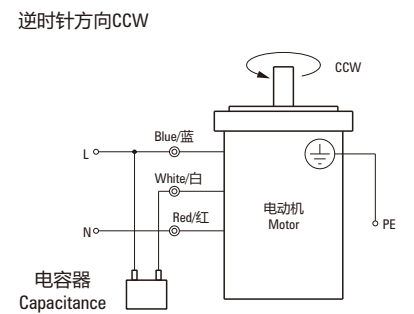
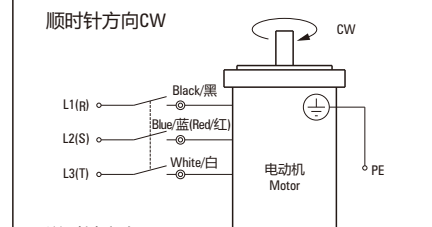
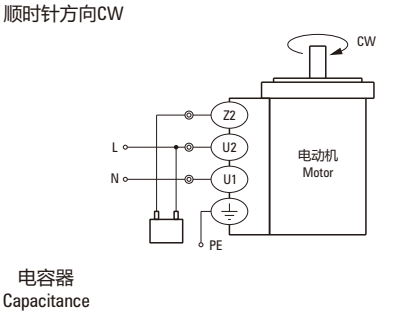
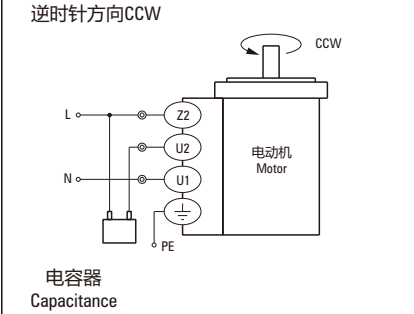
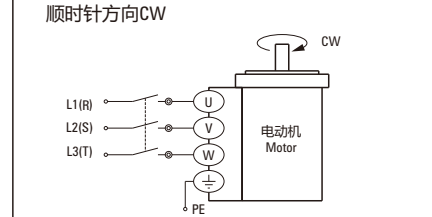
型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5IK120GU-AF□	5IK120A-AF□	ZD300CFAUL	58	26	38
5IK120GU-EF□	5IK120A-EF□	ZD250CFAUL	47	27	37
5IK120GU-CF□	5IK120A-CF□	ZD70BFAUL	47	24	37

- 常规电容器出线为引线, 也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional
- 电动机型号的□中为表示带端子箱型的记号(T)
Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
5IK120GU-AF、5IK120GU-EF、5IK120GU-HF、5IK120GU-CF		5IK120GU-SF(S3F)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
5IK120GU-AFT、5IK120GU-EFT、5IK120GU-HFT、5IK120GU-CFT		5IK120GU-SFT(S3FT)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

■ 120W □ 104mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
6IK120GU-AF (6IK120A-AF)	6IK120GU-AFT (6IK120A-AFT)	120	1ph 100	50	2.10	600	930	1250	30.0
				60	2.50		750	1550	
6IK120GU-EF (6IK120A-EF)	6IK120GU-EFT (6IK120A-EFT)	120	1ph 110	60	1.70	600	750	1550	20.0
			1ph 120		1.80				
6IK120GU-CF (6IK120A-CF)	6IK120GU-CFT (6IK120A-CFT)	120	1ph 220	50	0.95	750	930	1250	8.0
			1ph 230						
6IK120GU-HF (6IK120A-HF)	6IK120GU-HFT (6IK120A-HFT)	120	1ph 220	60	0.95	700	750	1550	8.0
			1ph 230		1.00				
6IK120GU-SF (6IK120A-SF)	6IK120GU-SFT (6IK120A-SFT)	120	3ph 220	50	0.75	2200	890	1300	-
				60	0.70	2000	730	1600	
6IK120GU-S3F (6IK120A-S3F)	6IK120GU-S3FT (6IK120A-S3FT)	120	3ph 380	50	0.43	2200	890	1300	-
				60	0.40	2000	730	1600	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6IK120GU-AF	6IK120A-AF
	6IK120GU-EF	6IK120A-EF
	6IK120GU-CF	6IK120A-CF
	6IK120GU-HF	6IK120A-HF
	6IK120GU-SF	6IK120A-SF
	6IK120GU-S3F	6IK120A-S3F
带端子箱型 Terminal Box Type	6IK120GU-AFT	6IK120A-AFT
	6IK120GU-EFT	6IK120A-EFT
	6IK120GU-CFT	6IK120A-CFT
	6IK120GU-HFT	6IK120A-HFT
	6IK120GU-SFT	6IK120A-SFT
	6IK120GU-S3FT	6IK120A-S3FT

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速机另售·中间减速机另售。电动机型号的□中为表示带端子箱型的记号(T)。

Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.

- 减速机型号的□中为减速比的数值。

Enter the gear ratio in the box (□) within the model name.

- 色表示与电动机同一方向运转，其他则为相反方向。

The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.

- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。

The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。

To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
6IK120GU-AF□ 6IK120GU-CF□	6GU□K	50Hz	2.30	2.70	3.80	4.50	5.60	6.80	6.68	8.50	10.2	12.2	12.0	15.3	18.4	22.1	24.0	30.7	36.8	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			23.4	27.5	38.7	45.9	57.1	69.3	68.2	86.7	104	124	123	156	187	225	245	313	375	400	400	400	400	400	400	400
6IK120GU-SF□	6GU□K	50Hz	2.22	2.60	3.60	4.30	5.40	6.50	6.42	8.10	9.70	11.7	11.6	14.7	17.6	21.1	23.2	29.4	35.2	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			2.40	26.5	36.7	43.8	55.0	66.3	65.6	87.6	98.8	119	118	149	179	215	236	300	359	400	400	400	400	400	400	400

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
6IK120GU-AF□ 6IK120GU-EF□ 6IK120GU-HF□	6GU□K	60Hz	1.80	2.20	3.00	3.60	4.60	5.50	5.40	6.80	8.20	9.80	9.70	12.4	14.9	17.8	19.4	24.8	29.7	37.1	40.0	40.0	40.0	40.0	40.0	40.0
			18.3	22.4	30.6	36.7	46.9	56.1	55.0	69.3	83.6	100	99.0	126	152	181	198	253	303	378	400	400	400	400	400	400
6IK120GU-SF□	6GU□K	60Hz	1.80	2.20	3.00	3.60	4.40	5.30	5.20	6.70	8.00	9.60	9.40	12.0	14.5	17.3	18.8	24.1	28.9	36.1	40.0	40.0	40.0	40.0	40.0	40.0
			18.3	22.4	30.6	36.7	44.8	54.0	53.3	68.3	81.6	97.9	95.9	122	148	176	192	245	295	368	400	400	400	400	400	400

■ 容许悬挂负载 · 容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页

Motor (Round shaft) →P215

减速机→215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215页→P215

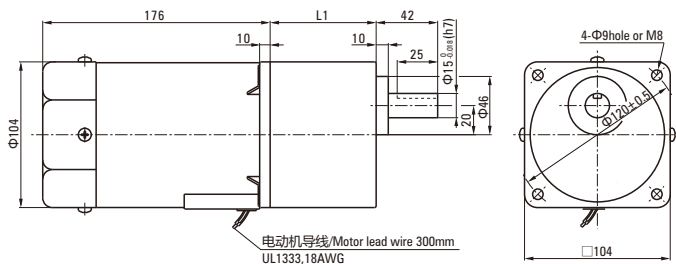
外形图 (单位 mm) Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead wiring Type ①

重量 Weight : 电动机 Motor : 4.8kg

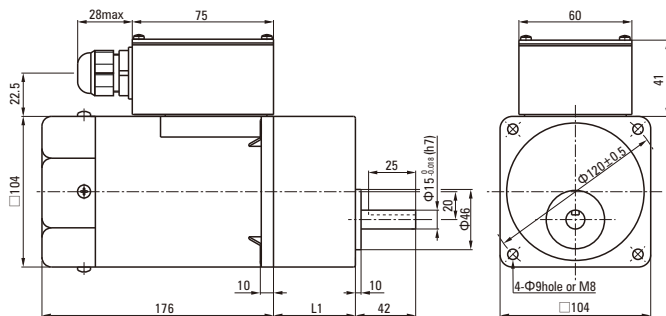
减速机 Gearhead : 2.1kg



● 带端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 4.95kg

减速机 Gearhead : 2.1kg

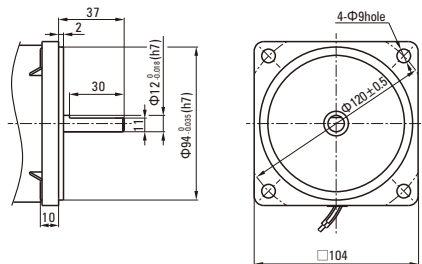


● 适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12$ mm

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



电动机型号 Motor Model	减速机型号 Gearhead Model	减速比 Gear Ratio	L1
6IK120GU-AF 6IK120GU-EF 6IK120GU-CF 6IK120GU-HF 6IK120GU-SF 6IK120GU-S3F	6GU□K	3~200	72

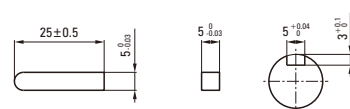
● 减速机型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

电动机型号 Motor Model	减速机型号 Gearhead Model	减速比 Gear Ratio	L1
6IK120GU-AFT 6IK120GU-EFT 6IK120GU-CFT 6IK120GU-HFT 6IK120GU-SFT 6IK120GU-S3FT	6GU□K	3~200	72

● 减速机型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

● 键·键槽 (减速机附件)

Key · Keyway (Accessory Of Gearhead)



电容器外形尺寸 Dimension Of Capacitor

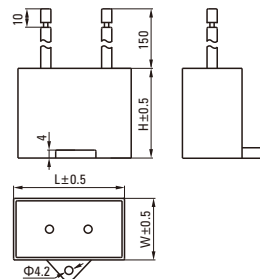
型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
6IK120GU-AF	6IK120A-AF	ZD300CFAUL	58	26.0	38
6IK120GU-EF	6IK120A-EF	ZD200CFAUL	47	23.0	35
6IK120GU-CF	6IK120A-CF	ZD80BFAUL	48	26.5	38

● 常规电容器出线为引线, 也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

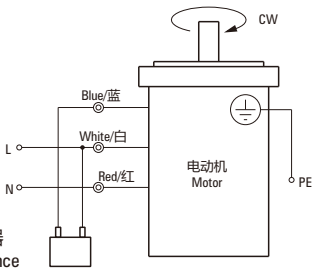
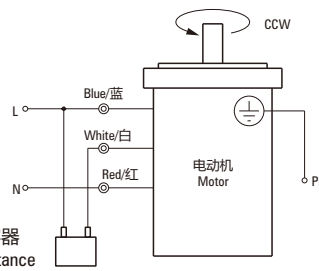
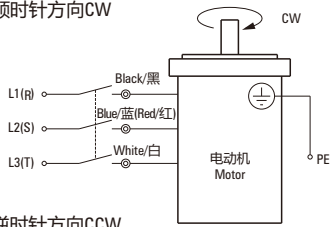
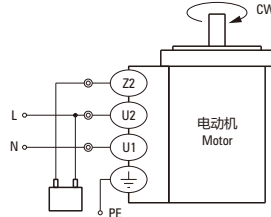
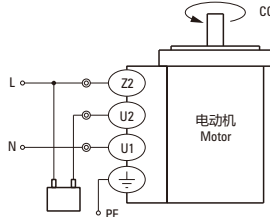
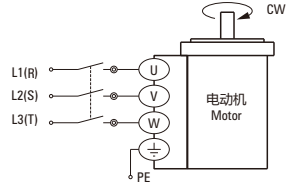
● 电动机型号的□中为表示带端子箱型的记号(T)

Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

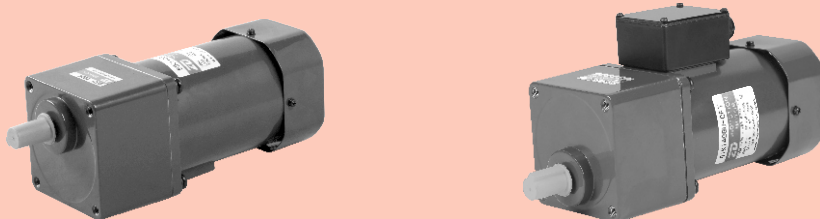
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
6IK120GU-AF、6IK120GU-EF、6IK120GU-HF、6IK120GU-CF		6IK120GU-SF(S3F)
顺时针方向CW  电容器 Capacitance	逆时针方向CCW  电容器 Capacitance	顺时针方向CW  电动机 Motor 逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
6IK120GU-AFT、6IK120GU-EFT、6IK120GU-HFT、6IK120GU-CFT		6IK120GU-SFT(S3FT)
顺时针方向CW  电动机 Motor 电容器 Capacitance	逆时针方向CCW  电动机 Motor 电容器 Capacitance	顺时针方向CW  电动机 Motor 逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

140W 104mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
6IK140GU-AF (6IK140A-AF)	6IK140GU-AFT (6IK140A-AFT)	140	1ph 100	50	2.70	700	1080	1250	35.0
				60	3.00		870	1550	
6IK140GU-EF (6IK140A-EF)	6IK140GU-EFT (6IK140A-EFT)	140	1ph 110	60	1.80	700	850	1600	25.0
			1ph 120		1.95				
6IK140GU-CF (6IK140A-CF)	6IK140GU-CFT (6IK140A-CFT)	140	1ph 220	50	1.05	850	1040	1350	10.0
			1ph 230		1.15				
6IK140GU-HF (6IK140A-HF)	6IK140GU-HFT (6IK140A-HFT)	140	1ph 220	60	1.05	750	850	1600	10.0
			1ph 230		1.15				
6IK140GU-SF (6IK140A-SF)	6IK140GU-SFT (6IK140A-SFT)	140	3ph 220	50	0.85	2700	1080	1250	-
				60	0.75	2200	870	1550	
6IK140GU-SF (6IK140A-S3F)	6IK140GU-SFT (6IK140A-S3FT)	140	3ph 380	50	0.49	2700	1080	1250	-
				60	0.43	2200	870	1550	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6IK140GU-AF	6IK140A-AF
	6IK140GU-EF	6IK140A-EF
	6IK140GU-CF	6IK140A-CF
	6IK140GU-HF	6IK140A-HF
	6IK140GU-SF	6IK140A-SF
	6IK140GU-S3F	6IK140A-S3F
带端子箱型 Terminal Box Type	6IK140GU-AFT	6IK140A-AFT
	6IK140GU-EFT	6IK140A-EFT
	6IK140GU-CFT	6IK140A-CFT
	6IK140GU-HFT	6IK140A-HFT
	6IK140GU-SFT	6IK140A-SFT
	6IK140GU-S3FT	6IK140A-S3FT

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速机另售·中间减速机另售。电动机型号的□中为表示带端子箱型的记号(T)。

Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.

- 减速机型号的□中为减速比的数值。

Enter the gear ratio in the box (□) within the model name.

- 色表示与电动机同一方向运转，其他则为相反方向。

The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.

- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。

The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。

To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
6IK140GU-AF□ 6IK140GU-CF□	6GU□K	50Hz	2.60	3.10	4.40	5.20	6.60	7.90	7.80	9.90	11.8	14.2	14.0	17.8	21.4	25.7	28.0	35.6	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			26.5	31.6	44.8	53.0	67.3	80.6	79.6	101	120	144	143	181	218	262	286	363	400	400	400	400	400	400	400	400
6IK140GU-SF□			2.50	3.00	4.20	5.10	6.30	7.60	7.20	9.50	11.4	13.7	13.0	17.2	20.6	24.7	26.0	34.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			25.5	30.6	42.8	52.0	63.2	77.5	73.6	96.9	116	139	133	175	210	252	265	349	400	400	400	400	400	400	400	400

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
6IK140GU-AF□ 6IK140GU-SF□ 6IK140GU-EF□	6GU□K	60Hz	2.10	2.50	3.50	4.20	5.30	6.30	6.30	7.90	9.50	11.4	11.3	14.4	17.2	20.7	22.6	28.7	34.5	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			21.4	25.5	35.7	42.8	54.0	64.2	64.2	80.6	96.9	116	115	147	175	211	231	292	352	400	400	400	400	400	400	400
6IK140GU-HF□			2.10	2.50	3.40	4.10	5.20	6.20	6.10	7.80	9.30	11.2	11.0	12.0	16.8	20.2	22.0	28.0	33.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			21.4	25.5	34.6	41.8	53.0	63.2	62.2	79.5	94.8	114	112	122	171	206	224	285	343	400	400	400	400	400	400	400

■ 容许悬挂负载 · 容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页

Motor (Round shaft) →P215

减速机→215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215页→P215

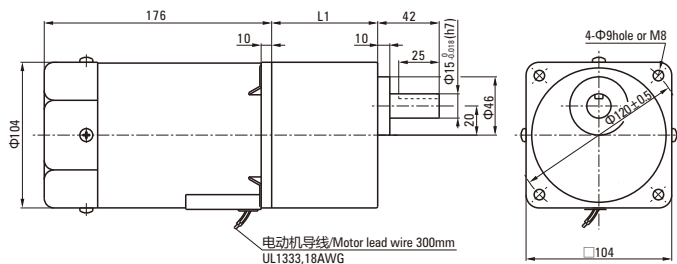
外形图 (单位 mm) Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight : 电动机 Motor : 5.0kg

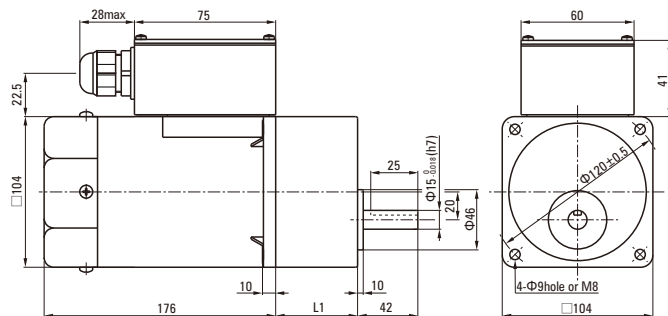
减速机 Gearhead : 2.1kg



● 带端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 5.15kg

减速机 Gearhead : 2.1kg

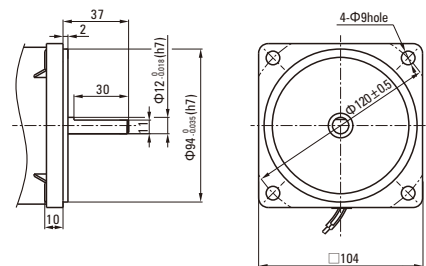


● 适用电缆直径为 Use cable with a diameter of Φ6~Φ12mm

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



电容器外形尺寸 Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
6IK140GU-AF	6IK140A-AF	ZD350CFAUL	58	30	40
6IK140GU-EF	6IK140A-EF	ZD250CFAUL	47	27	37
6IK140GU-CF	6IK140A-CF	ZD100BFAUL	58	26	38

● 常规电容器出线为引线, 也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

● 电动机型号的□中为表示带端子箱型的记号(T)

Enter the code that represents the terminal box type (T) in the box (□) within the model name

电动机型号 Motor Model	减速机型号 Gearhead Model	减速比 Gear Ratio	L1
6IK140GU-AF 6IK140GU-EF 6IK140GU-CF 6IK140GU-HF 6IK140GU-SF 6IK140GU-S3F	6GU□K	3~200	72

● 减速机型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

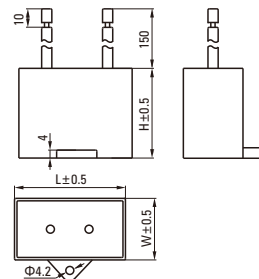
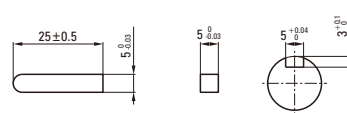
电动机型号 Motor Model	减速机型号 Gearhead Model	减速比 Gear Ratio	L1
6IK140GU-AFT 6IK140GU-EFT 6IK140GU-CFT 6IK140GU-HFT 6IK140GU-SFT 6IK140GU-S3FT	6GU□K	3~200	72

● 减速机型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

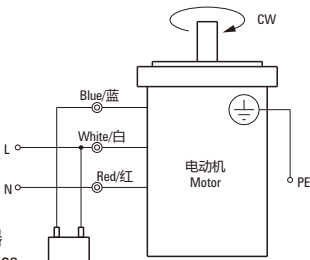
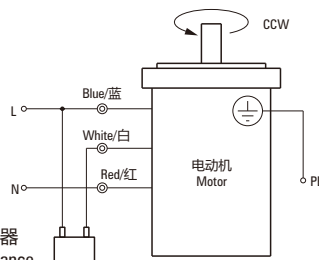
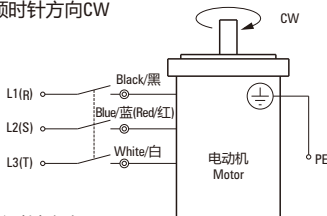
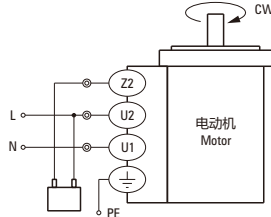
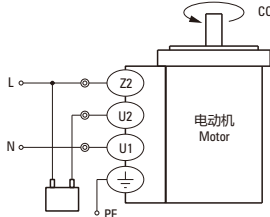
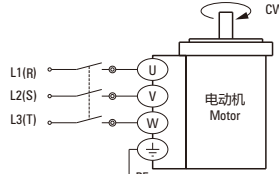
● 键·键槽 (减速机附件)

Key · Keyway (Accessory Of Gearhead)



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
6IK140GU-AF、6IK140GU-EF、6IK140GU-HF、6IK140GU-CF		6IK140GU-SF(S3F)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
6IK140GU-AFT、6IK140GU-EFT、6IK140GU-HFT、6IK140GU-CFT		6IK140GU-SFT(S3FT)
顺时针方向CW 	逆时针方向CCW 	顺时针方向CW  逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:

单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.

若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 INDUCTION MOTORS

200W 104mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
6IK200GU-AF (6IK200A-AF)	6IK200GU-AFT (6IK200A-AFT)	200	1ph 100	50	3.20	900	1520	1250	45.0
				60	3.50		1230	1550	
6IK200GU-EF (6IK200A-EF)	6IK200GU-EFT (6IK200A-EFT)	200	1ph 110	60	2.75	850	1230	1550	35.0
			1ph 120		2.65				
6IK200GU-CF (6IK200A-CF)	6IK200GU-CFT (6IK200A-CFT)	200	1ph 220	50	1.40	1000	1520	1250	10.0
			1ph 230						
6IK200GU-HF (6IK200A-HF)	6IK200GU-HFT (6IK200A-HFT)	200	1ph 220	60	1.40	900	1230	1550	10.0
			1ph 230						
6IK200GU-SF (6IK200A-SF)	6IK200GU-SFT (6IK200A-SFT)	200	3ph 220	50	1.20	3400	1520	1250	-
				60	1.00	2700	1230	1550	
6IK200GU-S3F (6IK200A-S3F)	6IK200GU-S3FT (6IK200A-S3FT)	200	3ph 380	50	0.69	3400	1520	1250	-
				60	0.58	2700	1230	1550	

- 各种安全规格以电动机铭牌上的型号名取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A” 型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6IK200GU-AF	6IK200A-AF
	6IK200GU-EF	6IK200A-EF
	6IK200GU-CF	6IK200A-CF
	6IK200GU-HF	6IK200A-HF
	6IK200GU-SF	6IK200A-SF
	6IK200GU-S3F	6IK200A-S3F
带端子箱型 Terminal Box Type	6IK200GU-AFT	6IK200A-AFT
	6IK200GU-EFT	6IK200A-EFT
	6IK200GU-CFT	6IK200A-CFT
	6IK200GU-HFT	6IK200A-HFT
	6IK200GU-SFT	6IK200A-SFT
	6IK200GU-S3FT	6IK200A-S3FT

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio																				
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100
6IK200GU-AF□ 6IK200GU-EF□ 6IK200GU-CF□ 6IK200GU-HF□ 6IK200GU-SF□	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	42	37	30	25	20	16
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20
	6GU□K	50Hz	3.71	4.46	6.19	7.43	9.28	11.1	11.9	13.9	16.7	20.1	20.8	25.2	30.3	36.3	40.0	40.0	40.0	40.0	40.0
		60Hz	37.9	45.5	63.1	75.8	94.7	114	121	142	171	205	212	257	309	370	400	400	400	400	40.0

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

■ 减速器的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

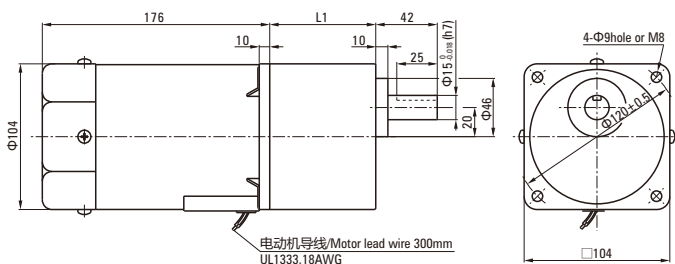
→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：5.0kg 减速机 Gearhead：2.1kg



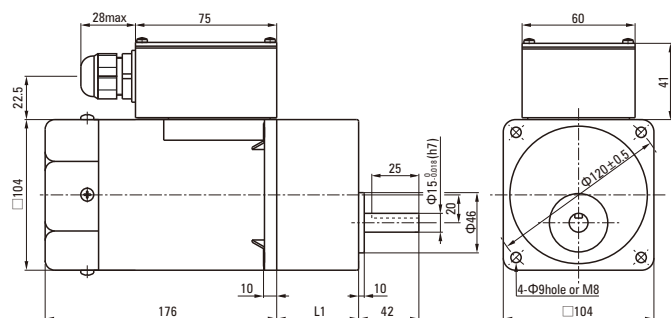
电动机型号 Motor Model	减速机型号 Gearhead Model	减速比 Gear Ratio	L1
6IK200GU-AF 6IK200GU-EF 6IK200GU-CF 6IK200GU-HF 6IK200GU-SF 6IK200GU-S3F	6GU□K	3~200	72

- 减速机型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

带端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 5.15kg

减速器 Gearhead : 2.1kg

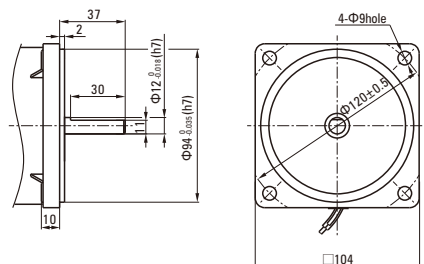


- 适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12\text{mm}$

圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

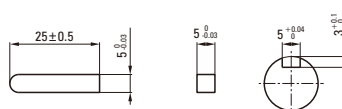


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
6IK200GU-AFT 6IK200GU-EFT 6IK200GU-CFT 6IK200GU-HFT 6IK200GU-SFT 6IK200GU-S3FT	6GU□K	3~200	72

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

键·键槽 (减速器附件)

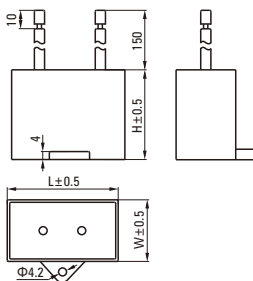
Key · Keyway (Accessory Of Gearhead)



电容器外形尺寸 Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
6IK200GU-AF	6IK200A-AF	ZD450CFAUL	70	38	52
6IK200GU-EF	6IK200A-EF	ZD350CFAUL	58	30	40
6IK200GU-CF	6IK200A-CF	ZD100BFAUL	58	26	38

- 常规电容器出线为引线,也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional
- 电动机型号的□中为表示带端子箱型的记号(T)
Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

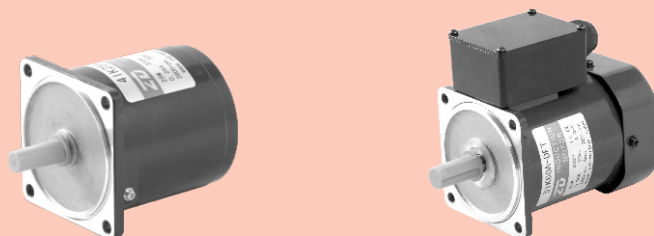
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type		
6IK200GU-AF、6IK200GU-EF、6IK200GU-HF、6IK200GU-CF		6IK200GU-SF(S3F)
顺时针方向CW 电容器 Capacitance	逆时针方向CCW 电容器 Capacitance	顺时针方向CW 逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among R, S and T
带端子箱型 Terminal Box Type		
6IK200GU-AFT、6IK200GU-EFT、6IK200GU-HFT、6IK200GU-CFT		6IK200GU-SFT(S3FT)
顺时针方向CW 电容器 Capacitance	逆时针方向CCW 电容器 Capacitance	顺时针方向CW 逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆时针方向运转 To change the rotation direction change any two connections among U, V and W

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

感应电动机 2极·高速型 INDUCTION MOTOR 2-POLES·HIGH SPEED

■ 6W~150W □ 60mm · □ 70mm · □ 80mm · □ 90mm



规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 圆轴型 Round Shaft Type	输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
2IK6A-B	6	1ph 110	50	0.18	35	22	2650	3
			60	0.20		18	3100	
2IK6A-D	6	1ph 220	50	0.11	35	22	2650	0.8
			60	0.12		18	3100	
3IK15A-B	15	1ph 110	50	0.38	65	54	2650	6
			60	0.40		46	3100	
3IK15A-D	15	1ph 220	50	0.18	65	54	2650	1.5
			60	0.22		46	3100	
4IK25A-B	25	1ph 110	50	0.55	90	90	2650	10
			60	0.65		77	3100	
4IK25A-D	25	1ph 220	50	0.25	90	90	2650	2
			60	0.30		77	3100	
4IK25A-T	25	3ph 220	50	0.20	220	88	2700	-
			60	0.15	185	75	3200	
4IK25A-T3	25	3ph 380	50	0.11	220	88	2700	-
			60	0.08	185	75	3200	
4IK40A-BF	40	1ph 110	50	0.80	120	147	2600	12
			60	0.85		123	3100	
4IK40A-DF	40	1ph 220	50	0.40	120	147	2600	3
			60	0.45		123	3100	
4IK40A-TF	40	3ph 220	50	0.27	350	147	2600	-
			60	0.22	300	123	3100	
4IK40A-T3F	40	3ph 380	50	0.15	350	147	2600	-
			60	0.13	300	123	3100	
5IK40A-B	40	1ph 110	50	0.75	140	147	2600	10
			60	0.90		123	3100	
5IK40A-D	40	1ph 220	50	0.38	140	144	2650	3
			60	0.40		120	3200	
5IK40A-T	40	3ph 220	50	0.26	350	147	2600	-
			60	0.21	300	123	3100	
5IK40A-T3	40	3ph 380	50	0.15	350	147	2600	-
			60	0.12	300	123	3100	
5IK60A-BF	60	1ph 110	50	1.05	170	215	2650	15
			60	1.0		180	3200	
5IK60A-DF	60	1ph 220	50	0.52	180	215	2650	4
			60	0.55		180	3200	

规格 Specs 连续额定 Continuous Rating

型号 Model · 类型 Type 圆轴型 Round Shaft Type	输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容量容量 Capacitor μF
5IK60A-TF	60	3ph 220	50	0.35	500	215	2650	-
			60	0.30	420	180	3200	
5IK60A-T3F	60	3ph 380	50	0.20	500	215	2650	-
			60	0.17	420	180	3200	
5IK90A-BF	90	1ph 110	50	1.50	250	325	2650	25
			60	1.80		270	3200	
5IK90A-DF	90	1ph 220	50	0.72	250	325	2650	6
			60	0.90		270	3200	
5IK90A-TF 5IK90A-TFT	90	3ph 220	50	0.50	800	325	2650	-
			60	0.42	670	270	3200	
5IK90A-T3F 5IK90A-T3FT	90	3ph 380	50	0.29	800	325	2650	-
			60	0.24	670	270	3200	
5IK120A-BF	120	1ph 110	50	1.85	330	450	2650	30
			60	2.25		360	3200	
5IK120A-DF	120	1ph 220	50	0.95	330	450	2650	8
			60	1.10		360	3200	
5IK120A-TF 5IK120A-TFT	120	3ph 220	50	0.65	1000	430	2650	-
			60	0.50	900	370	3100	
5IK120A-T3F 5IK120A-T3FT	120	3ph 380	50	0.37	1000	430	2650	-
			60	0.29	900	370	3100	
5IK150A-BF	150	1ph 110	50	2.50	400	540	2650	35
			60	2.85		450	3200	
5IK150A-DF	150	1ph 220	50	1.20	400	540	2650	10
			60	1.52		450	3200	
5IK150A-TF 5IK150A-TFT	150	3ph 220	50	0.85	1250	550	2600	-
			60	0.70	1100	460	3100	
5IK150A-T3F 5IK150A-T3FT	150	3ph 380	50	0.49	1250	550	2600	-
			60	0.40	1100	460	3100	

种类 Type

● 电动机 Motor

输出功率 Output Power	电压 Voltage	型号 Model
6W	1ph 110VAC	2IK6A-B
	1ph 220VAC	2IK6A-D
15W	1ph 110VAC	3IK15A-B
	1ph 220VAC	3IK15A-D
25W	1ph 110VAC	4IK25A-B
	1ph 220VAC	4IK25A-D
	3ph 220VAC	4IK25A-T
	3ph 380VAC	4IK25A-T3
40W	1ph 110VAC	4IK40A-BF
	1ph 220VAC	4IK40A-DF
	3ph 220VAC	4IK40A-TF
	3ph 380VAC	4IK40A-T3F
40W	1ph 110VAC	5IK40A-B
	1ph 220VAC	5IK40A-D
	3ph 220VAC	5IK40A-T
	3ph 380VAC	5IK40A-T3
60W	1ph 110VAC	5IK60A-BF
	1ph 220VAC	5IK60A-DF
	3ph 220VAC	5IK60A-TF
	3ph 220VAC	5IK60A-TFT
	3ph 380VAC	5IK60A-T3F
	3ph 380VAC	5IK60A-T3FT

输出功率 Output Power	电压 Voltage	型号 Model
90W	1ph 110VAC	5IK90A-BF
	1ph 220VAC	5IK90A-DF
	3ph 220VAC	5IK90A-TF
	3ph 220VAC	5IK90A-TFT
	3ph 380VAC	5IK90A-T3F
	3ph 380VAC	5IK90A-T3FT
120W	1ph 110VAC	5IK120A-BF
	1ph 220VAC	5IK120A-DF
	3ph 220VAC	5IK120A-TF
	3ph 220VAC	5IK120A-TFT
	3ph 380VAC	5IK120A-T3F
	3ph 380VAC	5IK120A-T3FT
150W	1ph 110VAC	5IK150A-BF
	1ph 220VAC	5IK150A-DF
	3ph 220VAC	5IK150A-TF
	3ph 220VAC	5IK150A-TFT
	3ph 380VAC	5IK150A-T3F
	3ph 380VAC	5IK150A-T3FT

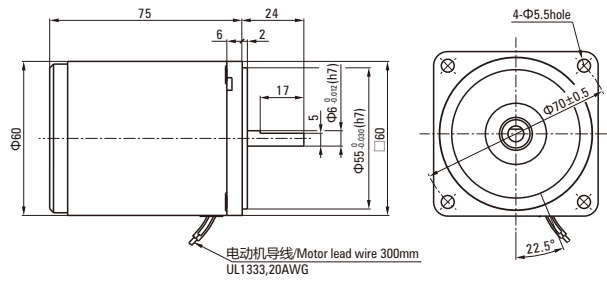
外形图 (单位 mm) Dimensions (Unit mm)

6W

电动机 Motor

2IK6A-B、2IK6A-D

重量 Weight: 0.65kg



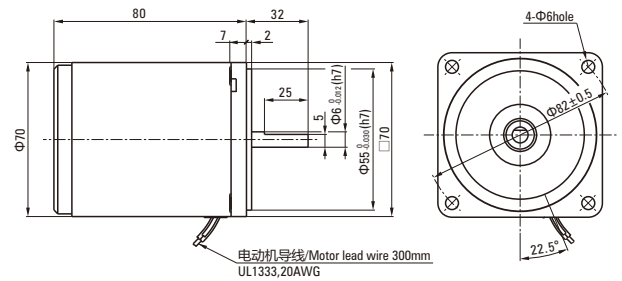
外形图 (单位 mm) Dimensions (Unit mm)

15W

电动机 Motor

3IK15A-B、3IK15A-D

重量 Weight: 0.90kg



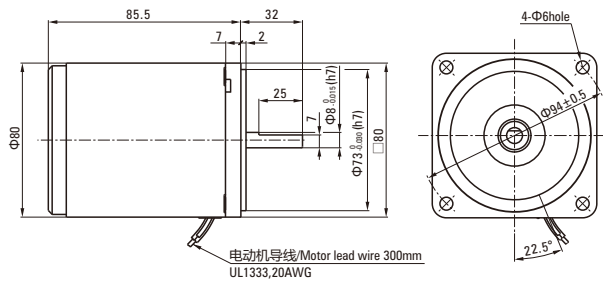
外形图 (单位 mm) Dimensions (Unit mm)

25W

电动机 Motor

4IK25A-B、4IK25A-D、4IK25A-T、4IK25A-T3

重量 Weight: 1.4kg



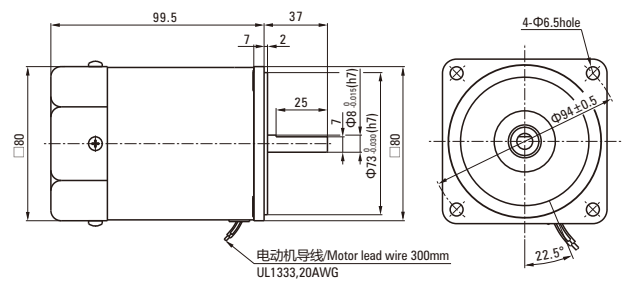
外形图 (单位 mm) Dimensions (Unit mm)

40W

电动机 Motor

4IK40A-BF、4IK40A-DF、4IK40A-TF、4IK40A-T3F

重量 Weight: 1.6kg



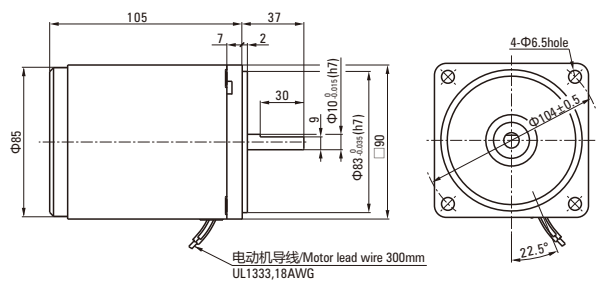
外形图 (单位 mm) Dimensions (Unit mm)

40W

电动机 Motor

5IK40A-B、5IK40A-D、5IK40A-T、5IK40A-T3

重量 Weight: 2.0kg



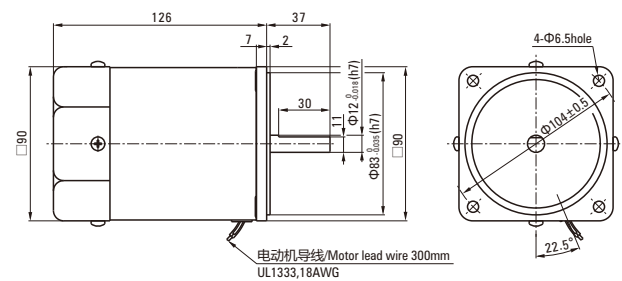
外形图 (单位 mm) Dimensions (Unit mm)

60W

电动机 Motor

5IK60A-BF、5IK60A-DF、5IK60A-TF、5IK60A-T3F

重量 Weight: 2.4kg



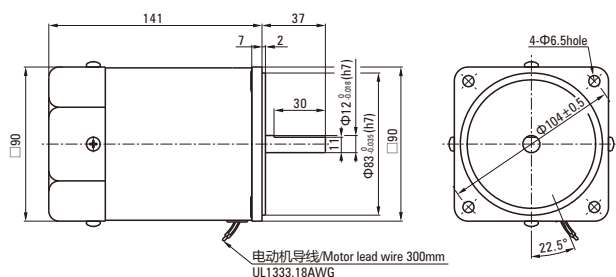
外形图 (单位 mm) Dimensions (Unit mm)

90W

电动机 Motor

5IK90A-BF、5IK90A-DF、5IK90A-TF、5IK90A-T3F

重量 Weight: 2.8kg



外形图 (单位 mm) Dimensions (Unit mm)

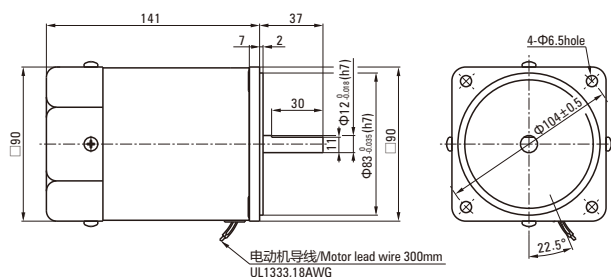
120W

电动机 Motor

5IK120A-BF、5IK120A-DF、5IK120A-TF、5IK120A-T3F

5IK150A-BF、5IK150A-DF、5IK150A-TF、5IK150A-T3F

重量 Weight: 0.90kg



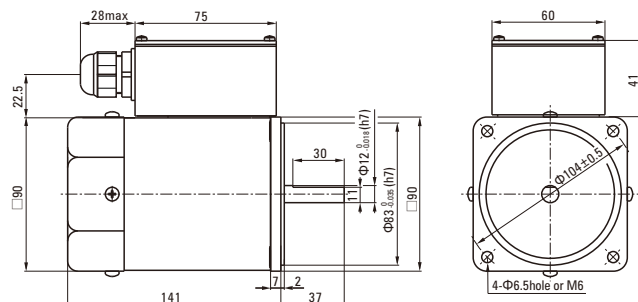
外形图 (单位 mm) Dimensions (Unit mm)

90W、120W、150W

电动机 Motor

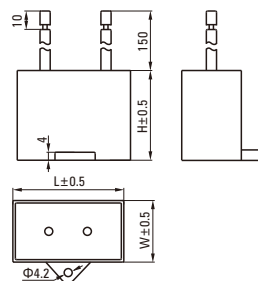
5IK90A-TFT、5IK120A-TFT、5IK150A-TFT、5IK90A-T3FT、5IK120A-T3FT、5IK150A-T3FT

重量 Weight: 3.3kg



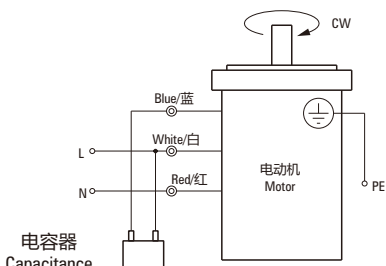
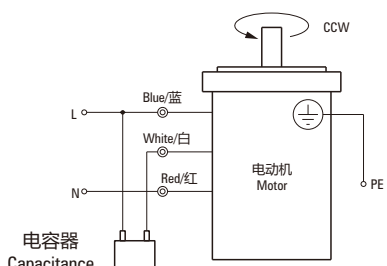
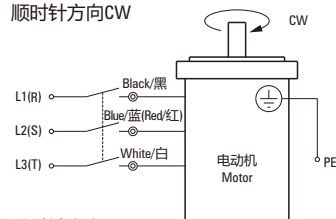
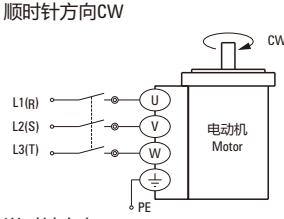
电容器外形尺寸 Formal Dimension of Capacitor

型号Model	电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft				
2IK6A-B	ZD30CFAUL	38	18.5	29
2IK6A-D	ZD08BFAUL	36	10.5	20
3IK15A-B	ZD60CFAUL	48	23.0	32
3IK15A-D	ZD15BFAUL	36	12.5	24
4IK25A-B	ZD100CFAUL	38	19.5	31
4IK25A-D	ZD20BFAUL	36	15.0	25
4IK40A-BF	ZD120CFAUL	58	30.0	40
5IK40A-DF	ZD30BFAUL	38	18.5	29
5IK40A-B	ZD100CFAUL	58	26.0	38
5IK40A-D	ZD30BFAUL	38	18.5	29
5IK60A-BF	ZD150CFAUL	47	20.0	31
5IK60A-DF	ZD40BFAUL	47	17.0	31
5IK90A-BF	ZD250CFAUL	47	27.0	37
5IK90A-DF	ZD60BFAUL	48	23.0	32
5IK120A-BF	ZD300CFAUL	58	26.0	38
5IK120A-DF	ZD80BFAUL	40	26.5	38
5IK150A-BF	ZD350CFAUL	58	30.0	40
5IK150A-DF	ZD100BFAUL	58	26.0	38



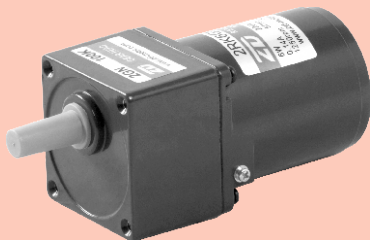
连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.

1ph110V 输入 Input		1ph220V 输入 Input	
顺时针方向CW		逆时针方向CCW	
			
3ph220V、380V 输入 Input			
4IK25A-T(T3)、5IK40A-TF(T3F)、5IK40A-T(T3)、 5IK60A-TF(T3F)、5IK90A-TF(T3F)、 5IK120A-TF(T3F)、5IK150A-TF(T3F)		5IK90A-TFT(T3FT)、5IK120A-TFT(T3FT)、 5IK150A-TFT(T3FT)	
顺时针方向CW		顺时针方向CW	
			
逆时针方向CCW 若对换R、S、T中任意二条，电动机作逆 时针方向运转 To change the rotation direction change any two connections among R, S and T		逆时针方向CCW 若对换U、V、W中任意二条，电动机作逆 时针方向运转 To change the rotation direction change any two connections among U, V and W	

可逆电动机 REVERSIBLE MOTORS

6W 60mm



规格 Specs 30分钟额定 30 Minutes Rating

型号 Model · 类型 Type 导线型 Lead Wire Type		输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft	W	V	Hz	A	mN.m	mN.m	r/min	μF
2RK6GN-A	2RK6A-A	6	1ph 100	50	0.265	60	48	1200	4.0
				60	0.232	55	40	1450	
2RK6GN-E	2RK6A-E	6	1ph110	50	0.185	45	40	1450	2.5
			1ph120	60	0.200				
2RK6GN-C	2RK6A-C	6	1ph220	50	0.145	55	48	1200	1.0
			1ph230	60	0.150				
2RK6GN-H	2RK6A-H	6	1ph220	50	0.145	40	60	1450	1.0
			1ph230	60	0.150				

- 可逆电动机的额定转矩、启动转矩数值均为未安装简易制动时的数值。
Values shown for rated torque and starting torque are measured for operation without the friction brake installed.
- 各种安全规格以电动机铭牌上的型号取得认定。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- ：内置热保护装置（自动复位型）。在电动机因某种原因过热时会自行启动使电动机停止。
Contains a built-in thermal protector(automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.
- 电动机温度下降后会启动恢复运行，故在进行检查作业时请务必事先切断电源。
When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note:“-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

电动机 Motor

机型 Type	型号Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	2RK6GN-A	2RK6A-A
	2RK6GN-E	2RK6A-E
	2RK6GN-C	2RK6A-C
	2RK6GN-H	2RK6A-H

平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	2GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	2GN10XX (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为3N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 3N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
2RK6GN-A 2RK6GN-E 2RK6GN-C 2RK6GN-H	2GN□K	50Hz	0.12	0.14	0.19	0.23	0.29	0.35	0.39	0.49	0.58	0.70	0.75	0.88	1.10	1.30	1.39	1.60	1.90	2.40	2.90	3.00	3.00	3.00	3.00	3.00
			1.22	1.43	1.94	2.35	2.96	3.57	3.98	5.00	5.92	7.14	7.65	8.98	11.2	13.3	14.2	16.3	19.4	24.5	29.6	30.0	30.0	30.0	30.0	30.0
		60Hz	0.10	0.12	0.16	0.19	0.24	0.29	0.32	0.41	0.49	0.58	0.62	0.73	0.88	1.10	1.15	1.30	1.60	2.00	2.40	2.60	3.00	3.00	3.00	3.00
			1.02	1.22	1.63	1.94	2.45	2.96	3.26	4.18	5.00	5.92	6.32	7.45	8.98	11.2	11.7	13.3	16.3	20.4	24.5	2.65	30.0	30.0	30.0	30.0

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215 Motor (Round shaft) →P215
减速机→P215 Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

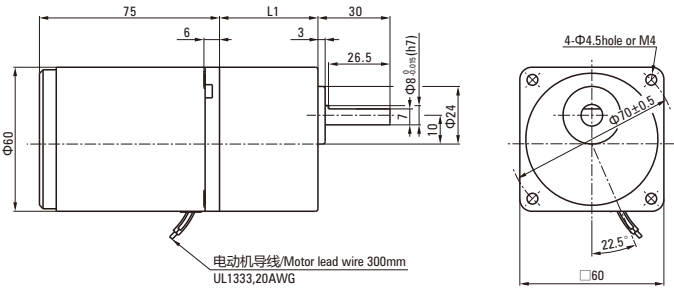
→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：0.8kg 减速机 Gearhead：0.4kg

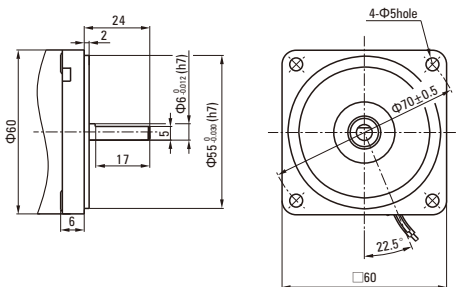


电动机型号 Motor Model	减速机型号 Gearhead Model	减速比 Gear Ratio	L1
2RK6GN-A 2RK6GN-E 2RK6GN-C 2RK6GN-H	2GN□K	3~200	41.5

- 减速机型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

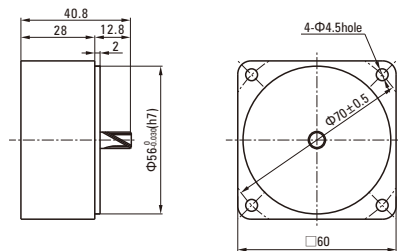
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



● 中间减速器 Middle Gearhead

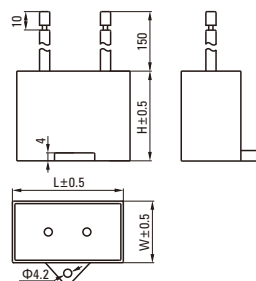
可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
2GN10XK
重量 Weight : 0.24kg



■ 电容器外形尺寸 Dimension Of Capacitor

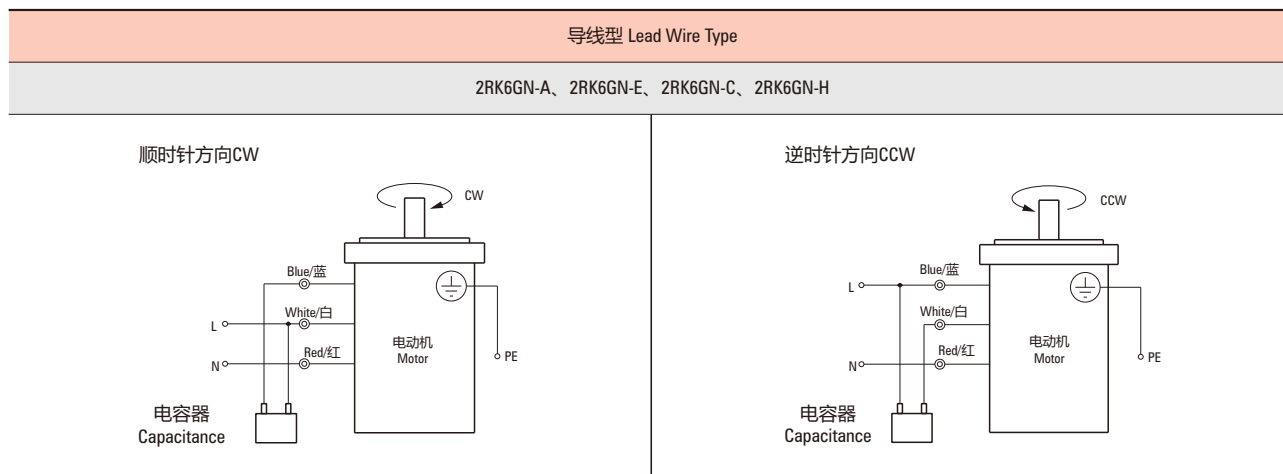
型号Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
2RK6GN-A	2RK6A-A	ZD40CFAUL	47	17	31
2RK6GN-E	2RK6A-E	ZD25CFAUL	38	17	28
2RK6GN-C	2RK6A-C	ZD10CFAUL	36	11	22

- 常规电容器出线为引线,也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



■ 连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向, CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型, 圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.



请注意 Note:

单相电动机运转方向的转换应在电动机停止后进行。

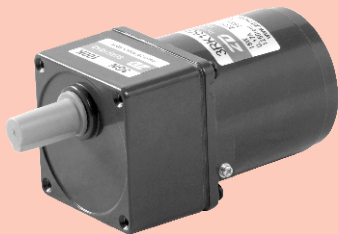
Change the direction of single-phase motor rotation only after motor stop.

若在电动机运转时转换运转方向, 可能发生无法转换运转方向或须费时较久的情况。

If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

可逆电动机 REVERSIBLE MOTORS

15W 70mm



规格 Specs 30分钟额定 30 Minutes Rating

型号 Model · 类型 Type 导线型 Lead Wire Type		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft								
3RK15GN-A	3RK15A-A	15	1ph 100	50	0.40	110	125	1200	7.0
				60	0.56	105	105	1450	
3RK15GN-E	3RK15A-E	15	1ph110	60	0.43	85	105	1450	6.0
			1ph120		0.42				
3RK15GN-C	3RK15A-C	15	1ph220	50	0.23	110	125	1200	1.5
			1ph230						
3RK15GN-H	3RK15A-H	15	1ph220	60	0.20	85	105	1450	1.5
			1ph230			90			

- 可逆电动机的额定转矩、启动转矩数值均为未安装简易制动时的数值。
Values shown for rated torque and starting torque are measured for operation without the friction brake installed.
- 各种安全规格以电动机铭牌上的型号取得认定。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- Ⓢ ：内置热保护装置（自动复位型）。在电动机因某种原因过热时会自行启动使电动机停止。
Contains a built-in thermal protector(automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.
- 电动机温度下降后会自动恢复运行，故在进行检查作业时请务必先切断电源。
When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

电动机 Motor

机型 Type	型号Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	3RK15GN-A	3RK15A-A
	3RK15GN-E	3RK15A-E
	3RK15GN-C	3RK15A-C
	3RK15GN-H	3RK15A-H

平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	3GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	3GN10XK（中间减速器 Middle Gearhead）	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为5N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 5N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio																				
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100
3RK15GN-A 3RK15GN-E 3RK15GN-C 3RK15GN-H	3GN□K	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16
			600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20
		60Hz	0.30	0.36	0.51	0.61	0.76	0.91	0.97	1.30	1.50	1.80	1.94	2.30	2.70	3.30	3.48	4.10	5.00	5.00	5.00
			3.06	3.67	5.20	6.22	7.75	9.28	9.90	13.2	15.3	18.3	19.8	23.4	27.5	33.7	35.5	41.8	50.0	50.0	50.0

■ 容许悬挂负载 · 容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215 Motor (Round shaft) →P215
减速机→P215 Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

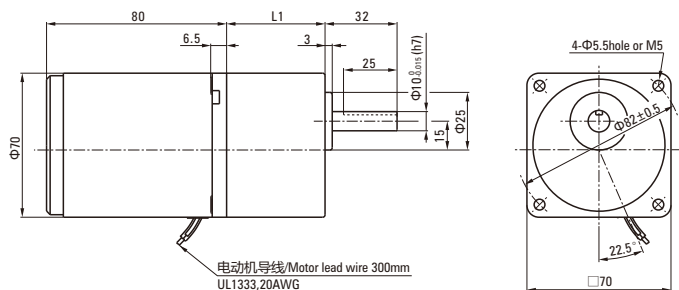
→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

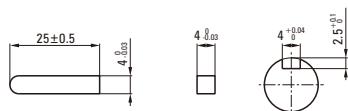
重量 Weight：电动机 Motor：1.15kg 减速机 Gearhead：0.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
3RK15GN-A 3RK15GN-E 3RK15GN-C 3RK15GN-H	3GN□K	3~200	42

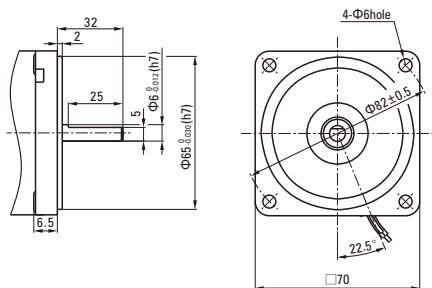
- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 键·键槽 (减速器附件) Key · Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

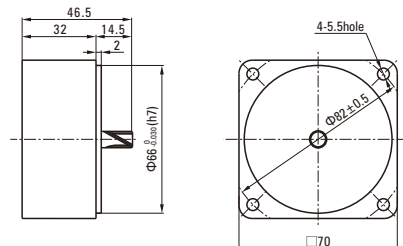
除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
3GN10XK

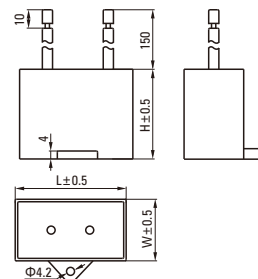
重量 Weight : 0.31kg



■ 电容器外形尺寸 Dimension Of Capacitor

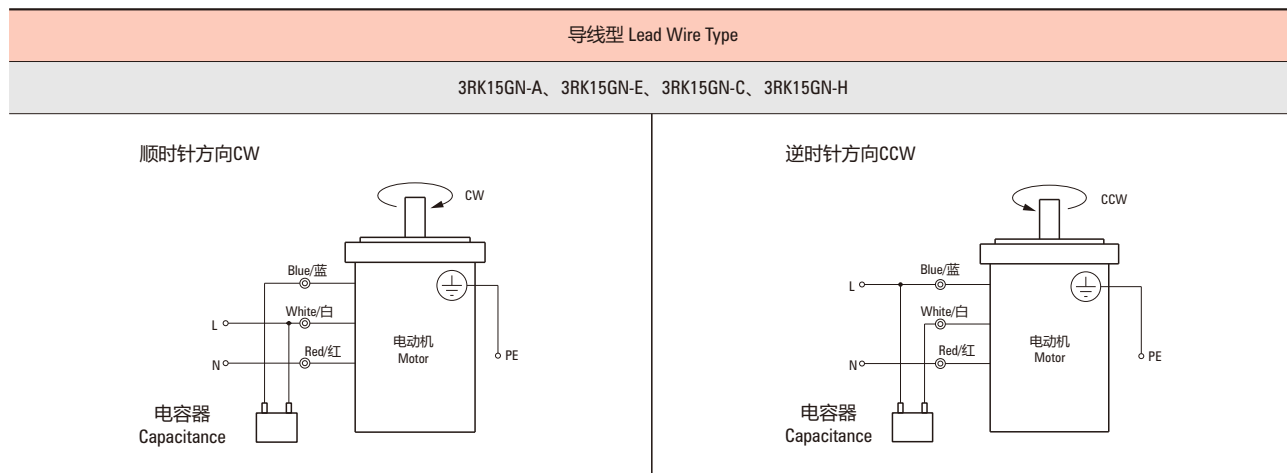
型号Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
3RK15GN-A	3RK15A-A	ZD70CFAUL	47	24.0	37
3RK15GN-E	3RK15A-E	ZD60CFAUL	48	23.0	32
3RK15GN-C	3RK15A-C	ZD15BFAUL	36	12.5	24

- 常规电容器出线为引线,也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



■ 连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向, CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型, 圆轴型亦同。 Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.



请注意 Note:

单相电动机运转方向的转换应在电动机停止后进行。

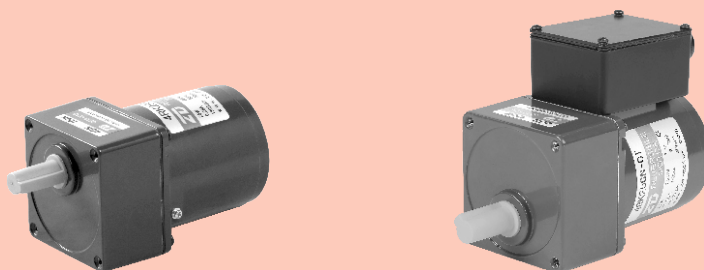
Change the direction of single-phase motor rotation only after motor stop.

若在电动机运转时转换运转方向, 可能发生无法转换运转方向或须费时较久的情况。

If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

可逆电动机 REVERSIBLE MOTORS

■ 25W □ 80mm



规格 Specs 30分钟额定 30 Minutes Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段(内): 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
4RK25GN-A (4RK25A-A)	4RK25GN-AT (4RK25A-AT)	25	1ph 100	50	0.59	160	200	1250	10.0
				60	0.69	140	165	1550	
4RK25GN-E (4RK25A-E)	4RK25GN-ET (4RK25A-ET)	25	1ph 110	60	0.45	140	165	1550	8.0
			1ph 120		0.50				
4RK25GN-C (4RK25A-C)	4RK25GN-CT (4RK25A-CT)	25	1ph 220	50	0.29	140	200	1250	2.2
			1ph 230		0.30	160			
4RK25GN-H (4RK25A-H)	4RK25GN-HT (4RK25A-HT)	25	1ph 220	60	0.35	140	165	1550	2.2
			1ph 230						

●可逆电动机的额定转矩、启动转矩数值均为未安装简易制动时的数值。

Values shown for rated torque and starting torque are measured for operation without the friction brake installed.

●各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●**Ⓘ**: 内置热保护装置(自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector(automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

●电动机温度下降后会自行恢复运行,故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

●注:“-A”型号中电压为110V时,配置电容器容量以实际铭牌为准。

Note:“-A” it means the voltage 110V, the assembly capacitor value it is according to the label.

种类 Type

● 电动机 Motor

机型 Type	型号Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	4RK25GN-A	4RK25A-A
	4RK25GN-E	4RK25A-E
	4RK25GN-C	4RK25A-C
	4RK25GN-H	4RK25A-H
带端子箱型 Terminal Box Type	4RK25GN-AT	4RK25A-AT
	4RK25GN-ET	4RK25A-ET
	4RK25GN-CT	4RK25A-CT
	4RK25GN-HT	4RK25A-HT

● 平行轴减速器(另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	4GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	4GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为8N·m。但安装了1/25~1/36的减速器时，容许转矩为6N·m
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 8N·m. When a gearhead of 1/25~1/36 is connected, the value for permissible torque is 6N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
4RK25GN-A□ 4RK25GN-E□ 4RK25GN-C□ 4RK25GN-H□	4GN□K	50Hz	0.49	0.58	0.81	0.97	1.20	1.50	1.55	2.00	2.40	2.90	3.17	3.70	4.40	5.30	5.57	6.60	7.90	8.00	8.00	8.00	8.00	8.00	8.00	8.00
			5.00	5.91	8.26	9.89	12.2	15.3	15.8	20.4	24.4	29.6	32.3	37.7	44.9	54.1	56.8	67.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
		60Hz	0.40	0.48	0.67	0.80	1.00	1.20	1.25	1.70	2.00	2.40	2.64	3.00	3.60	4.30	4.49	5.40	6.50	8.00	8.00	8.00	8.00	8.00	8.00	8.00
			4.08	4.89	6.83	8.16	10.2	12.2	12.8	17.3	20.4	24.4	26.9	30.6	36.7	43.8	45.8	55.1	66.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215 Motor (Round shaft) →P215
减速机→P215 Gearhead→P215

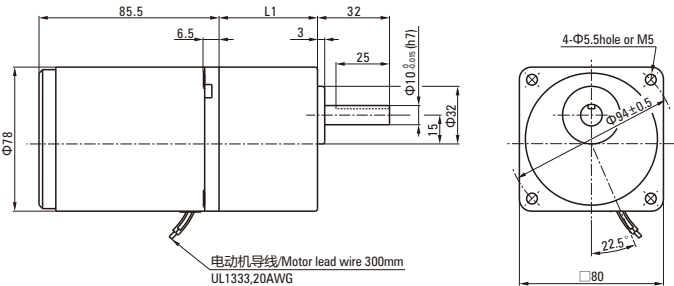
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type ①
重量 Weight：电动机 Motor：1.65kg 减速器 Gearhead：0.8kg

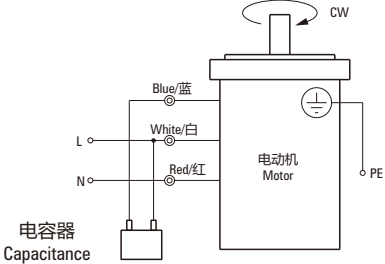
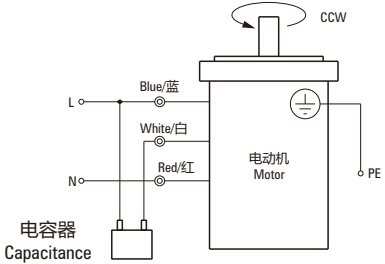
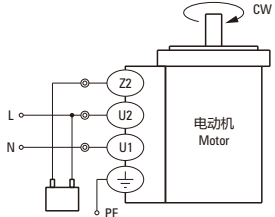
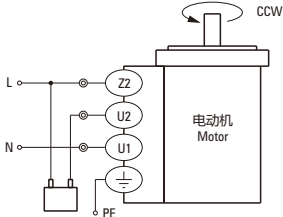


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
4RK25GN-A 4RK25GN-E 4RK25GN-C 4RK25GN-H	4GN□K	3~200	43.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

连接图 Wiring Diagram

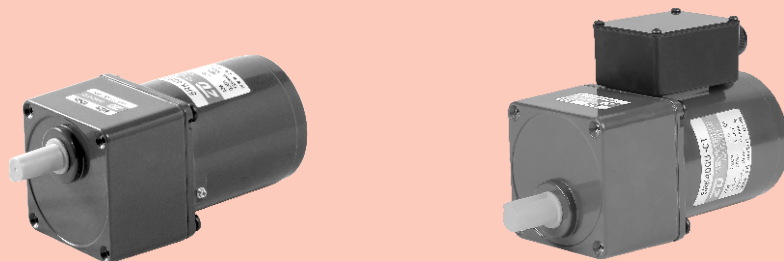
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type	
4RK25GN-A、4RK25GN-E、4RK25GN-H、4RK25GN-C	
顺时针方向CW 	逆时针方向CCW 
带端子箱型 Terminal Box Type	
4RK25GN-AT、4RK25GN-ET、4RK25GN-HT、4RK25GN-CT	
顺时针方向CW 	逆时针方向CCW 

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

可逆电动机 REVERSIBLE MOTORS

■ 40W □ 90mm



规格 Specs 30分钟额定 30 Minutes Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5RK40GN-A (5RK40A-A)	5RK40GN-AT (5RK40A-AT)	40	1ph 100	50	0.78	300	315	1250	15.0
				60	1.05		260	1550	
5RK40GN-E (5RK40A-E)	5RK40GN-ET (5RK40A-ET)	40	1ph 110	60	0.79	260	260	1550	12.0
			1ph 120		0.80				
5RK40GN-C (5RK40A-C)	5RK40GN-CT (5RK40A-CT)	40	1ph 220	50	0.45	270	315	1250	3.0
			1ph 230						
5RK40GN-H (5RK40A-H)	5RK40GN-HT (5RK40A-HT)	40	1ph 220	60	0.45	270	260	1550	3.0
			1ph 230						

●各种安全规格以电动机铭牌上的型号名取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK40GN-A	5RK40A-A
	5RK40GN-E	5RK40A-E
	5RK40GN-C	5RK40A-C
	5RK40GN-H	5RK40A-H
带端子箱型 Terminal Box Type	5RK40GN-AT	5RK40A-AT
	5RK40GN-ET	5RK40A-ET
	5RK40GN-CT	5RK40A-CT
	5RK40GN-HT	5RK40A-HT

● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为8N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 8N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
			600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK40GN-A□ 5RK40GN-E□ 5RK40GN-C□ 5RK40GN-H□	5GN□K	50Hz	0.77	0.92	1.30	1.50	1.90	2.30	2.38	3.20	3.80	4.60	4.88	5.70	6.90	8.30	8.57	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			7.85	9.38	13.2	15.3	19.4	23.4	24.3	32.6	38.7	46.9	49.8	58.1	70.4	84.7	87.4	100	100	100	100	100	100	100	100	100
		60Hz	0.63	0.76	1.10	1.30	1.60	1.90	2.00	2.60	3.20	3.80	4.07	4.70	5.70	6.80	7.19	8.60	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			6.42	7.75	11.2	13.2	16.3	19.3	20.4	26.5	32.6	38.7	41.5	47.9	58.1	69.3	73.4	87.7	100	100	100	100	100	100	100	100

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

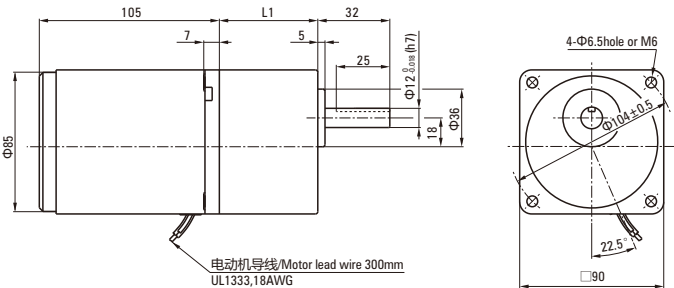
→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：2.45kg 减速器 Gearhead：1.35kg

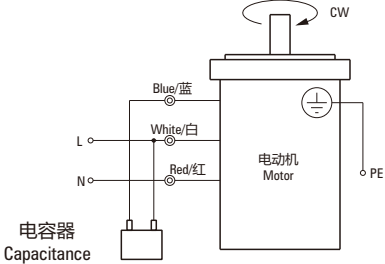
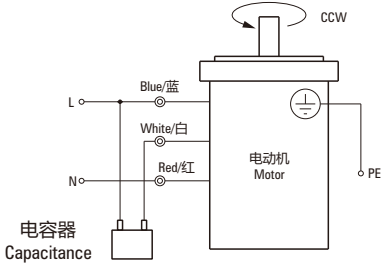
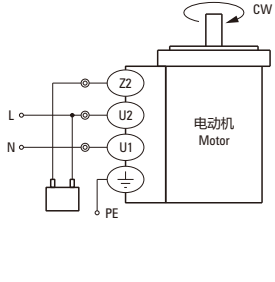
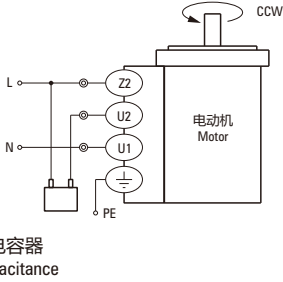


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK40GN-A 5RK40GN-E 5RK40GN-C 5RK40GN-H	5GN□K	3~200	60

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=42)
Gear ratio 3~18, short case is possible (L1=42)

连接图 Wiring Diagram

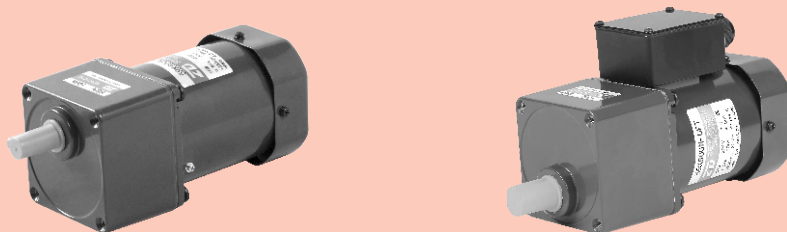
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type	
5RK40GN-A、5RK40GN-E、5RK40GN-H、5RK40GN-C	
顺时针方向CW 	逆时针方向CCW 
带端子箱型 Terminal Box Type	
5RK40GN-AT、5RK40GN-ET、5RK40GN-HT、5RK40GN-CT	
顺时针方向CW 	逆时针方向CCW 

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

可逆电动机 REVERSIBLE MOTORS

60W 90mm



规格 Specs 30分钟额定 30 Minutes Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5RK60GN-AF (5RK60A-AF)	5RK60GN-AFT (5RK60A-AFT)	60	1ph 100	50	1.26	470	470	1250	25.0
				60	1.70		380	1550	
5RK60GN-EF (5RK60A-EF)	5RK60GN-EFT (5RK60A-EFT)	60	1ph 110	60	1.05	330	380	1550	15.0
			1ph 120			380			
5RK60GN-CF (5RK60A-CF)	5RK60GN-CFT (5RK60A-CFT)	60	1ph 220	50	0.55	420	470	1250	4.50
			1ph 230		0.60	460			
5RK60GN-HF (5RK60A-HF)	5RK60GN-HFT (5RK60A-HFT)	60	1ph 220	60	0.55	420	380	1550	4.50
			1ph 230		0.60	460			

●各种安全规格以电动机铭牌上的型号名取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK60GN-AF	5RK60A-AF
	5RK60GN-EF	5RK60A-EF
	5RK60GN-CF	5RK60A-CF
	5RK60GN-HF	5RK60A-HF
带端子箱型 Terminal Box Type	5RK60GN-AFT	5RK60A-AFT
	5RK60GN-EFT	5RK60A-EFT
	5RK60GN-CFT	5RK60A-CFT
	5RK60GN-HFT	5RK60A-HFT

● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为10N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 10N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK60GN-AF□ 5RK60GN-EF□ 5RK60GN-CF□ 5RK60GN-HF□	5GN□K	50Hz	1.10	1.40	1.90	2.30	2.90	3.40	3.57	4.80	5.70	6.80	7.03	8.60	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			11.2	14.2	19.3	23.4	29.6	34.7	36.4	48.9	58.1	69.3	71.7	87.7	100	100	100	100	100	100	100	100	100	100	100	100
		60Hz	0.92	1.10	1.50	1.80	2.30	2.80	2.99	3.80	4.60	5.50	5.70	6.90	8.30	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			9.38	11.2	15.3	18.3	23.4	28.5	30.5	38.7	46.9	56.1	58.2	70.1	84.7	100	100	100	100	100	100	100	100	100	100	100

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

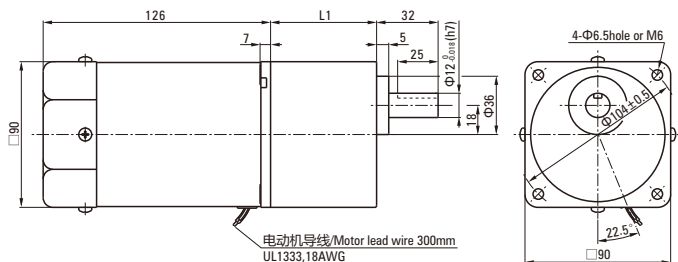
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：2.75kg

减速机 Gearhead：1.35kg



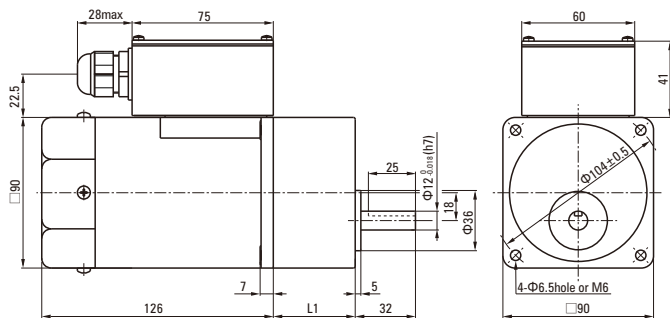
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK60GN-AF 5RK60GN-EF 5RK60GN-CF 5RK60GN-HF	5GN□K	3~200	60

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=42)
Gear ratio 3~18, short case is possible (L1=42)

带端子箱型 Terminal Box Type ②

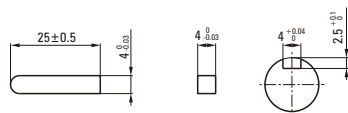
重量 Weight : 电动机 Motor : 2.9kg

减速器 Gearhead : 1.35kg



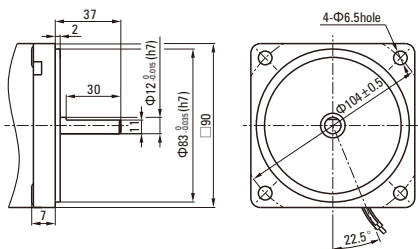
●适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12\text{mm}$

键·键槽 (减速器附件) Key · Keyway (Accessory Of Gearhead)



圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

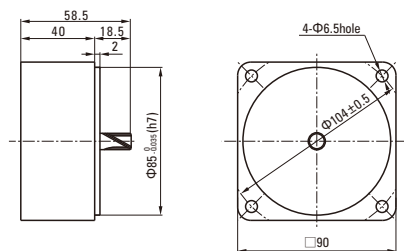


中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GN10XK

重量 Weight : 0.6kg



电容器外形尺寸 Dimension Of Capacitor

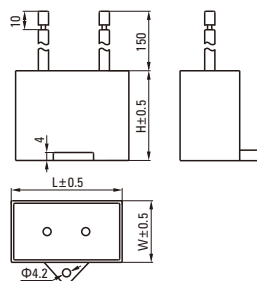
型号Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5RK60GN-AF	5RK60A-AF	ZD250CFAUL	47	27	37
5RK60GN-EF	5RK60A-EF	ZD150CFAUL	47	20	31
5RK60GN-CF	5RK60A-CF	ZD45BFAUL	47	19	31

●常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

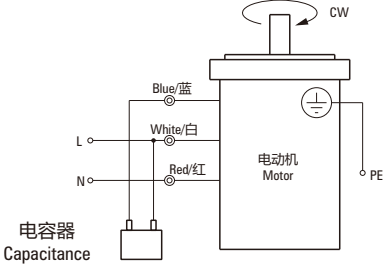
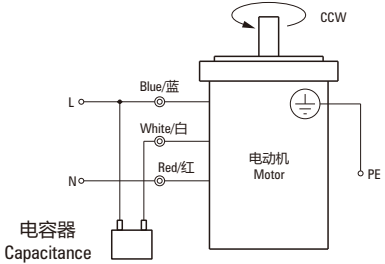
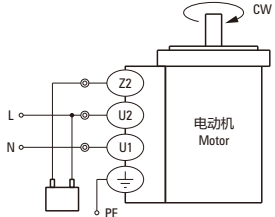
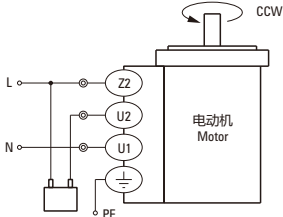
●电动机型号的□中为表示带端子箱型的记号(T)

Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

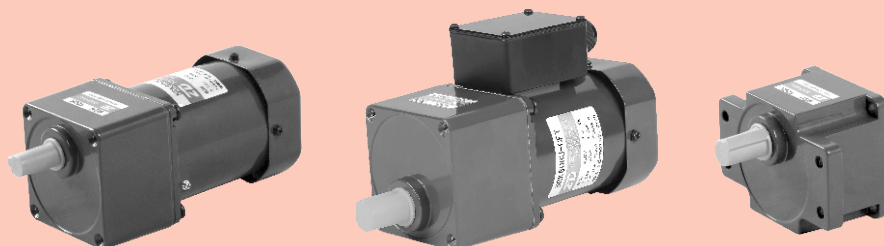
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type	
5RK60GN-AF、5RK60GN-EF、5RK60GN-HF、5RK60GN-CF	
顺时针方向CW 	逆时针方向CCW 
带端子箱型 Terminal Box Type	
5RK60GN-AFT、5RK60GN-EFT、5RK60GN-HFT、5RK60GN-CFT	
顺时针方向CW 	逆时针方向CCW 

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

可逆电动机 REVERSIBLE MOTORS

60W 90mm



规格 Specs 30分钟额定 30 Minutes Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5RK60GU-AF	5RK60GU-AFT	60	1ph 100	50	1.26	470	470	1250	25.0
				60	1.70		380	1550	
5RK60GU-EF	5RK60GU-EFT	60	1ph 110	60	1.05	330	380	1550	15.0
			1ph 120			380			
5RK60GU-CF	5RK60GU-CFT	60	1ph 220	50	0.55	420	470	1250	4.50
			1ph 230		0.60	460			
5RK60GU-HF	5RK60GU-HFT	60	1ph 220	60	0.55	420	380	1550	4.50
			1ph 230		0.60	460			

●各种安全规格以电动机铭牌上的型号名取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK60GU-AF	5RK60A-AF
	5RK60GU-EF	5RK60A-EF
	5RK60GU-CF	5RK60A-CF
	5RK60GU-HF	5RK60A-HF
带端子箱型 Terminal Box Type	5RK60GU-AFT	5RK60A-AFT
	5RK60GU-EFT	5RK60A-EFT
	5RK60GU-CFT	5RK60A-CFT
	5RK60GU-HFT	5RK60A-HFT

● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为10N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 10N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK60GU-AF□ 5RK60GU-EF□ 5RK60GU-CF□ 5RK60GU-HF□	5GU□KB 5GU□K	50Hz	1.10	1.40	1.90	2.30	2.90	3.40	3.61	4.80	5.70	6.80	7.12	8.60	10.0	10.3	11.6	12.4	15.5	18.6	20.0	20.0	20.0	20.0	20.0	20.0
			11.2	14.2	19.3	23.4	29.6	34.7	36.8	48.9	58.1	69.3	72.6	87.7	100	105	118	126	158	189	200	200	200	200	200	200
		60Hz	0.92	1.10	1.50	1.80	2.30	2.80	3.01	3.80	4.60	5.50	5.73	6.90	8.30	8.30	9.70	10.0	12.5	15.0	18.8	20.0	20.0	20.0	20.0	20.0
			9.38	11.2	15.3	18.3	23.4	28.5	30.7	38.7	46.9	56.1	58.4	70.1	84.7	84.6	98.9	102	127	153	192	200	200	200	200	200

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

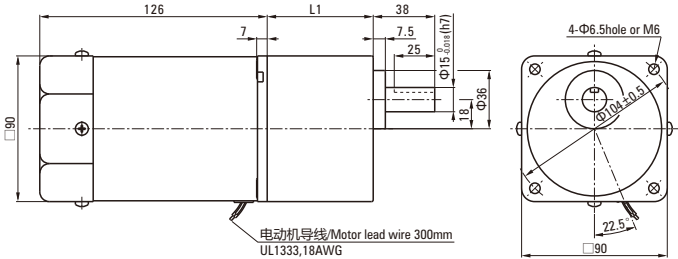
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type ①
重量 Weight：电动机 Motor：2.75kg 减速器 Gearhead：1.35kg



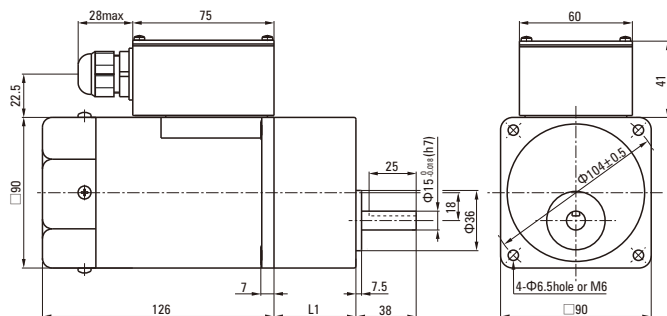
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK60GU-AF 5RK60GU-EF 5RK60GU-CF 5RK60GU-HF	5GU□KB	3~200	65.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

带端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 2.9kg

减速器 Gearhead : 1.5kg



●适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12\text{mm}$

电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK60GU-AFT 5RK60GU-EFT 5RK60GU-CFT 5RK60GU-HFT	5GU□KB	3~200	65.5

●减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

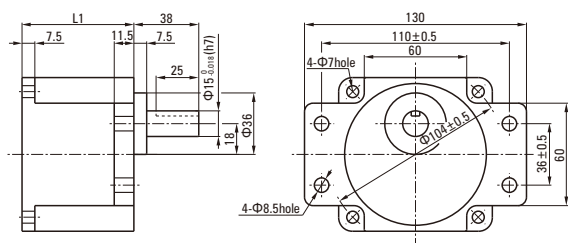
凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

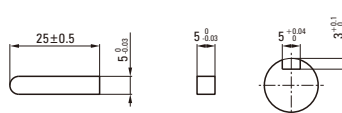
5GU□K

重量Weight:1.5kg



键·键槽 (减速器附件)

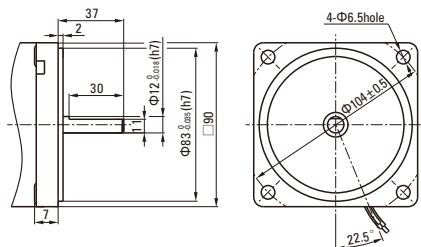
Key · Keyway (Accessory Of Gearhead)



圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

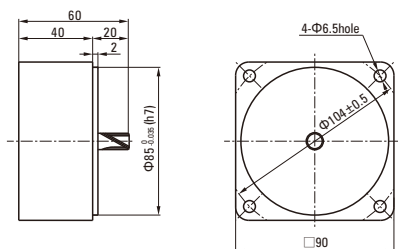


中间减速器 Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GU10XK

重量 Weight : 0.6kg



电容器外形尺寸 Dimension Of Capacitor

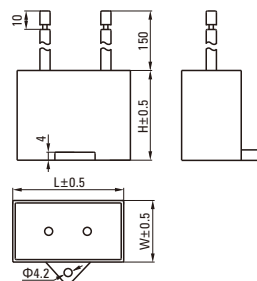
型号Model	电容器型号 Capacitor Model	L	W	H
5RK60GU-AF	ZD250CFAUL	47	27	37
5RK60GU-EF	ZD150CFAUL	47	20	31
5RK60GU-CF	ZD45BFAUL	47	19	31

● 常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

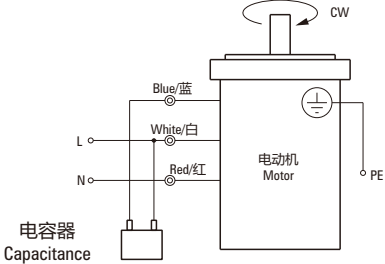
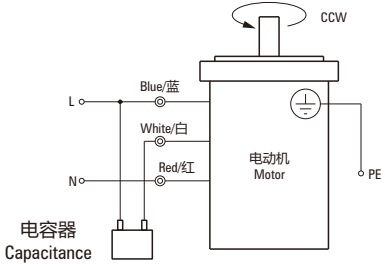
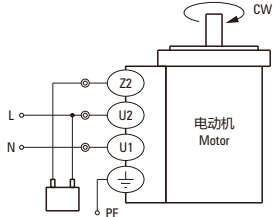
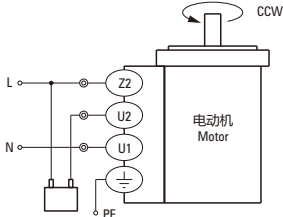
● 电动机型号的□中为表示带端子箱型的记号(T)

Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

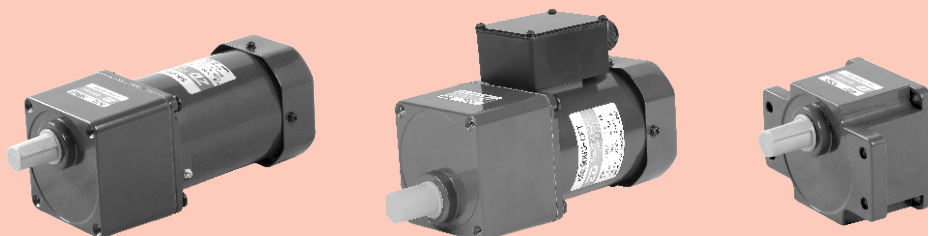
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type	
5RK60GU-AF、5RK60GU-EF、5RK60GU-HF、5RK60GU-CF	
顺时针方向CW 	逆时针方向CCW 
带端子箱型 Terminal Box Type	
5RK60GU-AFT、5RK60GU-EFT、5RK60GU-HFT、5RK60GU-CFT	
顺时针方向CW 	逆时针方向CCW 

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

可逆电动机 REVERSIBLE MOTORS

■ 90W □ 90mm



规格 Specs 30分钟额定 30 Minutes Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段()内: 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5RK90GU-AF (5RK90A-AF)	5RK90GU-AFT (5RK90A-AFT)	90	1ph 100	50	1.78	600	700	1250	30.0
				60	2.35		570	1550	
5RK90GU-EF (5RK90A-EF)	5RK90GU-EFT (5RK90A-EFT)	90	1ph 110	60	1.72	550	570	1550	25.0
			1ph 120			600			
5RK90GU-CF (5RK90A-CF)	5RK90GU-CFT (5RK90A-CFT)	90	1ph 220	50	0.82	560	700	1250	6.0
			1ph 230		0.81				
5RK90GU-HF (5RK90A-HF)	5RK90GU-HFT (5RK90A-HFT)	90	1ph 220	60	0.81	560	560	1550	6.0
			1ph 230		0.80				

●各种安全规格以电动机铭牌上的型号名取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK90GU-AF	5RK90A-AF
	5RK90GU-EF	5RK90A-EF
	5RK90GU-CF	5RK90A-CF
	5RK90GU-HF	5RK90A-HF
带端子箱型 Terminal Box Type	5RK90GU-AFT	5RK90A-AFT
	5RK90GU-EFT	5RK90A-EFT
	5RK90GU-CFT	5RK90A-CFT
	5RK90GU-HFT	5RK90A-HFT

● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK90GU-AF□ 5RK90GU-EF□ 5RK90GU-CF□ 5RK90GU-HF□	5GU□KB 5GU□K	50Hz	1.10	2.00	2.80	3.40	4.30	5.10	5.31	6.40	7.70	9.20	9.55	11.6	13.6	16.6	18.1	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			17.3	20.4	28.6	34.7	43.9	52.0	54.2	65.3	78.6	93.3	97.4	118	139	169	184	200	200	200	200	200	200	200	200	200
		60Hz	1.40	1.70	2.50	2.80	3.50	4.20	4.43	5.20	6.20	7.50	7.81	9.40	11.3	13.5	14.5	18.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			14.3	17.3	25.5	28.6	35.7	42.9	45.2	53.1	63.3	76.5	79.6	95.9	115	138	148	192	200	200	200	200	200	200	200	200

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

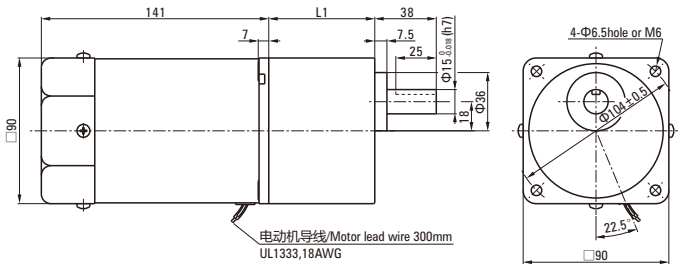
→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type ①

重量 Weight：电动机 Motor：3.25kg 减速机 Gearhead：1.5kg



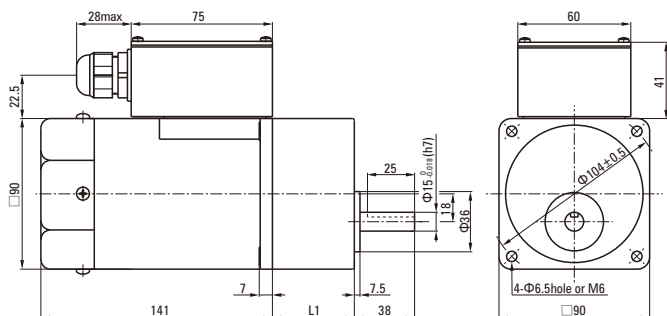
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK90GU-AF 5RK90GU-EF 5RK90GU-CF 5RK90GU-HF	5GU□KB	3~200	65.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

带端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 3.40kg

减速器 Gearhead : 1.5kg



●适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12$ mm

电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK90GU-AFT 5RK90GU-EFT 5RK90GU-CFT 5RK90GU-HFT	5GU□KB	3~200	65.5

●减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

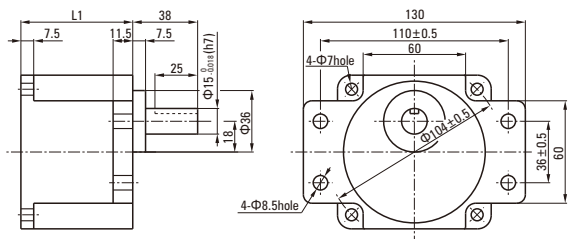
凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

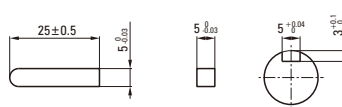
5GU□K

重量Weight:1.5kg



键·键槽 (减速器附件)

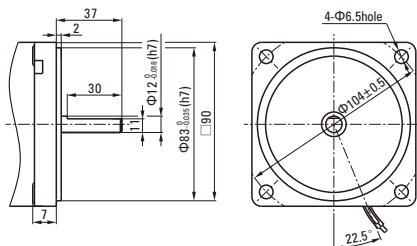
Key · Keyway (Accessory Of Gearhead)



圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

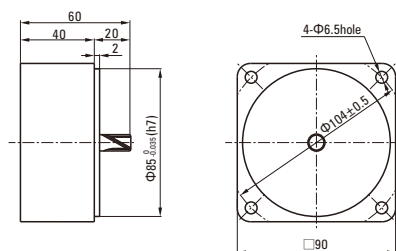


中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GN10XK

重量 Weight : 0.6kg



电容器外形尺寸 Dimension Of Capacitor

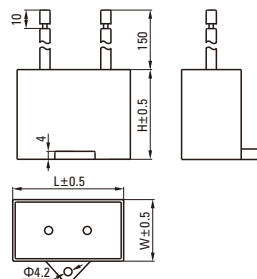
型号Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5RK90GU-AF	5RK90A-AF	ZD300CFAUL	58	26	38
5RK90GU-EF	5RK90A-EF	ZD250CFAUL	47	27	37
5RK90GU-CF	5RK90A-CF	ZD60BFAUL	48	23	32

●常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

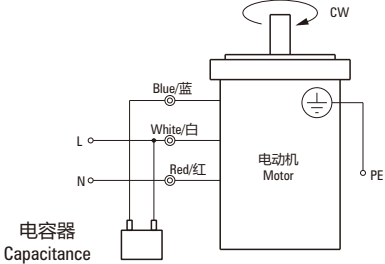
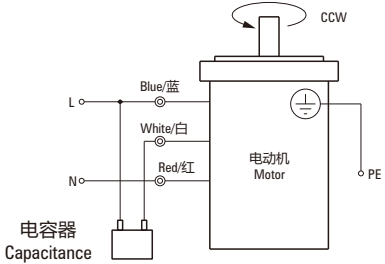
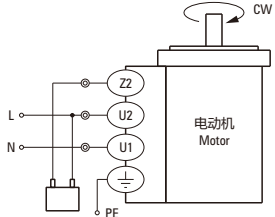
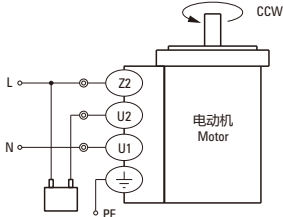
●电动机型号的□中为表示带端子箱型的记号(T)

Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

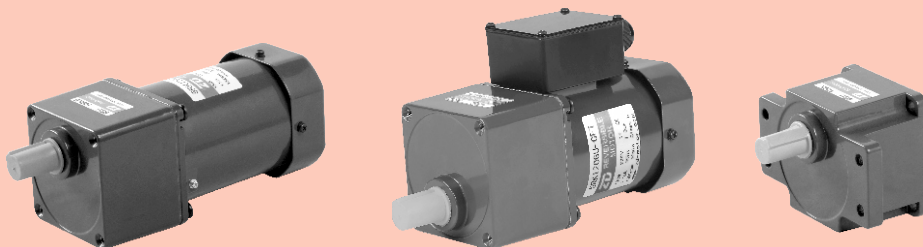
- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

导线型 Lead Wire Type	
5RK90GU-AF、5RK90GU-EF、5RK90GU-HF、5RK90GU-CF	
顺时针方向CW 	逆时针方向CCW 
带端子箱型 Terminal Box Type	
5RK90GU-AFT、5RK90GU-EFT、5RK90GU-HFT、5RK90GU-CFT	
顺时针方向CW 	逆时针方向CCW 

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

可逆电动机 REVERSIBLE MOTORS

■ 120W □ 90mm



规格 Specs 30分钟额定 30 Minutes Rating

型号 Model · 类型 Type 上段: 齿轮轴 Upper: Pinion Shaft 下段(): 圆轴 Below: Round Shaft		输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	电流 Current A	启动转矩 Starting Torque mN.m	额定转矩 Rated Torque mN.m	额定转速 Rated Speed r/min	电容器容量 Capacitor μF
导线型 Lead Wire Type 外形图Dimensions①	带端子箱型 Terminal Box Type 外形图Dimensions②								
5RK120GU-AF (5RK120A-AF)	5RK120GU-AFT (5RK120A-AFT)	120	1ph 100	50	2.25	700	930	1250	35.0
				60	2.85		750	1550	
5RK120GU-EF (5RK120A-EF)	5RK120GU-EFT (5RK120A-EFT)	120	1ph 110	60	1.90	650	750	1550	30.0
			1ph 120			720			
5RK120GU-CF (5RK120A-CF)	5RK120GU-CFT (5RK120A-CFT)	120	1ph 220	50	1.00	650	930	1250	7.0
			1ph 230		0.95				
5RK120GU-HF (5RK120A-HF)	5RK120GU-HFT (5RK120A-HFT)	120	1ph 220	60	1.00	600	750	1550	7.0
			1ph 230		0.95				

●各种安全规格以电动机铭牌上的型号名取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK120GU-AF	5RK120A-AF
	5RK120GU-EF	5RK120A-EF
	5RK120GU-CF	5RK120A-CF
	5RK120GU-HF	5RK120A-HF
带端子箱型 Terminal Box Type	5RK120GU-AFT	5RK120A-AFT
	5RK120GU-EFT	5RK120A-EFT
	5RK120GU-CFT	5RK120A-CFT
	5RK120GU-HFT	5RK120A-HFT

● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
 Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
 Enter the gear ratio in the box (□) within the model name.
- 色表示与电动机同一方向运转，其他则为相反方向。
 The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
 The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。
 To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
			600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK120GU-AF□ 5RK120GU-EF□ 5RK120GU-CF□ 5RK120GU-HF□	5GU□KB 5GU□K	50Hz	2.30	2.70	3.80	4.50	5.60	6.80	7.01	8.50	10.2	12.2	12.5	15.3	18.4	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			23.4	27.5	38.7	45.9	57.1	69.3	71.5	86.7	104	124	128	156	187	200	200	200	200	200	200	200	200	200	200	200
		60Hz	1.80	2.20	3.00	3.60	4.60	5.50	5.73	6.80	8.20	9.80	10.1	12.4	14.9	17.8	19.5	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			18.3	22.4	30.6	36.7	46.9	56.1	58.5	69.5	83.6	100	103	126	152	181	199	200	200	200	200	200	200	200	200	200

容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

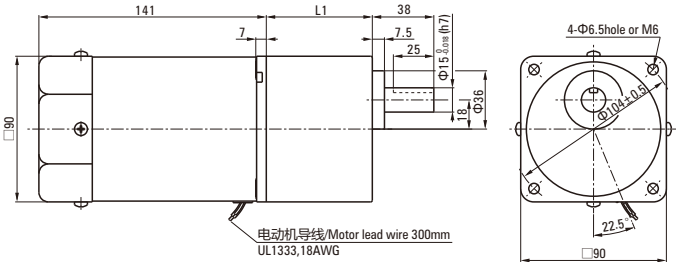
减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

外形图（单位 mm）Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type ①
 重量 Weight：电动机 Motor：3.45kg 减速器 Gearhead：1.5kg



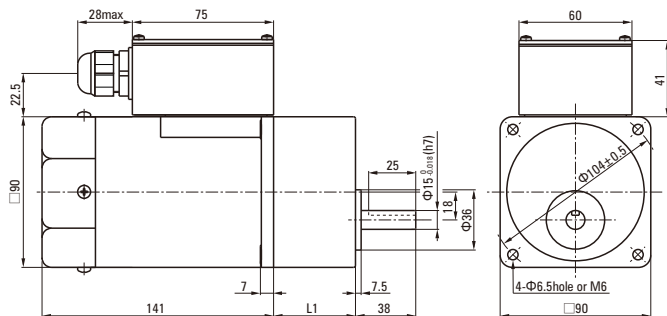
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK120GU-AF 5RK120GU-EF 5RK120GU-CF 5RK120GU-HF	5GU□KB	3~200	65.5

- 减速器型号的□中为减速比的数值
 Enter the gear ratio in the box (□) within the model name

带端子箱型 Terminal Box Type ②

重量 Weight : 电动机 Motor : 3.6kg

减速器 Gearhead : 1.5kg



●适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12\text{mm}$

电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK120GU-AFT 5RK120GU-EFT 5RK120GU-CFT 5RK120GU-HFT	5GU□KB	3~200	65.5

●减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

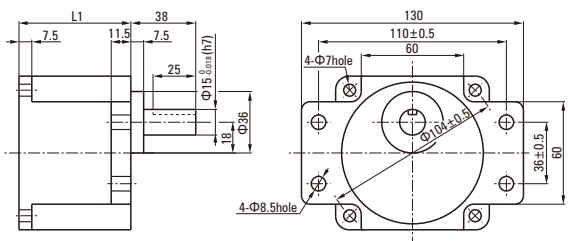
凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

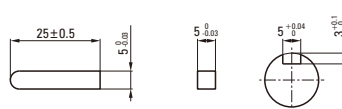
5GU□K

重量Weight:1.5kg



键·键槽 (减速器附件)

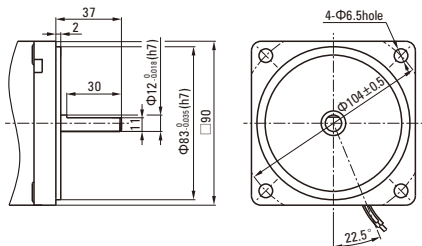
Key · Keyway (Accessory Of Gearhead)



圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

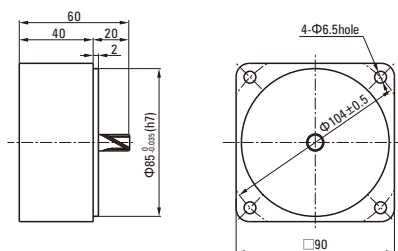


中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GN10XK

重量 Weight : 0.65kg



电容器外形尺寸 Dimension Of Capacitor

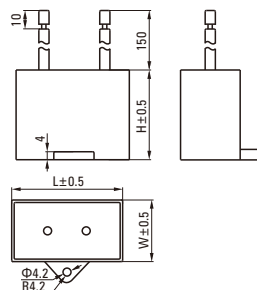
型号Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5RK120GU-AF	5RK120A-AF	ZD350CFAUL	58	30.0	40
5RK120GU-EF	5RK120A-EF	ZD300CFAUL	58	26.0	38
5RK120GU-CF	5RK120A-CF	ZD80BFAUL	48	26.5	38

●常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

●电动机型号的□中为表示带端子箱型的记号(T)

Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

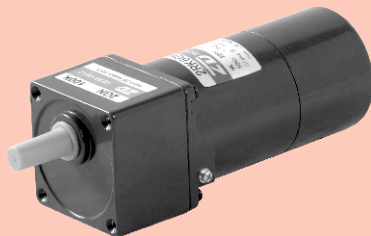
导线型 Lead Wire Type	
5RK120GU-AF、5RK120GU-EF、5RK120GU-HF、5RK120GU-CF	
顺时针方向CW	逆时针方向CCW
带端子箱型 Terminal Box Type	
5RK120GU-AFT、5RK120GU-EFT、5RK120GU-HFT、5RK120GU-CFT	
顺时针方向CW	逆时针方向CCW

请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 6W □ 60mm



规格 Specs / 电动机 Motor

- 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
2RK6GN-AM	2RK6A-AM	30min	6	1ph 100	50	0.265	60	48	1200	4.0
					60	0.232	55	40	1450	
2RK6GN-EM	2RK6A-EM	30min	6	1ph 110	60	0.185	45	40	1450	2.5
				1ph 120		0.200				
2RK6GN-CM	2RK6A-CM	30min	6	1ph 220	50	0.145	55	48	1200	1.0
				1ph 230		0.150				
2RK6GN-HM	2RK6A-HM	30min	6	1ph 220	60	0.145	60	40	1450	1.0
				1ph 230		0.150				
2RK6GN-SM	2RK6A-SM	30min	6	3ph 220	50	0.076	85	48	1200	-
					60	0.065	70	40	1450	
2RK6GN-S3M	2RK6A-S3M	30min	6	3ph 380	50	0.044	85	48	1200	-
					60	0.038	70	40	1450	

- 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

- (T): 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector (automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

- 电动机温度下降后会启动恢复运行，故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor value it is according to the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire	2RK6GN-AM	2RK6A-AM
	2RK6GN-EM	2RK6A-EM
	2RK6GN-CM	2RK6A-CM
	2RK6GN-HM	2RK6A-HM
	2RK6GN-SM	2RK6A-SM
	2RK6GN-S3M	2RK6A-S3M

- 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	2GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	2GN10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为3N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 3N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转 速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
2RK6GN-AM 2RK6GN-EM 2RK6GN-CM 2RK6GN-HM 2RK6GN-SM 2RK6GN-S3M	2GN□K	50Hz	0.12	0.14	0.19	0.23	0.29	0.35	0.39	0.49	0.58	0.70	0.75	0.88	1.10	1.30	1.39	1.60	1.90	2.40	2.90	3.00	3.00	3.00	3.00	3.00
			1.22	1.43	1.94	2.35	2.96	3.57	3.98	5.00	5.92	7.14	7.65	8.98	11.2	13.3	14.2	16.3	19.4	24.5	29.6	30.0	30.0	30.0	30.0	30.0
		60Hz	0.10	0.12	0.16	0.19	0.24	0.29	0.32	0.41	0.49	0.58	0.62	0.73	0.88	1.10	1.15	1.30	1.60	2.00	2.40	2.60	3.00	3.00	3.00	3.00
			1.02	1.22	1.63	1.94	2.45	2.96	3.26	4.18	5.00	5.92	6.32	7.45	8.98	11.2	11.7	13.3	16.3	20.4	24.5	26.5	30.0	30.0	30.0	30.0

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

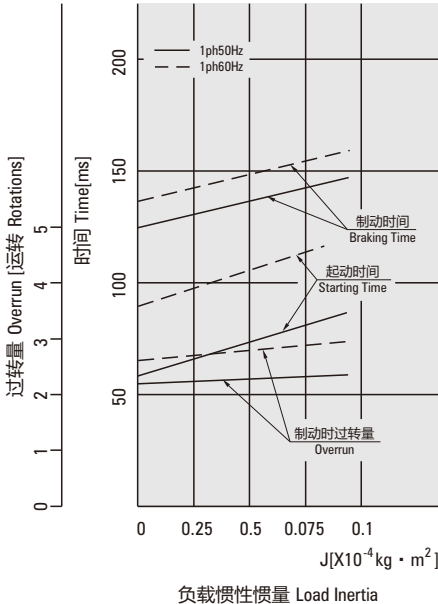
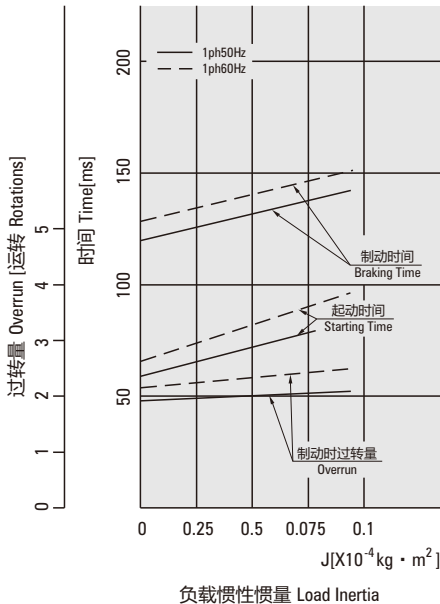
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性（参考值）Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor



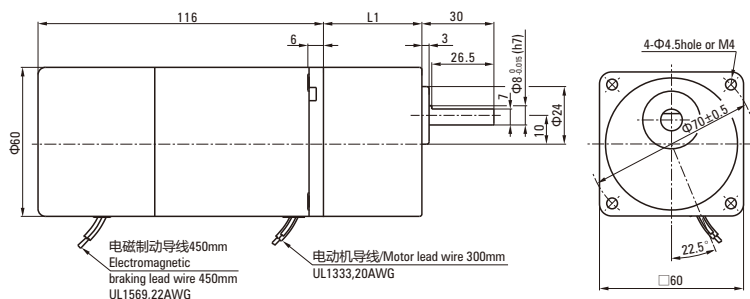
外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 1.1kg

减速器 Gearhead : 0.4kg

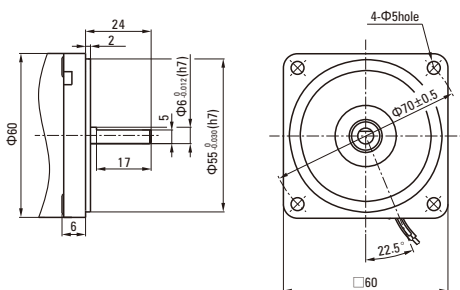


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
2RK6GN-AM 2RK6GN-EM 2RK6GN-CM 2RK6GN-HM 2RK6GN-SM 2RK6GN-S3M	2GN□K	3~200	41.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

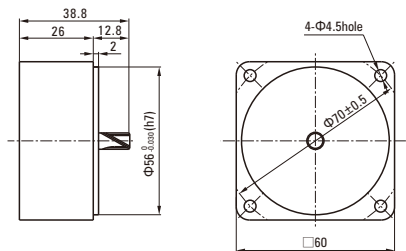
除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

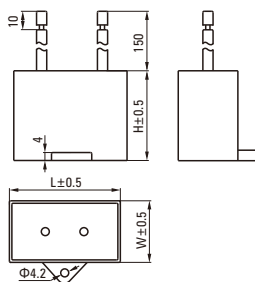
3GN10XK
重量 Weight : 0.3kg



电容器外形尺寸 Formal Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
2RK6GN-AM	2RK6A-AM	ZD40CFAUL	47	17	31
2RK6GN-EM	2RK6A-EM	ZD25CFAUL	38	17	28
2RK6GN-CM	2RK6A-CM	ZD10BFAUL	36	11	22

- 常规电容器出线为引线,也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional
- 电动机型号的中□为表示带端子的记号 (T)
Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
2RK6GN-AM、2RK6GN-EM、2RK6GN-CM、2RK6GN-HM

SW1为电动机的运行/停止及电磁制动操作用开关。（联动）

SW1 operates both motor and electromagnetic brake action. (Switched simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

在电动机停止状态下解除电磁制动时，应将SW1设定为非联动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

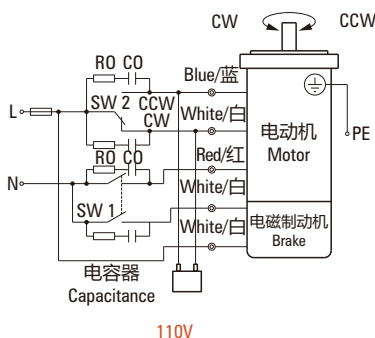
运转方向。Direction of Rotation.

将SW2转换至CW侧时，电动机作顺时针方向运转。

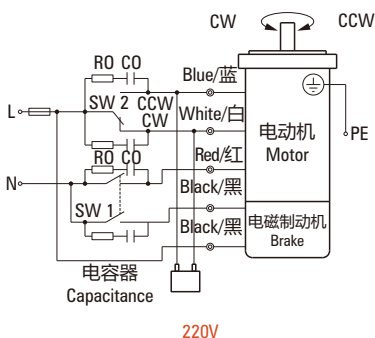
To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.

将SW2转换至CCW侧时，电动机作逆时针方向运转。

To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.



110V



220V

开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point		参考 Note
	单相100V、 110/120V输入 Single-Phase 100V, 110/120V Input	单相220V、 230V输入 Single-Phase 220V, 230V Input	
SW1	AC 125V 3A以上 (感应负载) AC 125V 3A minimum (Inductive Load)	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	联动Switched Simultaneously
SW2			-

三相电动机 Three-phase Motor
2IK6GN-SM(S3M)

SW1为电动机的运行/停止及电磁制动操作用开关。（联动）

SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

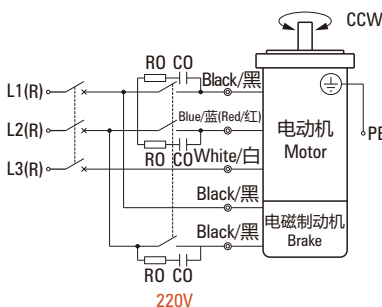
在电动机停止状态下解除电磁制动时，应将SW1设定为非联动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

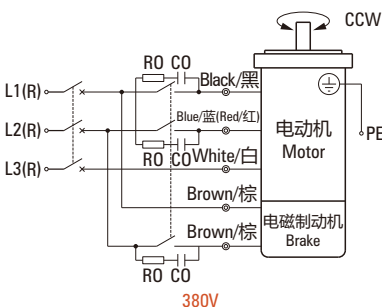
运转方向。Direction of Rotation.

若对换R、S、T中任意二条，电动机将逆时针方向运转。

To change the rotation direction, change any two connections between R, S and T.



220V



380V

开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point	参考 Note
SW1	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	联动 Switched Simultaneously

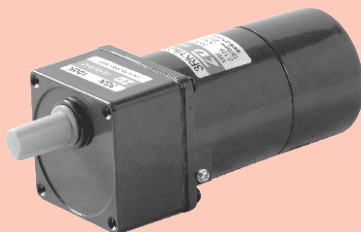
请注意Notes:

- R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。
- R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 15W □ 70mm



规格 Specs / 电动机 Motor

- 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
3RK15GN-AM	3RK15A-AM	30min	15	1ph 100	50	0.40	110	125	1200	7.0
					60	0.56	105	105	1450	
3RK15GN-EM	3RK15A-EM	30min	15	1ph 110	60	0.43	85	105	1450	6.0
				1ph 120		0.42				
3RK15GN-CM	3RK15A-CM	30min	15	1ph 220	50	0.23	110	125	1200	1.5
				1ph 230						
3RK15GN-HM	3RK15A-HM	30min	15	1ph 220	60	0.20	85	105	1450	1.5
				1ph 230			90			
3RK15GN-SM	3RK15A-SM	30min	15	3ph 220	50	0.14	220	125	1200	-
					60	0.12	180	105	1450	
3RK15GN-S3M	3RK15A-S3M	30min	15	3ph 380	50	0.08	220	125	1200	-
					60	0.06	180	105	1450	

- 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

- (T): 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector (automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

- 电动机温度下降后会自动恢复运行，故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor value it is according to the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	3RK15GN-AM	3RK15A-AM
	3RK15GN-EM	3RK15A-EM
	3RK15GN-CM	3RK15A-CM
	3RK15GN-HM	3RK15A-HM
	3RK15GN-SM	3RK15A-SM
	3RK15GN-S3M	3RK15A-S3M

- 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	3GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	3GN10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为5N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 5N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	
	转 速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5	
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9	
3RK15GN-AM 3RK15GN-EM 3RK15GN-CM 3RK15GN-HM 3RK15GN-SM 3RK15GN-S3M	3GN□K	50Hz	0.30	0.36	0.51	0.61	0.76	0.91	0.97	1.30	1.50	1.80	1.94	2.30	2.70	3.30	3.48	4.10	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
			3.06	3.67	5.20	6.22	7.75	9.28	9.90	13.2	15.3	18.3	19.8	23.4	27.5	33.7	35.5	41.8	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	
		60Hz	0.26	0.31	0.43	0.51	0.64	0.77	0.80	1.10	1.30	1.50	1.64	1.90	2.30	2.80	2.88	3.50	4.20	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
			2.65	3.16	4.38	5.20	6.53	7.85	8.16	11.2	13.2	15.3	16.7	19.3	23.4	28.5	29.4	35.7	42.8	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

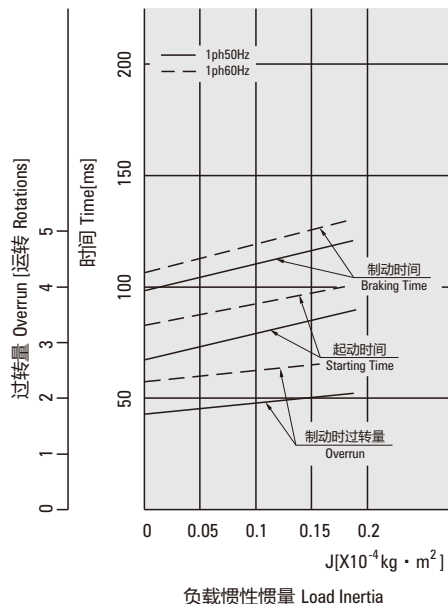
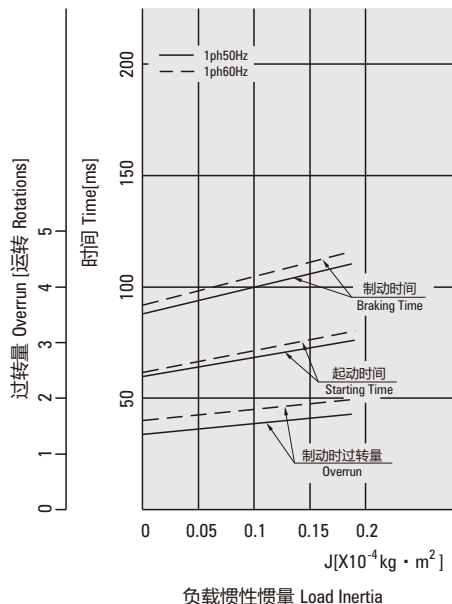
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性（参考值）Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor



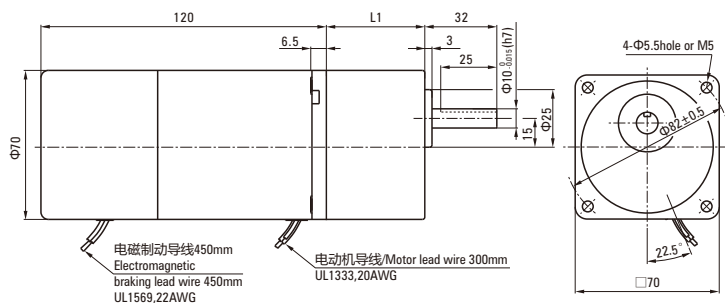
外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 1.47kg

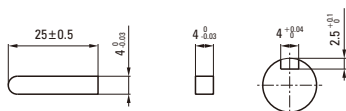
减速器 Gearhead : 0.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
3RK15GN-AM 3RK15GN-EM 3RK15GN-CM 3RK15GN-HM 3RK15GN-SM 3RK15GN-S3M	3GN□K	3~200	42

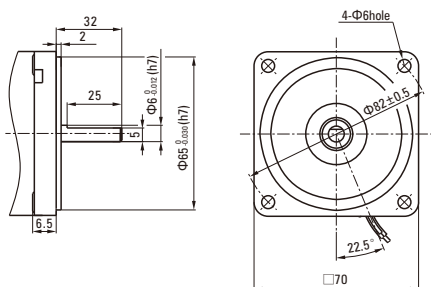
- 减速器型号中的□为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成长箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 键·键槽 (减速器附件) Key·Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

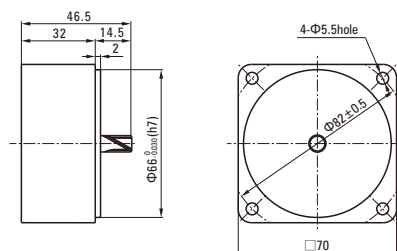


● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

3GN10XK

重量 Weight : 0.3kg

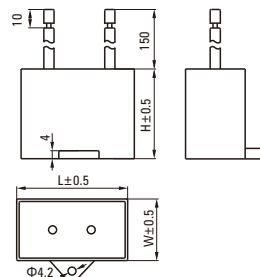


电容器外形尺寸 Form Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
3RK15GN-AM	3RK15A-AM	ZD70CFAUL	47	24.0	37
3RK15GN-EM	3RK15A-EM	ZD60CFAUL	48	23.0	32
3RK15GN-CM	3RK15A-CM	ZD15BFAUL	36	12.5	24

- 常规电容器出线为引线,也可根据客户要求配置插片式187#

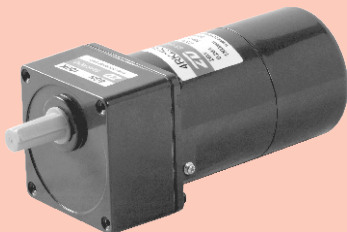
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

25W 80mm



规格 Specs / 电动机 Motor

● 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
4RK25GN-AM	4RK25A-AM	30min	25	1ph 100	50	0.59	160	200	1250	10.0
					60	0.69	140	165	1550	
4RK25GN-EM	4RK25A-EM	30min	25	1ph 110	60	0.45	140	165	1550	8.0
				1ph 120		0.50				
4RK25GN-CM	4RK25A-CM	30min	25	1ph 220	50	0.29	140	200	1250	2.2
				1ph 230		0.30	160			
4RK25GN-HM	4RK25A-HM	30min	25	1ph 220	60	0.35	140	165	1550	2.2
				1ph 230						
4RK25GN-SM	4RK25A-SM	30min	25	3ph 220	50	0.185	350	200	1250	-
					60	0.170	250	165	1550	
4RK25GN-S3M	4RK25A-S3M	30min	25	3ph 380	50	0.107	350	200	1250	-
					60	0.098	250	165	1550	

● 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

● (T): 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector(automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

● 电动机温度下降后会启动恢复运行，故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

● 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	4RK25GN-AM	4RK25A-AM
	4RK25GN-EM	4RK25A-EM
	4RK25GN-CM	4RK25A-CM
	4RK25GN-HM	4RK25A-HM
	4RK25GN-SM	4RK25A-SM
	4RK25GN-S3M	4RK25A-S3M

● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	4GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	4GN10XK (中间减速器 Middle Gearhead)	

● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速机另售·中间减速机另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速机型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为6N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 6N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	
	转 速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5	
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9	
4RK25GN-AM 4RK25GN-EM 4RK25GN-CM 4RK25GN-HM 4RK25GN-SM 4RK25GN-S3M	4GN□K	50Hz	0.49	0.58	0.81	0.97	1.20	1.50	1.55	2.00	2.40	2.90	3.17	3.70	4.40	5.30	5.57	6.60	7.90	8.00	8.00	8.00	8.00	8.00	8.00	8.00	
			5.00	5.91	8.26	9.89	12.2	15.3	15.8	20.4	24.4	29.6	32.3	37.7	44.9	54.1	56.8	67.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	
		60Hz	0.40	0.48	0.67	0.80	1.00	1.20	1.25	1.70	2.00	2.40	2.64	3.00	3.60	4.30	4.49	5.40	6.50	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
			4.08	4.89	6.83	8.16	10.2	12.2	12.8	17.3	20.4	24.4	26.9	30.6	36.7	43.8	45.8	55.1	66.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) →P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

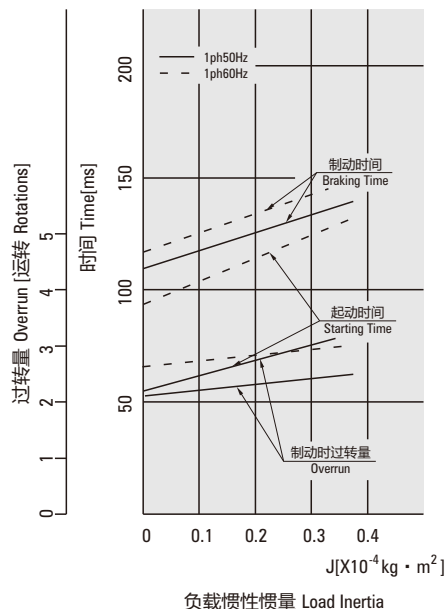
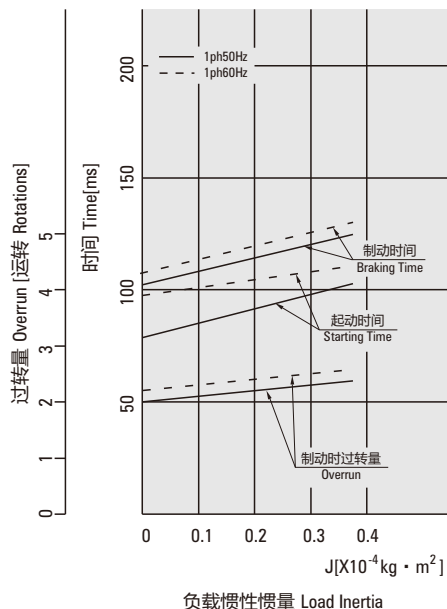
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性 (参考值) Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor



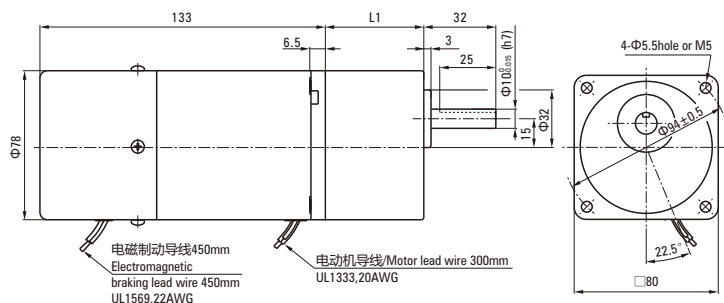
■ 外形图 (单位 mm) Dimensions (Unit mm)

減速器附有安裝用螺絲 Mounting screws are included with gearhead.

● **导线型** Lead Wiring Type

重量 Weight : 电动机 Motor : 2.15kg

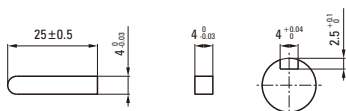
減速器 Gearhead : 0.8kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
4RK25GN-AM	4GN□K	3~200	43.5
4RK25GN-EM			
4RK25GN-CM			
4RK25GN-HM			
4RK25GN-SM			
4RK25GN-S3M			

- 減速器型號的□中為減速比的數值
Enter the gear ratio in the box (□) within the model name
- 減速比3~18可以做成短箱體 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

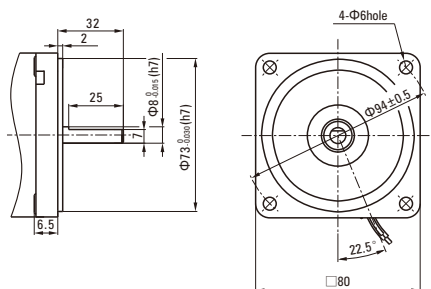
● 键·键槽（减速器附件）Key·Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

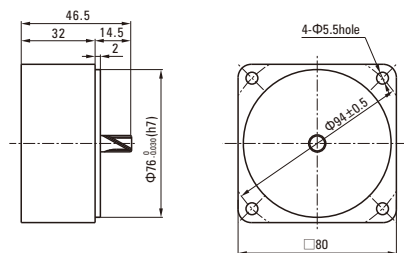


● **中间减速器** Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor
is the same as that of the gear shaft type

4GN10XK

重量 Weight : 0.41kg

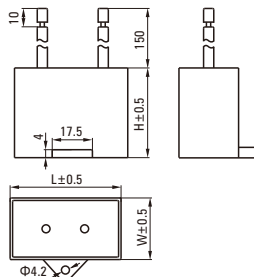


电容器外形尺寸 Formal Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
4RK25GN-AM	4RK25A-AM	ZD100CFAUL	58	26.0	38
4RK25GN-EM	4RK25A-EM	ZD80CFAUL	48	26.5	38
4RK25GN-CM	4RK25A-CM	ZD18BFAUL	37	15.0	27

- 常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
4RK25GN-AM、4RK25GN-EM、4RK25GN-CM、4RK25GN-HM

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）

SW1 operates both motor and electromagnetic brake action. (Switched simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

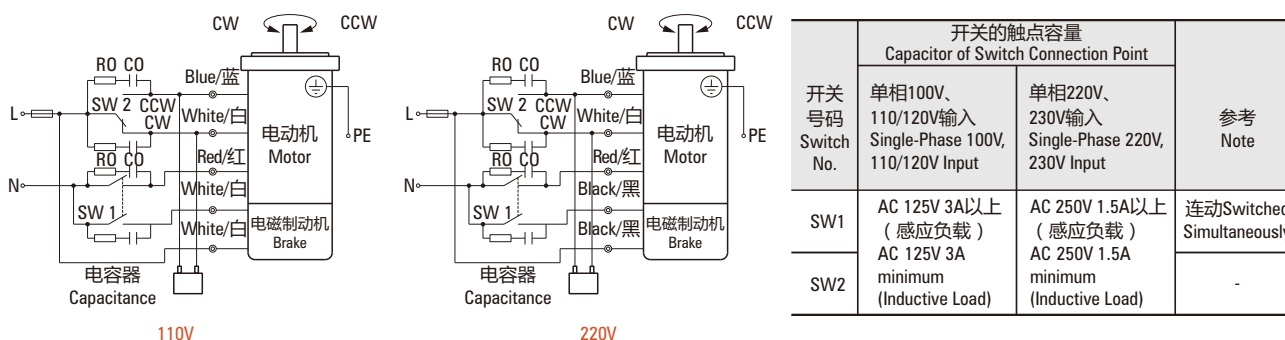
运转方向。Direction of Rotation.

将SW2转换至CW侧时，电动机作顺时针方向运转。

To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.

将SW2转换至CCW侧时，电动机作逆时针方向运转。

To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.



三相电动机 Three-phase Motor
4RK25GN-SM(S3M)

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）

SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

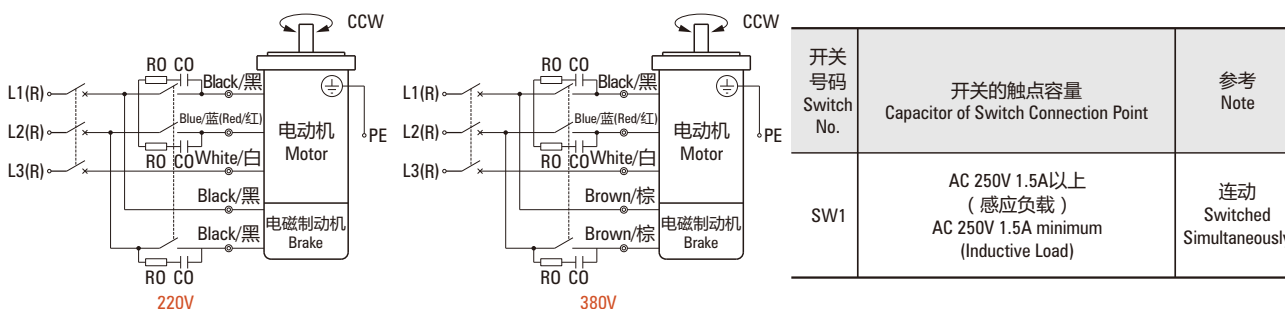
在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

运转方向。Direction of Rotation.

若对换R、S、T中任意二条，电动机作逆时针方向运转。

To change the rotation direction, change any two connections between R, S and T.



请注意Notes:

- R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。
- R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 40W □ 90mm



规格 Specs / 电动机 Motor

- 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
5RK40GN-AM	5RK40A-AM	30min	40	1ph 100	50	0.78	300	315	1250	15.0
					60	1.05		260	1550	
5RK40GN-EM	5RK40A-EM	30min	40	1ph 110	60	0.79	260	260	1550	12.0
				1ph 120		0.80				
5RK40GN-CM	5RK40A-CM	30min	40	1ph 220	50	0.45	270	315	1250	3.00
				1ph 230						
5RK40GN-HM	5RK40A-HM	30min	40	1ph 220	60	0.45	270	260	1550	3.00
				1ph 230						
5RK40GN-SM	5RK40A-SM	30min	40	3ph 220	50	0.30	800	315	1250	0.30
					60	0.25	660	250	1600	0.25
5RK40GN-S3M	5RK40A-S3M	30min	40	3ph 380	50	0.17	800	315	1250	0.30
					60	0.14	660	250	1600	0.25

- 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

- ⑩：内藏热保护装置（自动复位型）。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector(automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

- 电动机温度下降后会启动恢复运行，故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK40GN-AM	5RK40A-AM
	5RK40GN-EM	5RK40A-EM
	5RK40GN-CM	5RK40A-CM
	5RK40GN-HM	5RK40A-HM
	5RK40GN-SM	5RK40A-SM
	5RK40GN-S3M	5RK40A-S3M

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GN10XK（中间减速器 Middle Gearhead）	

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为6N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 6N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK40GN-AM 5RK40GN-EM 5RK40GN-CM 5RK40GN-HM 5RK40GN-SM 5RK40GN-S3M	5GN□K	50Hz	0.77	0.92	1.30	1.50	1.90	2.30	2.38	3.20	3.80	4.60	4.88	5.70	6.90	8.30	8.57	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			7.85	9.38	13.2	15.3	19.4	23.4	24.3	32.6	38.7	46.9	49.8	58.1	70.4	84.7	87.4	100	100	100	100	100	100	100	100	100
		60Hz	0.63	0.76	1.10	1.30	1.60	1.90	2.00	2.60	3.20	3.80	4.07	4.70	5.70	6.80	7.19	8.60	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			6.42	7.75	11.2	13.2	16.3	19.3	20.4	26.5	32.6	38.7	41.5	47.9	58.1	69.3	73.4	87.7	100	100	100	100	100	100	100	100

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) →P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

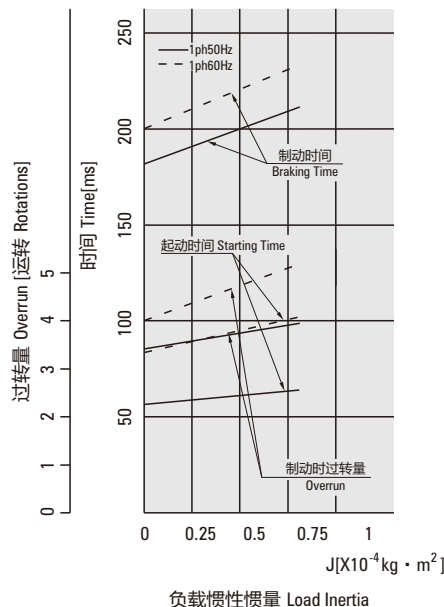
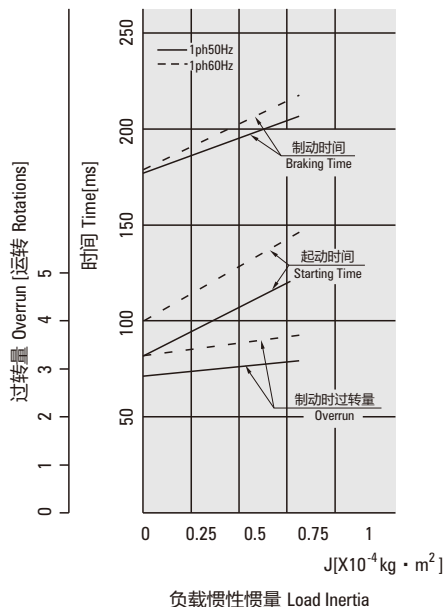
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性 (参考值) Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor



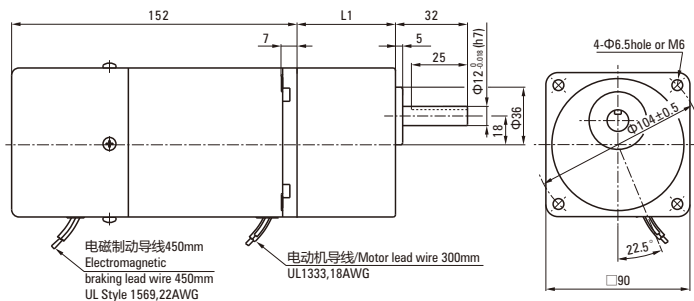
外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 3.1kg

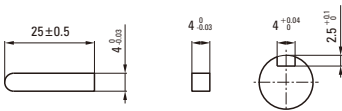
减速器 Gearhead : 1.35kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK40GN-AM 5RK40GN-EM 5RK40GN-CM 5RK40GN-HM 5RK40GN-SM 5RK40GN-S3M	5GN□K	3~200	60

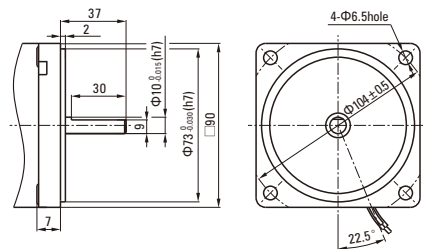
- 减速器型号中的□为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成长箱体 (L1=42)
Gear ratio 3~18, short case is possible (L1=42)

● 键·键槽 (减速器附件) Key·Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

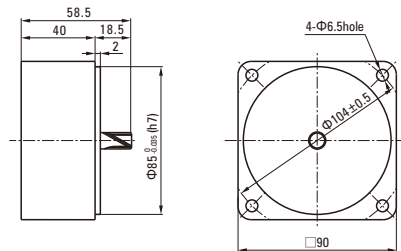


● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GN10XK

重量 Weight : 0.6kg

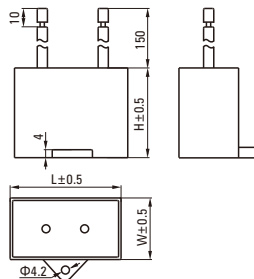


电容器外形尺寸 Form Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5RK40GN-AM	5RK40A-AM	ZD150CFAUL	47	20.0	31
5RK40GN-EM	5RK40A-EM	ZD120CFAUL	58	30.0	40
5RK40GN-CM	5RK40A-CM	ZD30BFAUL	38	18.5	29

- 常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

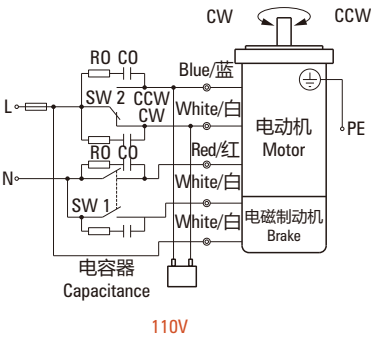


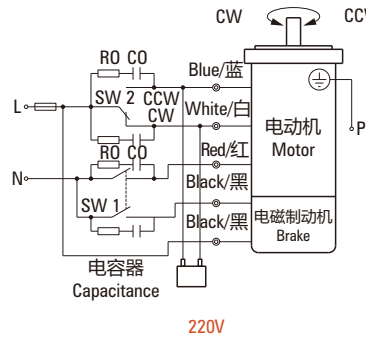
连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
5RK40GN-AM、5RK40GN-EM、5RK40GN-CM、5RK40GN-HM

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）
SW1 operates both motor and electromagnetic brake action. (Switched simultaneously)
SW1设定于ON时，电磁制动解除，电动机开始运行。
The motor will rotate when SW1 is switched simultaneously to ON.
SW1设定于OFF时，电动机停止，电磁制动开始工作。
When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.
在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。
If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.
运转方向。Direction of Rotation.
将SW2转换至CW侧时，电动机作顺时针方向运转。
To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.
将SW2转换至CCW侧时，电动机作逆时针方向运转。
To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.

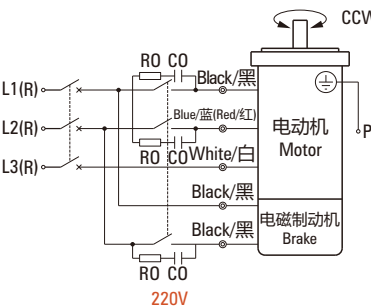


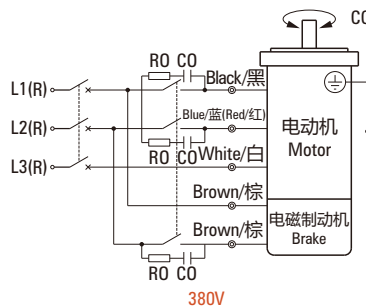


开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point		参考 Note
	单相100V、 110/120V输入 Single-Phase 100V, 110/120V Input	单相220V、 230V输入 Single-Phase 220V, 230V Input	
SW1	AC 125V 3A以上 (感应负载) AC 125V 3A minimum (Inductive Load)	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	连动Switched Simultaneously
SW2			-

三相电动机 Three-phase Motor
5RK40GN-SM(S3M)

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）
SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)
SW1设定于ON时，电磁制动解除，电动机开始运行。
The motor will rotate when SW1 is switched simultaneously to ON.
SW1设定于OFF时，电动机停止，电磁制动开始工作。
When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.
在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。
If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.
运转方向。Direction of Rotation.
若对换R、S、T中任意二条，电动机将逆时针方向运转。
To change the rotation direction, change any two connections between R, S and T.





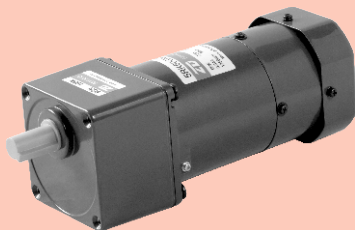
开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point	参考 Note
SW1	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	连动 Switched Simultaneously

请注意Notes:
●R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。
●R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 60W □ 90mm



■ 规格 Specs / 电动机 Motor

- 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容量容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
5RK60GN-AFM	5RK60A-AFM	30min	60	1ph 100	50	1.26	470	470	1250	25.0
					60	1.70		380	1550	
5RK60GN-EFM	5RK60A-EFM	30min	60	1ph 110	60	1.05	330	380	1550	15.0
				1ph 120			380			
5RK60GN-CFM	5RK60A-CFM	30min	60	1ph 220	50	0.55	420	470	1250	4.5
				1ph 230		0.60	460			
5RK60GN-HFM	5RK60A-HFM	30min	60	1ph 220	60	0.55	420	380	1550	4.5
				1ph 230		0.60	460			
5RK60GN-SFM	5RK60A-SFM	30min	60	3ph 220	50	0.45	1000	470	1250	-
					60	0.40	800	380	1550	
5RK60GN-S3FM	5RK60A-S3FM	30min	60	3ph 380	50	0.26	1000	470	1250	-
					60	0.23	800	380	1550	

- 各种安全规格以电动机铭牌上的型号取得认定。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- ⑩: 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。
Contains a built-in thermal protector (automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.
- 电动机温度下降后会自动恢复运行, 故在进行检查作业时请务必事先切断电源。
When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.
- 注: “-A” 型号中电压为110V时, 配置电容量以实际铭牌为准。
Note: “-A” it means the voltage 110V, the assembly capacitor value it is according to the label.

■ 种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK60GN-AFM	5RK60A-AFM
	5RK60GN-EFM	5RK60A-EFM
	5RK60GN-CFM	5RK60A-CFM
	5RK60GN-HFM	5RK60A-HFM
	5RK60GN-SFM	5RK60A-SFM
	5RK60GN-S3FM	5RK60A-S3FM

- 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GN10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为6N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 6N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK60GN-AFM 5RK60GN-EFM 5RK60GN-CFM 5RK60GN-HFM 5RK60GN-SFM 5RK60GN-S3FM	5GN□K	50Hz	1.10	1.40	1.90	2.30	2.90	3.40	3.57	4.80	5.70	6.80	7.03	8.60	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			11.2	14.2	19.3	23.4	29.6	34.7	36.4	48.9	58.1	69.3	71.7	87.7	100	100	100	100	100	100	100	100	100	100	100	100
		60Hz	0.92	1.10	1.50	1.80	2.30	2.80	2.99	3.80	4.60	5.50	5.70	6.90	8.30	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			9.38	11.2	15.3	18.3	23.4	28.5	30.5	38.7	46.9	56.1	58.2	70.4	84.7	100	100	100	100	100	100	100	100	100	100	100

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

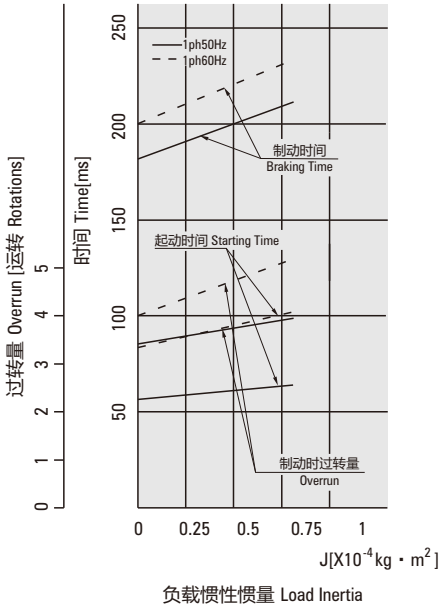
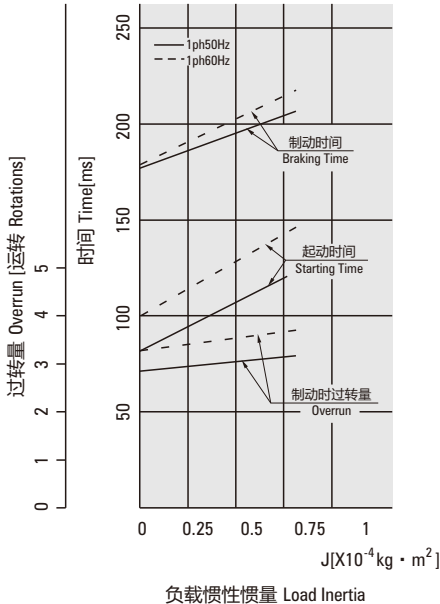
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性（参考值） Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor

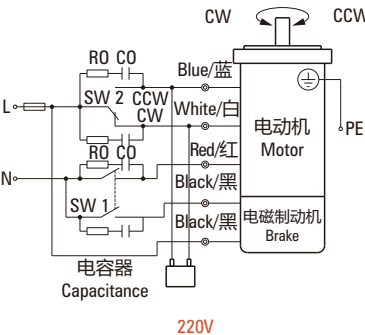
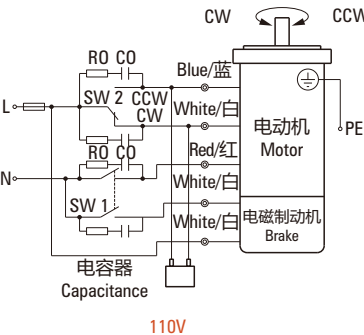


连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
5RK60GN-AFM、5RK60GN-EFM、5RK60GN-CFM、5RK60GN-HFM

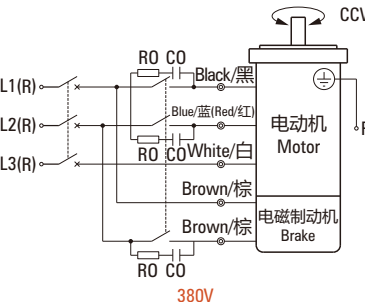
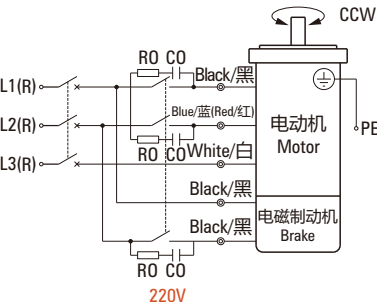
SW1为电动机的运行/停止及电磁制动操作用开关。（连动）
Sw1 operates both motor and electromagnetic brake action. (Switched simultaneously)
SW1设定于ON时，电磁制动解除，电动机开始运行。
The motor will rotate when SW1 is switched simultaneously to ON.
SW1设定于OFF时，电动机停止，电磁制动开始工作。
When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.
在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。
If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.
运转方向。Direction of Rotation.
将SW2转换至CW侧时，电动机作顺时针方向运转。
To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.
将SW2转换至CCW侧时，电动机作逆时针方向运转。
To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.



开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point		参考 Note
	单相100V、 110/120V输入 Single-Phase 100V, 110/120V Input	单相220V、 230V输入 Single-Phase 220V, 230V Input	
SW1	AC 125V 3A以上 (感应负载) AC 125V 3A minimum (Inductive Load)	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	连动Switched Simultaneously
SW2			-

三相电动机 Three-phase Motor
5RK60GN-SFM(S3FM)

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）
SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)
SW1设定于ON时，电磁制动解除，电动机开始运行。
The motor will rotate when SW1 is switched simultaneously to ON.
SW1设定于OFF时，电动机停止，电磁制动开始工作。
When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.
在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。
If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.
运转方向。Direction of Rotation.
若对换R、S、T中任意二条，电动机会逆时针方向运转。
To change the rotation direction, change any two connections between R, S and T.



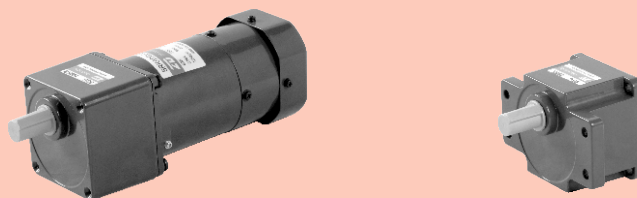
开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point	参考 Note
SW1	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	连动 Switched Simultaneously

- 请注意Notes:
- R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。
 - R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 60W □ 90mm



规格 Specs / 电动机 Motor

- 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type	额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
5RK60GU-AFM	30min	60	1ph 100	50	1.26	470	470	1250	25.0
				60	1.70		380	1550	
5RK60GU-EFM	30min	60	1ph 110	60	1.05	330	380	1550	15.0
			1ph 120		0.85	380			
5RK60GU-CFM	30min	60	1ph 220	50	0.55	420	470	1250	4.50
			1ph 230		0.60	460			
5RK60GU-HFM	30min	60	1ph 220	60	0.55	420	380	1550	4.50
			1ph 230		0.60	460			
5RK60GU-SFM	30min	60	3ph 220	50	0.45	1000	470	1250	-
				60	0.40	800	380	1550	
5RK60GU-S3FM	30min	60	3ph 380	50	0.26	1000	470	1250	-
				60	0.23	800	380	1550	

- 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

- (TP): 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector (automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

- 电动机温度下降后会自行恢复运行，故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor value it is according to the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model
	齿轮轴型 Pinion Shaft
导线型 Lead Wire Type	5RK60GU-AFM
	5RK60GU-EFM
	5RK60GU-CFM
	5RK60GU-HFM
	5RK60GU-SFM
	5RK60GU-S3FM

- 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK60GU-AFM 5RK60GU-EFM 5RK60GU-CFM 5RK60GU-HFM 5RK60GU-SFM 5RK60GU-S3FM	5GU□KB 5GU□K	50Hz	1.10	1.40	1.90	2.30	2.90	3.40	3.61	4.80	5.70	6.80	7.12	8.60	10.0	10.3	11.6	12.4	15.5	18.6	20.0	20.0	20.0	20.0	20.0	20.0
			11.2	14.2	19.3	23.4	29.6	34.7	36.8	48.9	58.1	69.3	72.6	87.7	100	105	118	126	158	189	200	200	200	200	200	200
		60Hz	0.92	1.10	1.50	1.80	2.30	2.80	3.01	3.80	4.60	5.50	5.73	6.90	8.30	8.30	9.70	10.0	12.5	15.0	18.8	20.0	20.0	20.0	20.0	20.0
			9.38	11.2	15.3	18.3	23.4	28.5	30.7	38.7	46.9	56.1	58.4	70.1	84.7	84.6	98.9	102	127	153	192	200	200	200	200	200

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

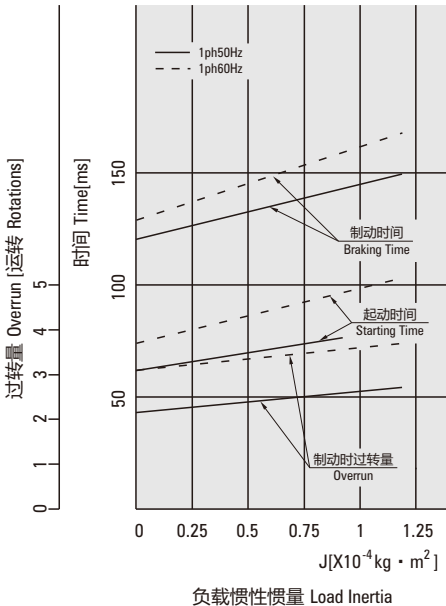
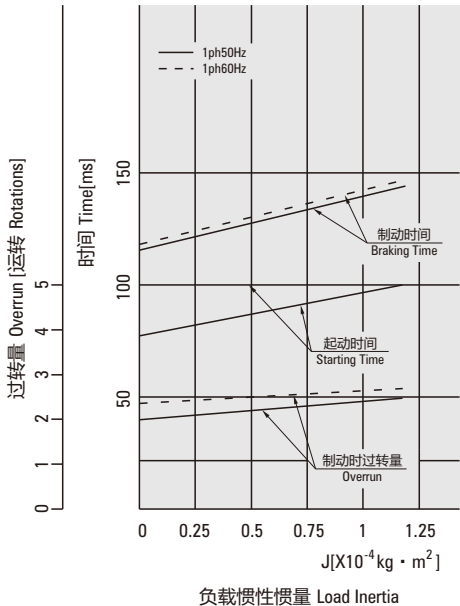
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性（参考值）Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor



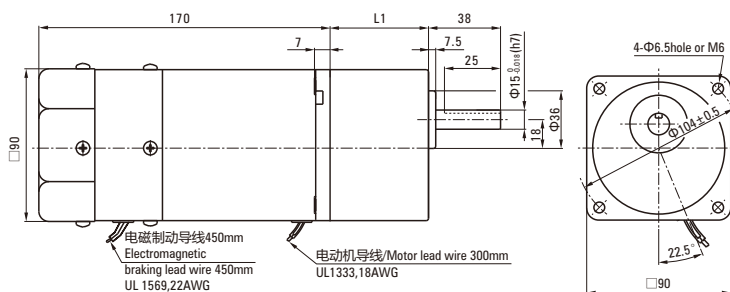
外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 3.55kg

减速器 Gearhead : 1.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK60GU-AFM 5RK60GU-EFM 5RK60GU-CFM 5RK60GU-HFM 5RK60GU-SFM 5RK60GU-S3FM	5GU□KB	3~200	65.5

● 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

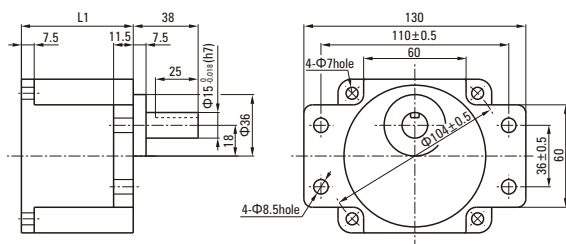
● 凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

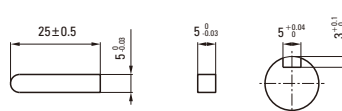
5GU□K

重量Weight:1.5kg



● 键·键槽 (减速器附件)

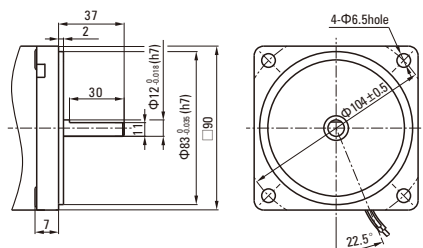
Key · Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

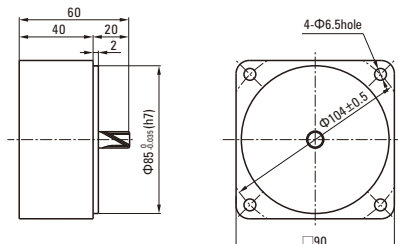


● 中间减速器 Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GU10XK

重量 Weight : 0.65kg



电容器外形尺寸 Formal Dimension Of Capacitor

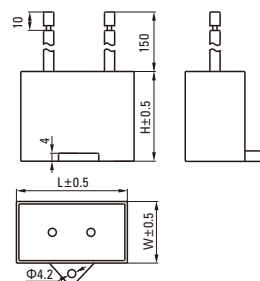
型号 Model	电容器型号 Capacitor Model	L	W	H
5RK60GU-AFM	ZD250CFAUL	47	27	37
5RK60GU-EFM	ZD150CFAUL	47	20	31
5RK60GU-CFM	ZD45BFAUL	47	19	31

● 常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

● 电动机型号的□中为表示带端子箱型的记号(T)

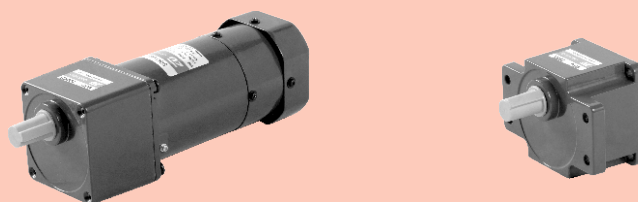
Enter the code that represents the terminal box type (T) in the box (□) within the model name



无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 90W □ 90mm



规格 Specs / 电动机 Motor

● 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
5RK90GU-AFM	5RK90A-AFM	30min	90	1ph 100	50	1.78	600	700	1250	30.0
					60	2.35		570	1550	
5RK90GU-EFM	5RK90A-EFM	30min	90	1ph 110	60	1.72	550	570	1550	25.0
				1ph 120			600			
5RK90GU-CFM	5RK90A-CFM	30min	90	1ph 220	50	0.82	560	700	1250	6.0
				1ph 230		0.81				
5RK90GU-HFM	5RK90A-HFM	30min	90	1ph 220	60	0.81	560	570	1550	6.0
				1ph 230		0.80				
5RK90GU-SFM	5RK90A-SFM	30min	90	3ph 220	50	0.60	1350	700	1250	-
					60	0.55	1100	570	1550	
5RK90GU-S3FM	5RK90A-S3FM	30min	90	3ph 380	50	0.35	1350	700	1250	-
					60	0.32	1100	570	1550	

● 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

● ⑩: 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector (automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

● 电动机温度下降后会启动恢复运行, 故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

● 注: “-A” 型号中电压为110V时, 配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor value it is according to the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK90GU-AFM	5RK90A-AFM
	5RK90GU-EFM	5RK90A-EFM
	5RK90GU-CFM	5RK90A-CFM
	5RK90GU-HFM	5RK90A-HFM
	5RK90GU-SFM	5RK90A-SFM
	5RK90GU-S3FM	5RK90A-S3FM

● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK90GU-AFM 5RK90GU-EFM 5RK90GU-CFM 5RK90GU-HFM 5RK90GU-SFM 5RK90GU-S3FM	5GU□KB 5GU□K	50Hz	1.70	2.00	2.80	3.40	4.30	5.10	5.31	6.40	7.70	9.20	9.55	11.6	13.9	16.6	18.1	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			17.3	20.4	28.6	34.7	43.9	52.0	54.2	65.3	78.6	93.9	97.4	118	142	169	184	200	200	200	200	200	200	200	200	200
		60Hz	1.40	1.70	2.30	2.80	3.50	4.20	4.43	5.20	6.20	7.50	7.81	9.40	11.3	13.5	14.5	18.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			14.3	17.3	23.5	28.6	35.7	42.9	45.2	53.1	63.3	76.5	79.6	95.9	115	128	148	192	200	200	200	200	200	200	200	200

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

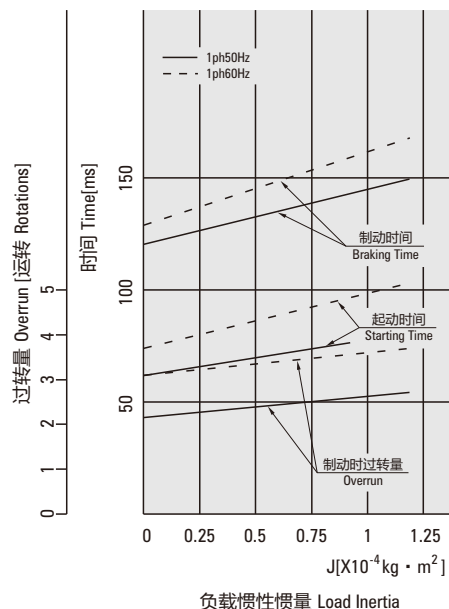
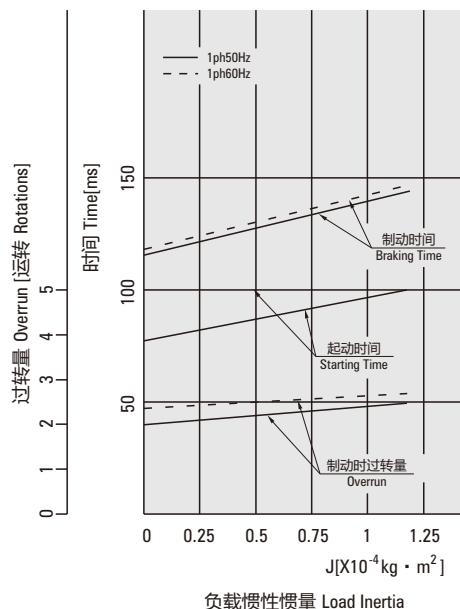
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性（参考值）Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor

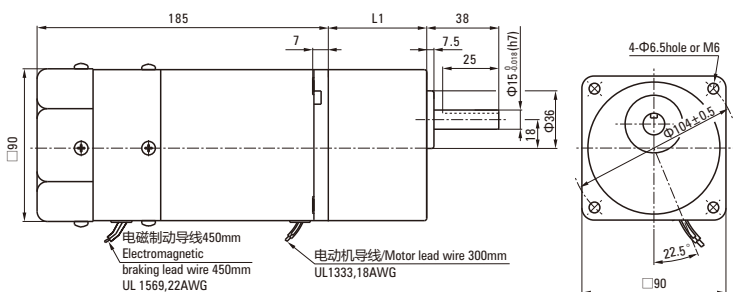


外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 4.3kg 减速器 Gearhead : 1.5kg



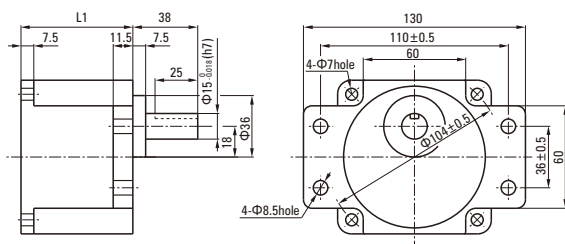
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK90GU-AFM 5RK90GU-EFM 5RK90GU-CFM 5RK90GU-HFM 5RK90GU-SFM 5RK90GU-S3FM	5GU□KB	3~200	65.5

● 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

● 凸缘安装型减速器 Flange Mounting Reducer

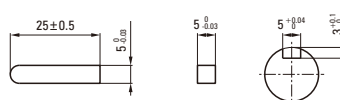
可安装在GU齿轮轴型上
Can be mounted on GU type gear shaft
5GU□K

重量 Weight: 1.5kg



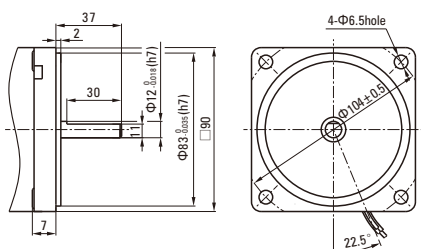
● 键·键槽 (减速器附件)

Key · Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

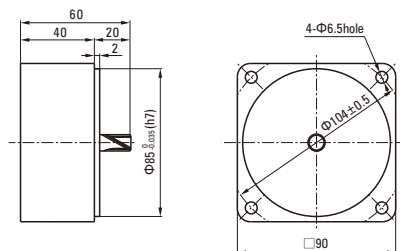
除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



● 中间减速器 Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

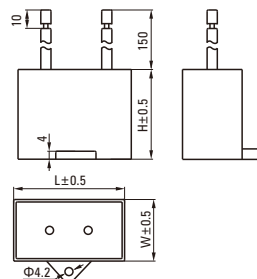
5GU10XK
重量 Weight : 0.65kg



电容器外形尺寸 Formal Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5RK90GU-AFM	5RK90A-AFM	ZD300CFAUL	58	26	38
5RK90GU-EFM	5RK90A-EFM	ZD250CFAUL	47	27	37
5RK90GU-CFM	5RK90A-CFM	ZD60BFAUL	48	23	32

● 常规电容器出线为引线,也可根据客户要求配置插片式187#
Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。

The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.

- 表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
5RK90GU-AFM、5RK90GU-EFM、5RK90GU-CFM、5RK90GU-HFM

SW1为电动机的运行/停止及电磁制动操作用开关。（联动）

SW1 operates both motor and electromagnetic brake action. (Switched simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

在电动机停止状态下解除电磁制动时，应将SW1设定为非联动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

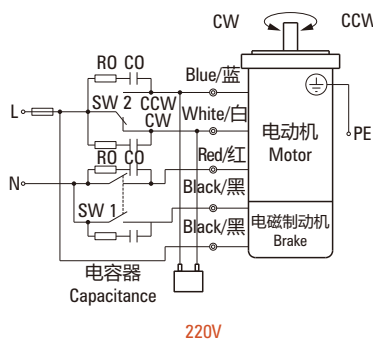
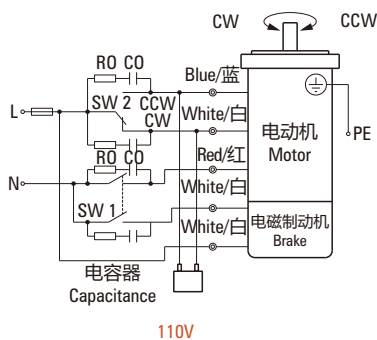
运转方向。Direction of Rotation.

将SW2转换至CW侧时，电动机作顺时针方向运转。

To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.

将SW2转换至CCW侧时，电动机作逆时针方向运转。

To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.



开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point		参考 Note
	单相100V、 110/120V输入 Single-Phase 100V, 110/120V Input	单相220V、 230V输入 Single-Phase 220V, 230V Input	
SW1	AC 125V 8A以上 (感应负载) AC 125V 8A minimum (Inductive Load)	AC 250V 8A以上 (感应负载) AC 250V 8A minimum (Inductive Load)	联动Switched Simultaneously
SW2			-

三相电动机 Three-phase Motor
5RK90GU-SFM(S3FM)

SW1为电动机的运行/停止及电磁制动操作用开关。（联动）

SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

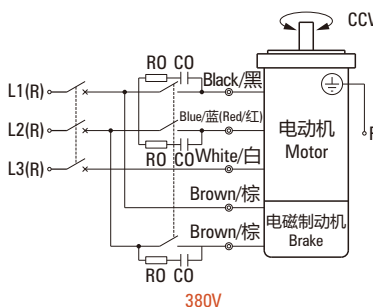
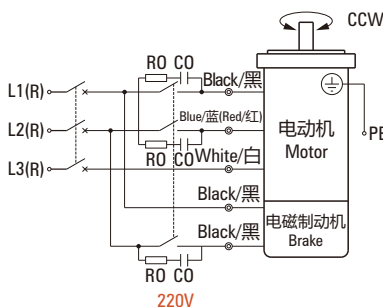
在电动机停止状态下解除电磁制动时，应将SW1设定为非联动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

运转方向。Direction of Rotation.

若对换R、S、T中任意二条，电动机作逆时针方向运转。

To change the rotation direction, change any two connections between R, S and T.



开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point	参考 Note
SW1	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	联动 Switched Simultaneously

请注意Notes:

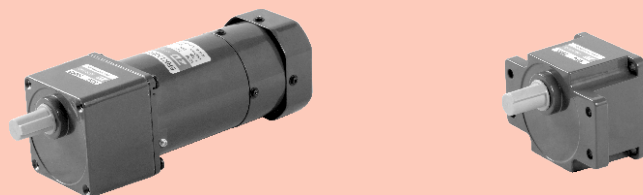
- R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。

- R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 120W □ 90mm



规格 Specs / 电动机 Motor

● 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
5RK120GU-AFM	5RK120A-AFM	30min	120	1ph 100	50	2.25	700	930	1250	35.0
					60	2.85		750	1550	
5RK120GU-EFM	5RK120A-EFM	30min	120	1ph 110	60	1.90	650	750	1550	30.0
				1ph 120			720			
5RK120GU-CFM	5RK120A-CFM	30min	120	1ph 220	50	1.00	650	930	1250	7.0
				1ph 230		0.95				
5RK120GU-HFM	5RK120A-HFM	30min	120	1ph 220	60	1.00	600	750	1550	7.0
				1ph 230		0.95				
5RK120GU-SFM	5RK120A-SFM	30min	120	3ph 220	50	0.70	1850	930	1250	-
					60	0.60	1600	750	1550	
5RK120GU-S3FM	5RK120A-S3FM	30min	120	3ph 380	50	0.40	1850	930	1250	-
					60	0.35	1600	750	1550	

● 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

● (T): 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector (automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

● 电动机温度下降后会启动恢复运行，故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

● 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor value it is according to the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5RK120GU-AFM	5RK120A-AFM
	5RK120GU-EFM	5RK120A-EFM
	5RK120GU-CFM	5RK120A-CFM
	5RK120GU-HFM	5RK120A-HFM
	5RK120GU-SFM	5RK120A-SFM
	5RK120GU-S3FM	5RK120A-S3FM

● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5RK120GU-AFM 5RK120GU-EFM 5RK120GU-CFM 5RK120GU-HFM 5RK120GU-SFM 5RK120GU-S3FM	5GU□KB 5GU□K	50Hz	2.30	2.70	3.80	4.50	5.60	6.80	7.01	8.50	10.2	12.2	12.5	15.3	18.4	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			23.4	27.5	38.7	45.9	57.1	69.3	71.5	86.7	104	124	128	156	187	200	200	200	200	200	200	200	200	200	200	200
		60Hz	1.80	2.20	3.00	3.60	4.60	5.50	5.73	6.80	8.20	9.80	10.1	12.4	14.9	17.8	19.5	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			18.3	22.4	30.6	36.7	46.9	56.1	58.5	69.5	83.6	100	103	126	152	181	199	200	200	200	200	200	200	200	200	200

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

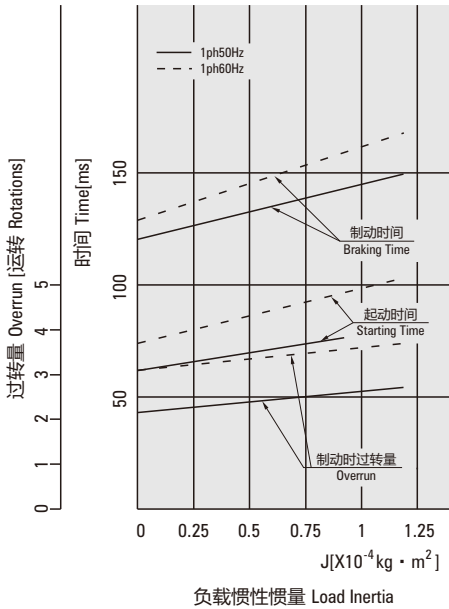
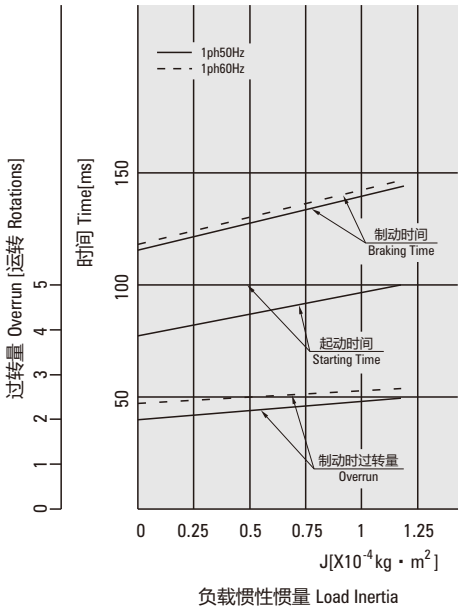
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性（参考值）Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor



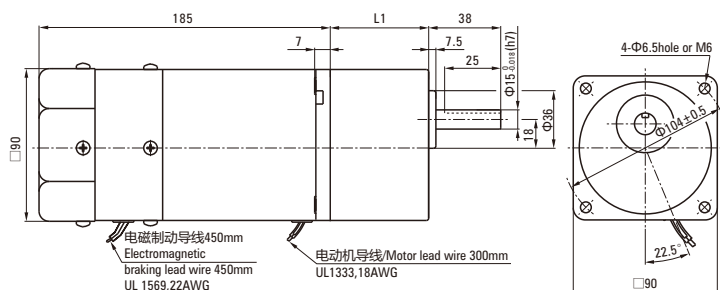
■ 外形图 (单位 mm) Dimensions (Unit mm)

減速器附有安裝用螺絲 Mounting screws are included with gearhead.

● **导线型** Lead Wiring Type

重量 Weight : 电动机 Motor : 4.3kg

減速器 Gearhead : 1.5kg



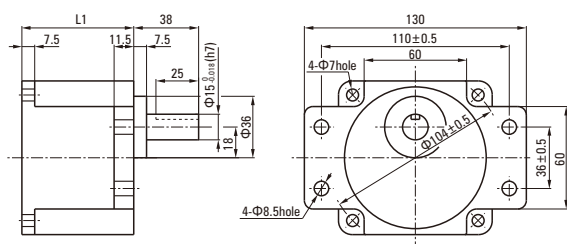
● 凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

5GU□K

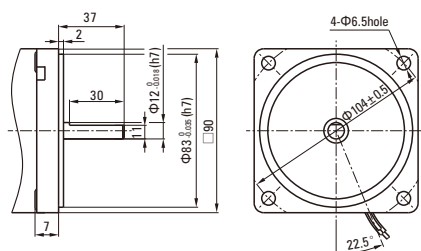
重量Weight:1.5kg



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



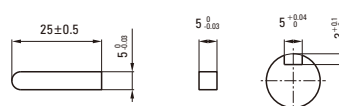
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5RK120GU-AFM	5GU□KB	3~200	65.5
5RK120GU-EFM			
5RK120GU-CFM			
5RK120GU-HFM			
5RK120GU-SFM			
5RK120GU-S3FM			

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 鍵・鍵槽（減速器附件）

Key · Keyway (Accessory Of Gearhead)



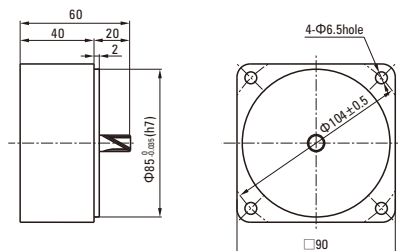
● **中间减速器** Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type

电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GU10XK

重量 Weight : 0.6kg

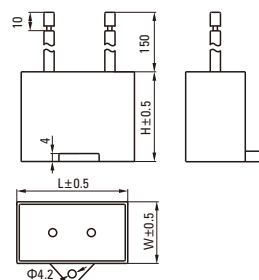


■ 电容器外形尺寸 Formal Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
5RK120GU-AFM	5RK120A-AFM	ZD350CFAUL	58	30.0	40
5RK120GU-EFM	5RK120A-EFM	ZD300CFAUL	58	26.0	38
5RK120GU-CFM	5RK120A-CFM	ZD80BFAUL	48	26.5	38

- 常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
5RK120GU-AFM、5RK120GU-EFM、5RK120GU-CFM、5RK120GU-HFM

SW1为电动机的运行/停止及电磁制动操作用开关。（联动）

SW1 operates both motor and electromagnetic brake action. (Switched simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

在电动机停止状态下解除电磁制动时，应将SW1设定为非联动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

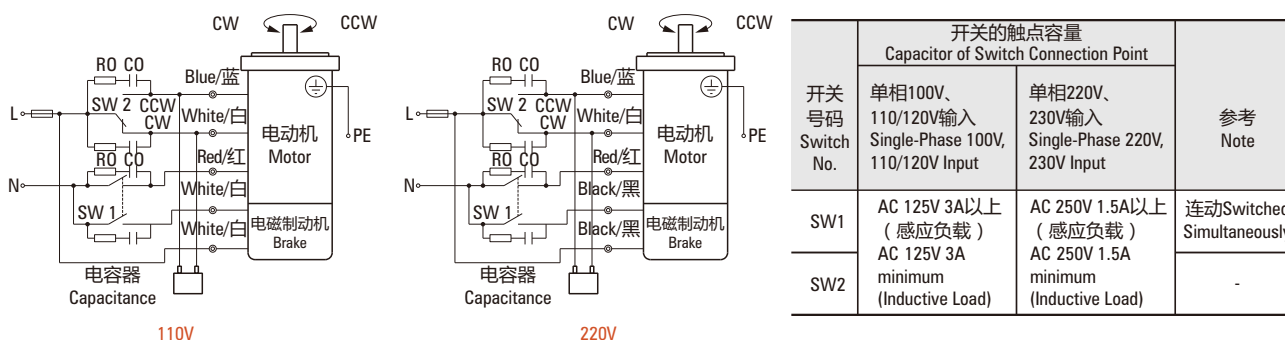
运转方向。Direction of Rotation.

将SW2转换至CW侧时，电动机作顺时针方向运转。

To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.

将SW2转换至CCW侧时，电动机作逆时针方向运转。

To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.



三相电动机 Three-phase Motor
5RK120GU-SFM(S3FM)

SW1为电动机的运行/停止及电磁制动操作用开关。（联动）

SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

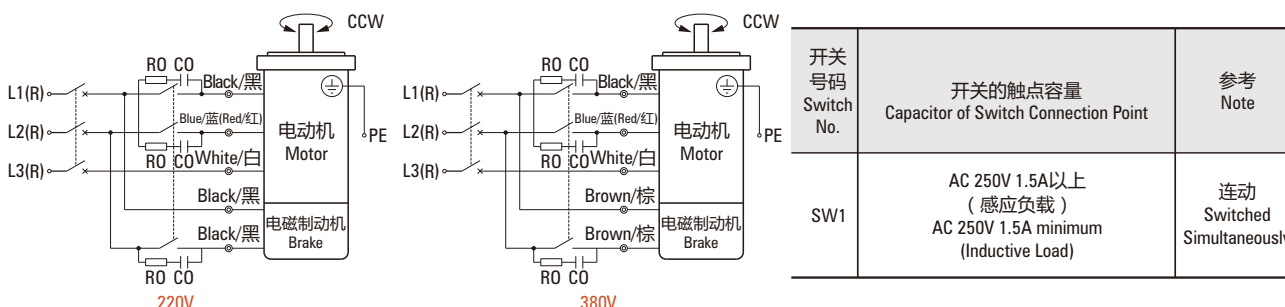
在电动机停止状态下解除电磁制动时，应将SW1设定为非联动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

运转方向。Direction of Rotation.

若对换R、S、T中任意二条，电动机将逆时针方向运转。

To change the rotation direction, change any two connections between R, S and T.



请注意Notes:

- R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。
- R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 120W □ 104mm



规格 Specs / 电动机 Motor

- 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
6RK120GU-AFM	6RK120A-AFM	30min	120	1ph 100	50	2.10	600	930	1250	35.0
					60	2.50		750	1550	
6RK120GU-EFM	6RK120A-EFM	30min	120	1ph 110	60	1.70	600	750	1550	30.0
				1ph 120		1.80				
6RK120GU-CFM	6RK120A-CFM	30min	120	1ph 220	50	0.95	750	930	1250	8.0
				1ph 230						
6RK120GU-HFM	6RK120A-HFM	30min	120	1ph 220	60	0.95	700	750	1550	8.0
				1ph 230		1.00				
6RK120GU-SFM	6RK120A-SFM	30min	120	3ph 220	50	0.75	2200	890	1250	-
					60	0.70	2000	730	1550	
6RK120GU-S3FM	6RK120A-S3FM	30min	120	3ph 380	50	0.43	2200	890	1250	-
					60	0.40	2000	730	1550	

- 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

- (T): 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector(automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

- 电动机温度下降后会自动恢复运行，故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6RK120GU-AFM	6RK120A-AFM
	6RK120GU-EFM	6RK120A-EFM
	6RK120GU-CFM	6RK120A-CFM
	6RK120GU-HFM	6RK120A-HFM
	6RK120GU-SFM	6RK120A-SFM
	6RK120GU-S3FM	6RK120A-S3FM

- 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
6RK120GU-AFM 6RK120GU-CFM 6RK120GU-SFM 6RK120GU-S3FM	6GU□K	50Hz	2.30	2.70	3.80	4.50	5.60	6.80	6.68	8.5	10.2	12.2	12.0	15.3	18.4	22.1	24.0	30.7	36.8	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			23.4	27.5	38.7	45.9	57.1	69.3	68.2	86.7	104	124	123	156	187	225	245	313	375	400	400	400	400	400	400	400
			2.22	2.60	3.60	4.30	5.40	6.50	6.42	8.10	9.70	11.7	11.6	14.7	17.6	21.1	23.2	29.4	35.2	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			2.40	26.5	36.7	43.8	55.0	66.3	65.6	87.6	98.8	119	118	149	179	215	236	300	359	400	400	400	400	400	400	400

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
6RK120GU-AFM 6RK120GU-CFM 6RK120GU-HFM 6RK120GU-SFM 6RK120GU-S3FM	6GU□K	50Hz	1.80	2.20	3.00	3.60	4.60	5.50	5.40	6.80	8.20	9.80	9.70	12.4	14.9	17.8	19.4	24.8	29.7	37.1	40.0	40.0	40.0	40.0	40.0	40.0
			18.3	22.4	30.6	36.7	46.9	56.1	55.0	69.3	83.6	100	99.0	126	152	181	198	253	303	378	400	400	400	400	400	400
		60Hz	1.80	2.10	3.00	3.50	4.40	5.30	5.20	6.70	8.00	9.60	9.40	12.0	14.5	17.3	18.8	24.1	28.9	36.1	40.0	40.0	40.0	40.0	40.0	40.0
			18.3	21.4	30.6	35.7	44.8	54.0	53.3	68.3	81.6	97.9	95.9	122	148	176	192	245	295	368	400	400	400	400	400	400

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页 Motor (Round shaft) →P215
减速机→215页 Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215页→P215

连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。

The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.

- 表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
6RK120GU-AFM、6RK120GU-EFM、6RK120GU-CFM、6RK120GU-HFM

SW1为电动机的运行/停止及电磁制动操作用开关。（联动）

SW1 operates both motor and electromagnetic brake action. (Switched simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

在电动机停止状态下解除电磁制动时，应将SW1设定为非联动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

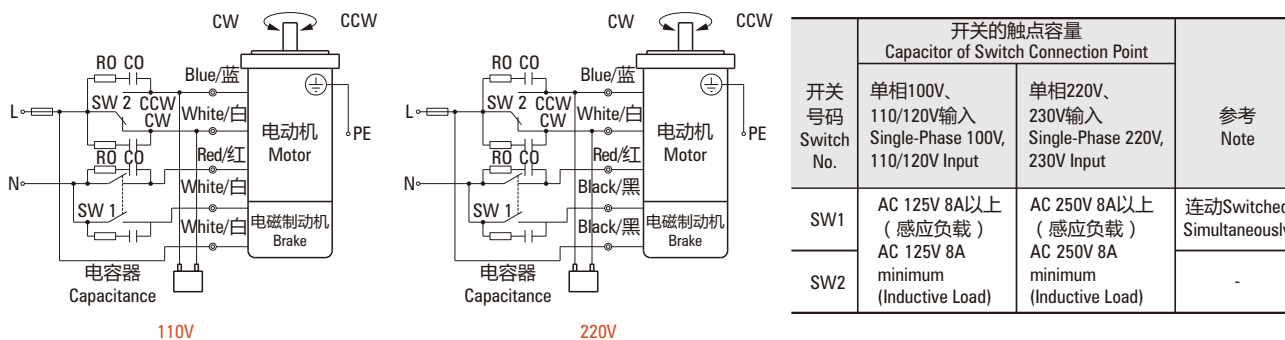
运转方向。Direction of Rotation.

将SW2转换至CW侧时，电动机作顺时针方向运转。

To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.

将SW2转换至CCW侧时，电动机作逆时针方向运转。

To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.



三相电动机 Three-phase Motor
6RK120GU-SFM(S3FM)

SW1为电动机的运行/停止及电磁制动操作用开关。（联动）

SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

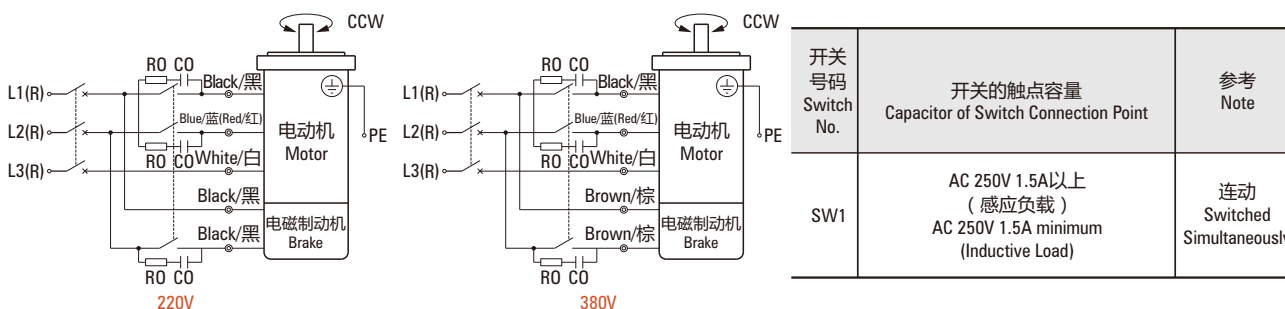
在电动机停止状态下解除电磁制动时，应将SW1设定为非联动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

运转方向。Direction of Rotation.

若对换R、S、T中任意二条，电动机将逆时针方向运转。

To change the rotation direction, change any two connections between R, S and T.



请注意Notes:

- R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。

- R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 140W □ 104mm



规格 Specs / 电动机 Motor

- 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
6RK140GU-AFM	6RK140A-AFM	30min	140	1ph 100	50	2.70	700	1080	1250	35.0
					60	3.00		870	1550	
6RK140GU-EFM	6RK140A-EFM	30min	140	1ph 110	60	1.80	700	850	1550	25.0
				1ph 120		1.95				
6RK140GU-CFM	6RK140A-CFM	30min	140	1ph 220	50	1.05	850	1040	1250	10.0
				1ph 230		1.15				
6RK140GU-HFM	6RK140A-HFM	30min	140	1ph 220	60	1.05	750	850	1550	10.0
				1ph 230		1.15				
6RK140GU-SM	6RK140A-SM	30min	140	3ph 220	50	0.85	2700	1080	1250	-
					60	0.75	2200	870	1550	
6RK140GU-S3M	6RK140A-S3M	30min	140	3ph 380	50	0.49	2700	1080	1250	-
					60	0.43	2200	870	1550	

- 各种安全规格以电动机铭牌上的型号取得认定。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

- ⑩: 内藏热保护装置 (自动复位型)。在电动机因某种原因过热时会自行启动使电动机停止。

Contains a built-in thermal protector(automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.

- 电动机温度下降后会启动恢复运行，故在进行检查作业时请务必事先切断电源。

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6RK140GU-AFM	6RK140A-AFM
	6RK140GU-EFM	6RK140A-EFM
	6RK140GU-CFM	6RK140A-CFM
	6RK140GU-HFM	6RK140A-HFM
	6RK140GU-SFM	6RK140A-SFM
	6RK140GU-S3FM	6RK140A-S3FM

- 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz 60Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
6RK140GU-AFM 6RK140GU-CFM 6RK140GU-SFM 6RK140GU-S3FM	6GU□K	50Hz	2.60	3.10	4.40	5.20	6.60	7.90	7.80	9.90	11.8	14.2	14.0	17.8	21.4	25.7	28.0	35.6	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			26.5	31.6	44.8	53.0	67.3	80.6	79.6	101	120	144	143	181	218	262	286	263	400	400	400	400	400	400	400	400
			2.50	3.00	4.20	5.10	6.30	7.60	7.20	9.50	11.4	13.7	13.0	17.2	20.6	24.7	26.0	34.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			25.5	30.6	42.8	52.0	63.2	77.5	73.6	96.9	116	139	133	175	210	252	265	349	400	400	400	400	400	400	400	400

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz 60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
6RK140GU-AFM 6RK140GU-EFM 6RK140GU-HFM 6RK140GU-SFM 6RK140GU-S3FM	6GU□K	50Hz	2.10	2.50	3.50	4.20	5.30	6.30	6.30	7.90	9.50	11.4	11.3	14.4	17.2	20.7	22.6	28.7	34.5	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			21.4	25.5	35.7	42.8	54.0	64.2	64.2	80.6	96.9	116	115	147	175	211	231	292	352	400	400	400	400	400	400	400
		60Hz	2.10	2.50	3.40	4.10	5.20	6.20	6.10	7.80	9.30	11.2	11.0	14.0	16.8	20.2	22.0	28.0	33.7	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			21.4	25.5	34.6	41.8	53.0	63.2	62.2	79.5	94.8	114	112	142	171	206	224	285	343	400	400	400	400	400	400	400

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215 Motor (Round shaft) →P215
减速机→P215 Gearhead→P215

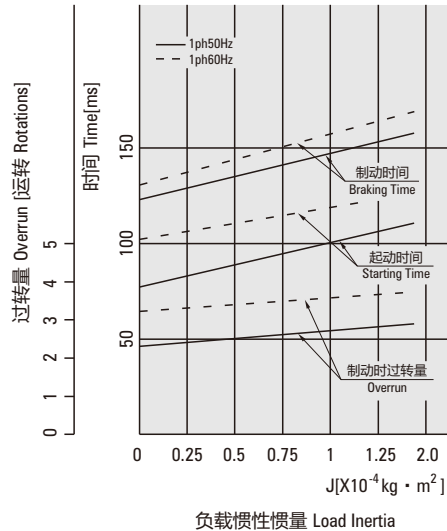
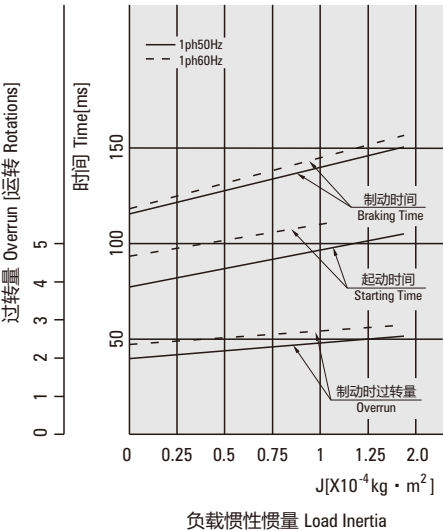
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性（参考值） Starting And Brake Characteristics (Reference Values)

● 单相电动机 Single-phase Motor

● 三相电动机 Three-phase Motor



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
6RK140GU-AFM、6RK140GU-EFM、6RK140GU-CFM、6RK140GU-HFM

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）

SW1 operates both motor and electromagnetic brake action. (Switched simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

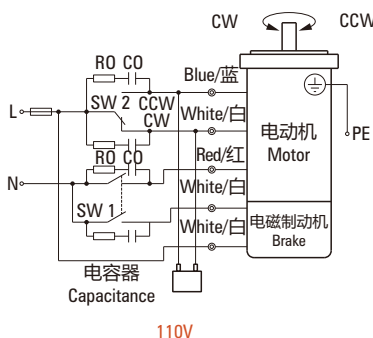
运转方向。Direction of Rotation.

将SW2转换至CW侧时，电动机作顺时针方向运转。

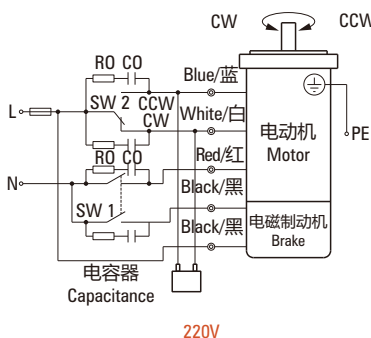
To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.

将SW2转换至CCW侧时，电动机作逆时针方向运转。

To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.



110V



220V

开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point		参考 Note
	单相100V、 110/120V输入 Single-Phase 100V, 110/120V Input	单相220V、 230V输入 Single-Phase 220V, 230V Input	
SW1	AC 125V 8A以上 (感应负载) AC 125V 8A minimum (Inductive Load)	AC 250V 8A以上 (感应负载) AC 250V 8A minimum (Inductive Load)	连动Switched Simultaneously
SW2			-

三相电动机 Three-phase Motor
6RK140GU-SFM(S3FM)

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）

SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

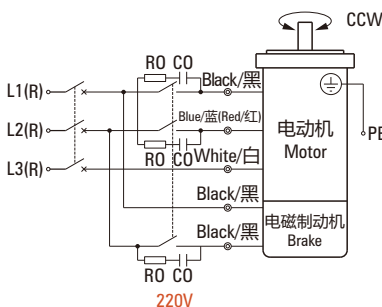
在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

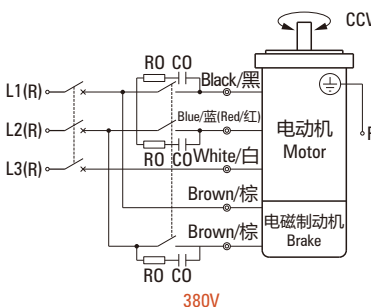
运转方向。Direction of Rotation.

若对换R、S、T中任意二条，电动机作逆时针方向运转。

To change the rotation direction, change any two connections between R, S and T.



220V



380V

开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point	参考 Note
SW1	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	连动 Switched Simultaneously

请注意Notes:

- R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。
- R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

无励磁动作型电磁制动电动机

POWER OFF ACTIVATED TYPE ELECTROMAGNETIC BRAKE MOTOR

■ 200W □ 104mm



规格 Specs / 电动机 Motor

- 没有内藏简易制动 This type of motor does not contain a built-in simple brake mechanism.

型号 Model · 类型 Type 导线型 Lead Wire Type		额定 Rating	输出功率 Output Power	电压 Voltage	频率 Frequency	电流 Current	启动转矩 Starting Torque	额定转矩 Rated Torque	额定转速 Rated Speed	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		W	V	Hz	A	mN.m	mN.m	r/min	μF
6RK200GU-AFM	6RK200A-AFM	30min	200	1ph 100	50	3.20	900	1385	1250	45.0
					60	3.50		1120	1550	
6RK200GU-EFM	6RK200A-EFM	30min	200	1ph 110	60	2.75	850	1120	1550	35.0
				1ph 120		2.65				
6RK200GU-CFM	6RK200A-CFM	30min	200	1ph 220	50	1.40	1100	1385	1250	12.0
				1ph 230						
6RK200GU-HFM	6RK200A-HFM	30min	200	1ph 220	60	1.40	1000	1120	1550	12.0
				1ph 230						
6RK200GU-SFM	6RK200A-SFM	30min	200	3ph 220	50	1.20	3400	1385	1250	-
					60	1.00	2700	1120	1550	
6RK200GU-S3FM	6RK200A-S3FM	30min	200	3ph 380	50	0.69	3400	1385	1250	-
					60	0.58	2700	1120	1550	

- 各种安全规格以电动机铭牌上的型号取得认定。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- ⑩：内藏热保护装置（自动复位型）。在电动机因某种原因过热时会自行启动使电动机停止。
Contains a built-in thermal protector(automatic return). If a motor overheats for any reason, the thermal protector is opened and the motor stops.
- 电动机温度下降后会自动恢复运行，故在进行检查作业时请务必事先切断电源。
When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note:“-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6RK200GU-AFM	6RK200A-AFM
	6RK200GU-EFM	6RK200A-EFM
	6RK200GU-CFM	6RK200A-CFM
	6RK200GU-HFM	6RK200A-HFM
	6RK200GU-SFM	6RK200A-SFM
	6RK200GU-S3FM	6RK200A-S3FM

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
6RK200GU-AF□M 6RK200GU-EF□M 6RK200GU-CF□M 6RK200GU-HF□M 6RK200GU-SF□M 6RK200GU-S3F□M	6GU□K	50Hz	3.71	4.46	6.19	7.43	9.28	11.1	11.9	13.9	16.7	20.1	20.8	25.2	30.3	36.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			37.9	45.5	63.1	75.8	94.7	114	121	142	171	205	212	257	309	370	400	400	400	400	400	400	400	400	400	400
		60Hz	2.99	3.59	4.99	5.99	7.49	8.98	9.70	11.2	13.5	16.2	17.2	20.3	24.4	29.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			30.6	36.7	50.9	61.1	76.4	91.7	98.9	115	138	165	175	207	249	299	400	400	400	400	400	400	400	400	400	400

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

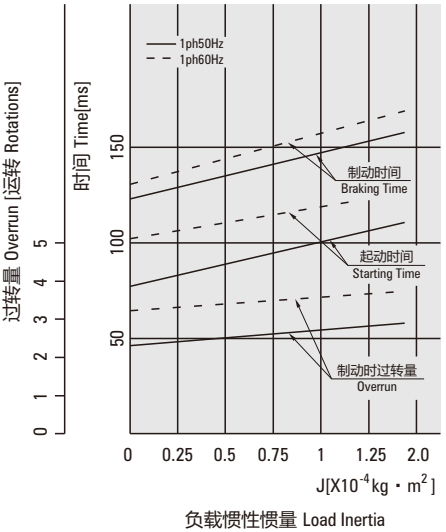
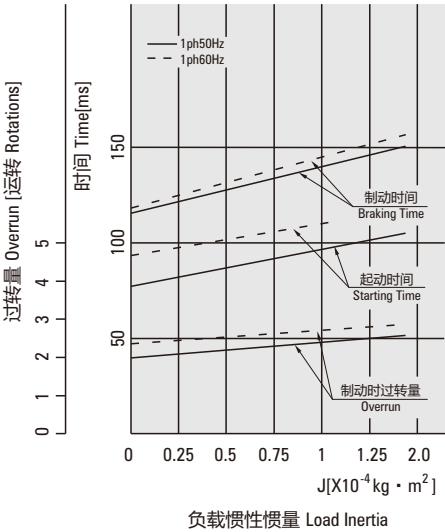
电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 启动、制动特性（参考值） Starting And Brake Characteristics (Reference Values)

- 单相电动机 Single-phase Motor
- 三相电动机 Three-phase Motor



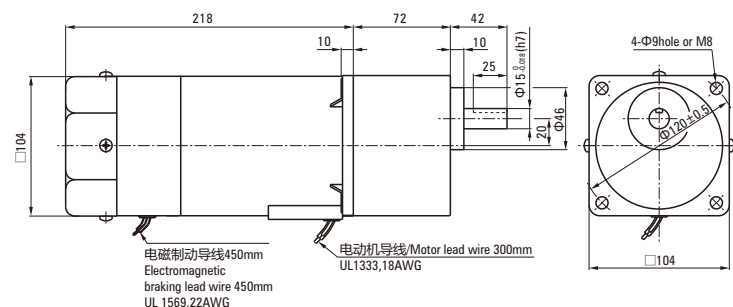
外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 5.9kg

减速器 Gearhead : 2.1kg



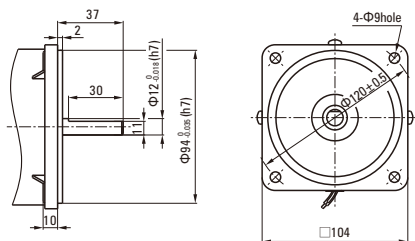
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
6RK200GU-AFM 6RK200GU-EFM 6RK200GU-CFM 6RK200GU-HFM 6RK200GU-SFM 6RK200GU-S3FM	6GU□K	3~200	72

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

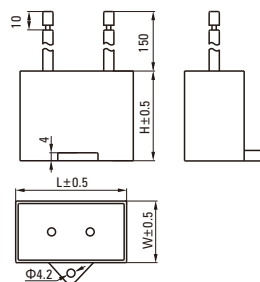


电容器外形尺寸 Formal Dimension Of Capacitor

型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
6RK200GU-AFM	6RK200A-AFM	ZD400CFAUL	70	38	52
6RK200GU-EFM	6RK200A-EFM	ZD300CFAUL	58	30	40
6RK200GU-CFM	6RK200A-CFM	ZD100BFAUL	58	26	38

- 常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional



连接图 Wiring Diagram

●运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。

The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.

●表中所记品名为齿轮轴型，圆轴型亦同。Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.

单相电动机 Single-phase Motor
6RK200GU-AFM、6RK200GU-EFM、6RK200GU-CFM、6RK200GU-HFM

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）

SW1 operates both motor and electromagnetic brake action. (Switched simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

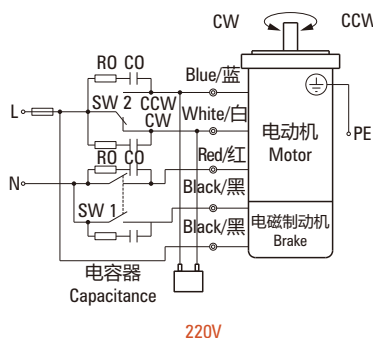
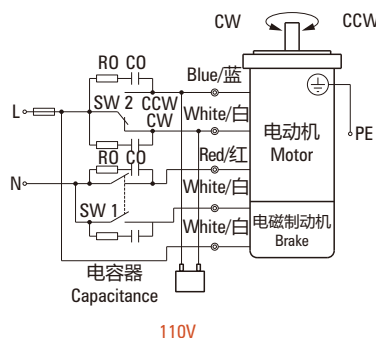
运转方向。Direction of Rotation.

将SW2转换至CW侧时，电动机作顺时针方向运转。

To rotate the motor in a clockwise (CW) direction, turn SW2 to CW.

将SW2转换至CCW侧时，电动机作逆时针方向运转。

To rotate the motor in a counterclockwise (CCW) direction, turn SW2 to CCW.



开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point		参考 Note
	单相100V、 110/120V输入 Single-Phase 100V, 110/120V Input	单相220V、 230V输入 Single-Phase 220V, 230V Input	
SW1	AC 125V 8A以上 (感应负载) AC 125V 8A minimum (Inductive Load)	AC 250V 8A以上 (感应负载) AC 250V 8A minimum (Inductive Load)	连动Switched Simultaneously
SW2			-

三相电动机 Three-phase Motor
6RK200GU-SFM(S3FM)

SW1为电动机的运行/停止及电磁制动操作用开关。（连动）

SW1 operates both motor and electromagnetic brake action. (Switched Simultaneously)

SW1设定于ON时，电磁制动解除，电动机开始运行。

The motor will rotate when SW1 is switched simultaneously to ON.

SW1设定于OFF时，电动机停止，电磁制动开始工作。

When SW1 is switched simultaneously to OFF, the motor stops immediately with the electromagnetic brake and holds the load.

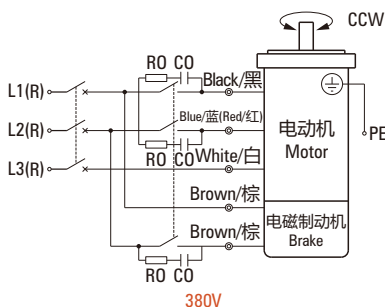
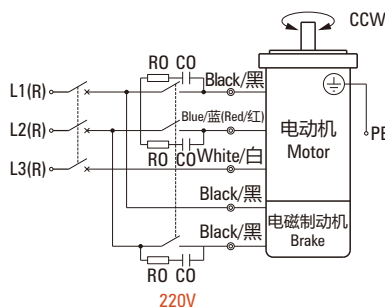
在电动机停止状态下解除电磁制动时，应将SW1设定为非连动，而仅将黑色导线侧的触点设定为ON。

If you wish to release the brake while the motor is stopped, set the SW1 to off and connection point at the side of black lead to ON.

运转方向。Direction of Rotation.

若对换R、S、T中任意二条，电动机逆时针方向运转。

To change the rotation direction, change any two connections between R, S and T.



开关 号码 Switch No.	开关的触点容量 Capacitor of Switch Connection Point	参考 Note
SW1	AC 250V 1.5A以上 (感应负载) AC 250V 1.5A minimum (Inductive Load)	连动 Switched Simultaneously

请注意Notes:

●R0C0为吸收电涌电压用CR电路。[R0=5~200Ω、C0=0.1~0.2μF、200WV (400WV)] 请使用选购配件EPCR1201-2。

●R0C0 indicate surge suppressor circuit. [R0=5~200Ω, C0=0.1~0.2μF, 200WV (400WV)] EPCR1201-2 is available as an optional surge suppressor.

调速电动机 SPEED ADJUSTABLE MOTOR

■ 6W □ 60mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
2IK6RGN-A	2IK6RA-A	6	1ph 100	50	90~1350	50	30	35	0.240	3.5
				60	90~1650	50	29	35	0.250	
2IK6RGN-E	2IK6RA-E	6	1ph 110	60	90~1650	50	29	30	0.160	2.0
			1ph 120						0.180	
2IK6RGN-C	2IK6RA-C	6	1ph 220	50	90~1350	55	29	35	0.130	0.8
			1ph 230						0.110	
2IK6RGN-H	2IK6RA-H	6	1ph 220	60	90~1650	55	29	35	0.140	0.8
			1ph 230						0.120	

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	2IK6RGN-A	2IK6RA-A
	2IK6RGN-E	2IK6RA-E
	2IK6RGN-C	2IK6RA-C
	2IK6RGN-H	2IK6RA-H

● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	2GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	2GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为3N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 3N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
2IK6RGN-A 2IK6RGN-E 2IK6RGN-C 2IK6RGN-H	2GN□K	50Hz	0.12	0.14	0.19	0.23	0.29	0.35	0.39	0.49	0.58	0.70	0.75	0.88	1.10	1.30	1.39	1.60	1.90	2.40	2.90	3.00	3.00	3.00	3.00	3.00
			1.22	1.43	1.94	2.35	2.96	3.57	3.98	5.00	5.92	7.14	7.65	8.98	11.2	13.3	14.2	16.3	19.4	24.5	29.6	30.0	30.0	30.0	30.0	30.0
		60Hz	0.10	0.12	0.16	0.19	0.24	0.29	0.32	0.41	0.49	0.58	0.62	0.73	0.88	1.10	1.15	1.30	1.60	2.00	2.40	2.60	3.00	3.00	3.00	3.00
			1.02	1.22	1.63	1.94	2.45	2.96	3.26	4.18	5.00	5.92	6.32	7.45	8.98	11.2	11.7	13.3	16.3	20.4	24.5	2.65	30.0	30.0	30.0	30.0

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215

Motor (Round shaft) →P215

减速机→P215

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

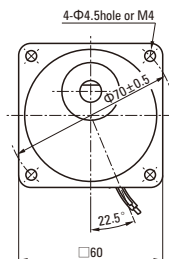
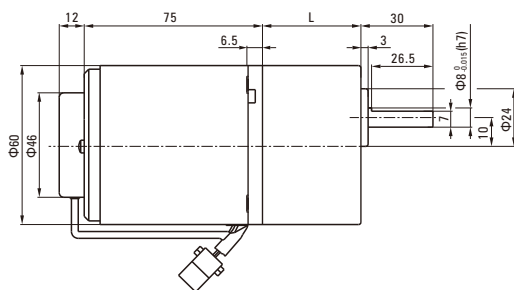
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：1.1kg

减速机 Gearhead：0.5kg



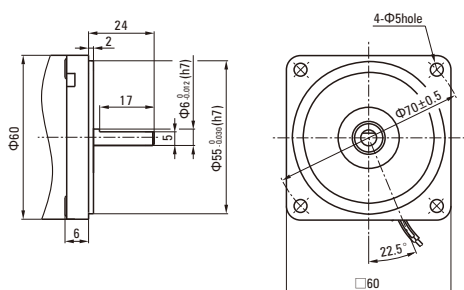
电动机型号 Motor Model	减速机型号 Gearhead Model	减速比 Gear Ratio	L1
2IK6RGN-A 2IK6RGN-E 2IK6RGN-C 2IK6RGN-H	2GN□K	3~200	41.5

- 减速机型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



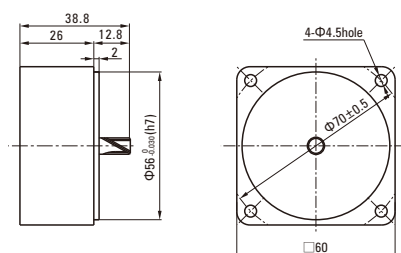
● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type

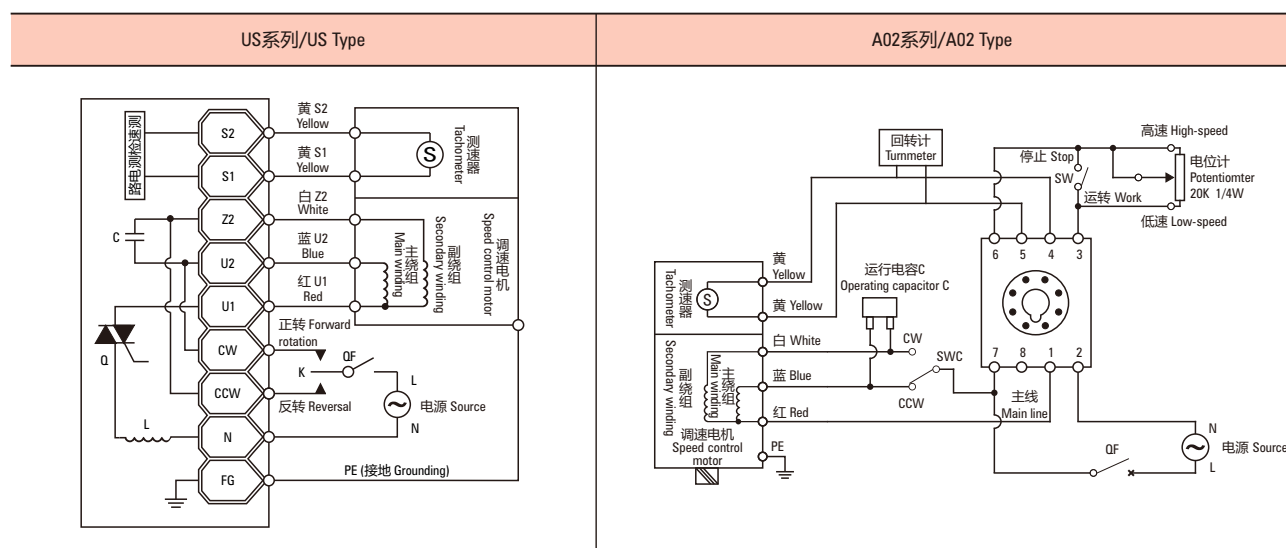
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

2GN10XK

重量 Weight : 0.24kg

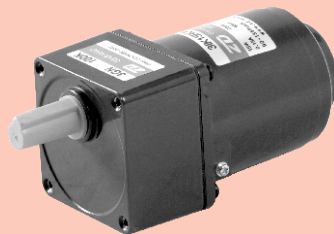


■ 连接图 Wiring Diagram



调速电动机 SPEED ADJUSTABLE MOTOR

15W 70mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
3IK15RGN-A	3IK15RA-A	15	1ph 100	50	90~1350	120	35	55	0.35	6.0
				60	90~1650				0.33	
3IK15RGN-E	3IK15RA-E	15	1ph 110	60	90~1650	125	35	55	0.30	5.0
			1ph 120						0.32	
3IK15RGN-C	3IK15RA-C	15	1ph 220	50	90~1350	120	35	54	0.18	1.2
			1ph 230						0.20	
3IK15RGN-H	3IK15RA-H	15	1ph 220	60	90~1650	85	35	52	0.16	1.2
			1ph 230			105			0.15	

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

●电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	3IK15RGN-A	3IK15RA-A
	3IK15RGN-E	3IK15RA-E
	3IK15RGN-C	3IK15RA-C
	3IK15RGN-H	3IK15RA-H

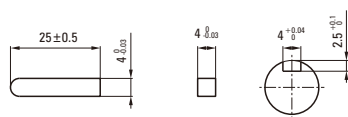
●平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	3GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	3GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

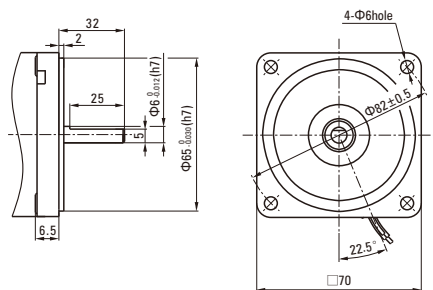
Enter the gear ratio in the box (□) within the model name

● 键·键槽 (减速器附件) Key · Keyway (Accessory Of Gearhead)



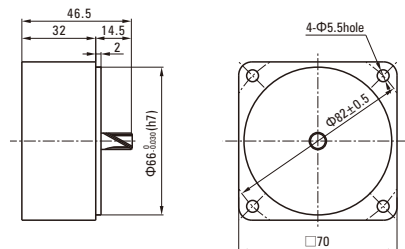
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

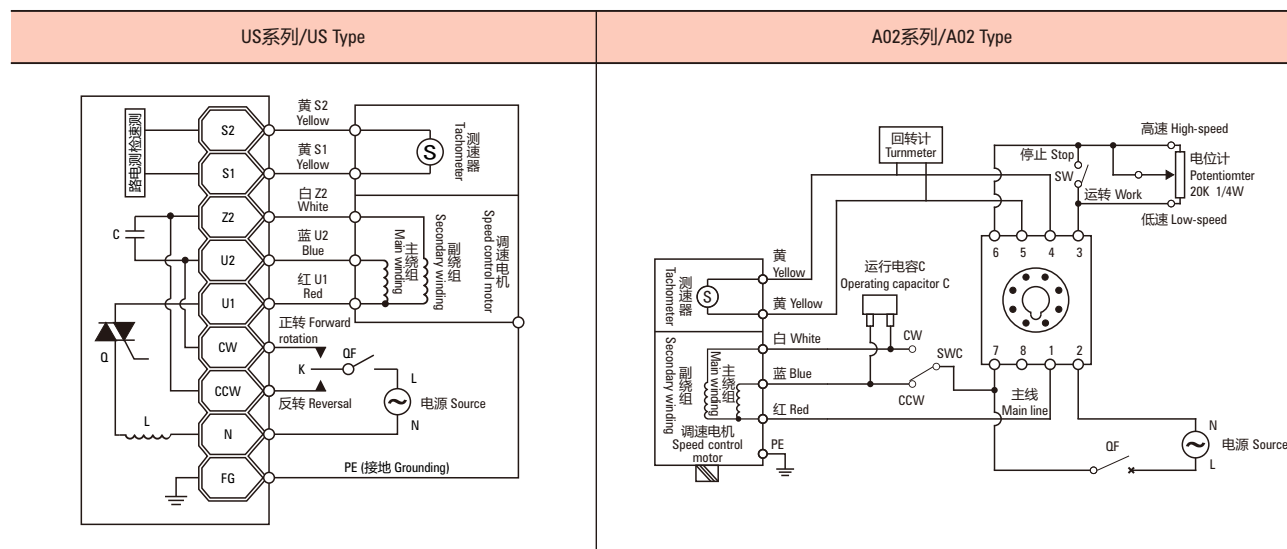


● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
3GN10XK
重量 Weight : 0.31kg

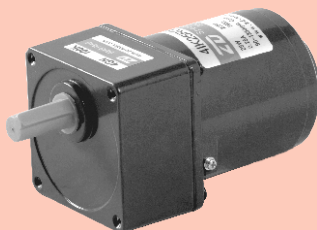


■ 连接图 Wiring Diagram



调速电动机 SPEED ADJUSTABLE MOTOR

■ 25W □ 80mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
4IK25RGN-A	4IK25RA-A	25	1ph 100	50	90~1350	190	47	88	0.50	8.0
				60	90~1650				0.55	
4IK25RGN-E	4IK25RA-E	25	1ph 110	60	90~1650	190	50	105	0.45	7.0
			1ph 120						0.50	
4IK25RGN-C	4IK25RA-C	25	1ph 220	50	90~1350	190	47	88	0.25	1.8
			1ph 230						0.23	
4IK25RGN-H	4IK25RA-H	25	1ph 220	60	90~1650	190	45	88	0.23	1.8
			1ph 230							

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	4IK25RGN-A	4IK25RA-A
	4IK25RGN-E	4IK25RA-E
	4IK25RGN-C	4IK25RA-C
	4IK25RGN-H	4IK25RA-H

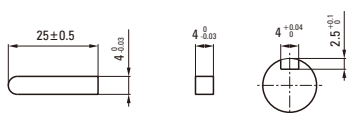
● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	4GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	4GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

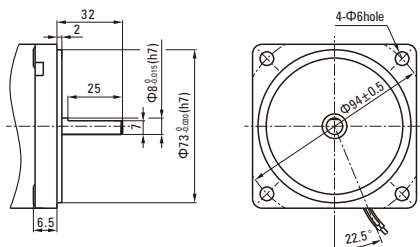
Enter the gear ratio in the box (□) within the model name

● 键·键槽 (减速器附件) Key · Keyway (Accessory Of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

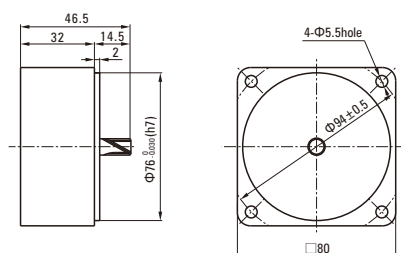


● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

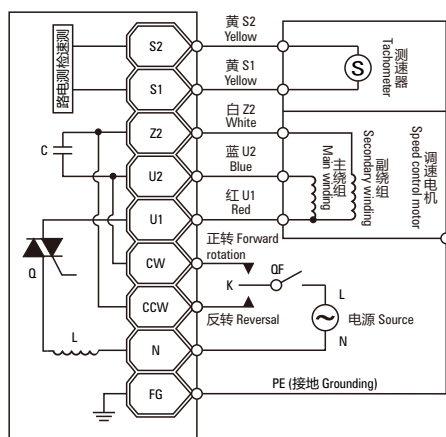
4GN10XK

重量 Weight : 0.41kg

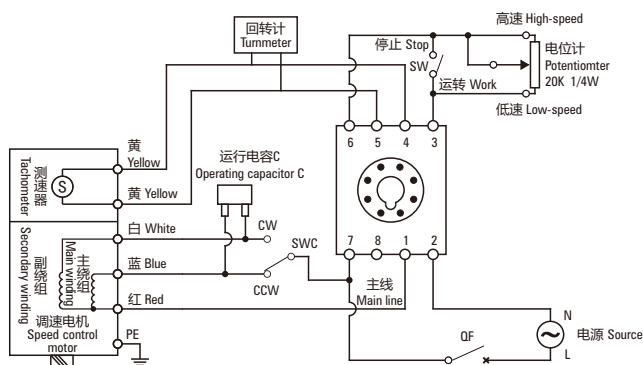


■ 连接图 Wiring Diagram

US系列/US Type

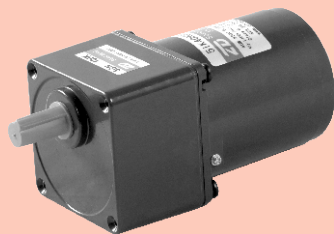


A02系列/A02 Type



调速电动机 SPEED ADJUSTABLE MOTOR

■ 40W □ 90mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
5IK40RGN-A	5IK40RA-A	40	1ph 100	50	90~1350	260	70	180	0.65	12.0
				60	90~1650				0.70	
5IK40RGN-E	5IK40RA-E	40	1ph 110	60	90~1650	260	65	180	0.55	8.0
			1ph 120						0.60	
5IK40RGN-C	5IK40RA-C	40	1ph 220	50	90~1350	300	75	160	0.35	2.5
			1ph 230						0.40	
5IK40RGN-H	5IK40RA-H	40	1ph 220	60	90~1650	230	70	145	0.35	2.5
			1ph 230						0.40	

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5IK40RGN-A	5IK40RA-A
	5IK40RGN-E	5IK40RA-E
	5IK40RGN-C	5IK40RA-C
	5IK40RGN-H	5IK40RA-H

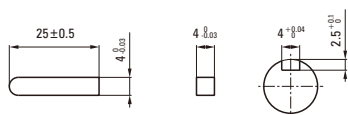
● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

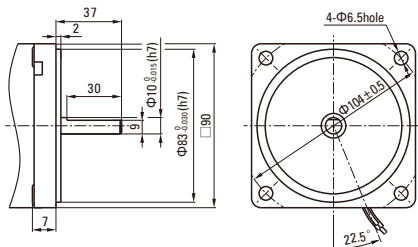
Enter the gear ratio in the box (□) within the model name

● 键·键槽 (减速器附件) Key · Keyway (Accessory Of Gearhead)



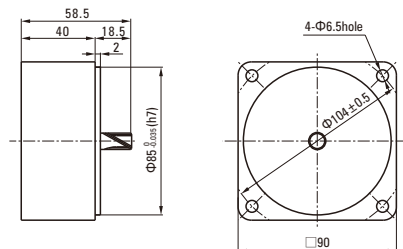
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

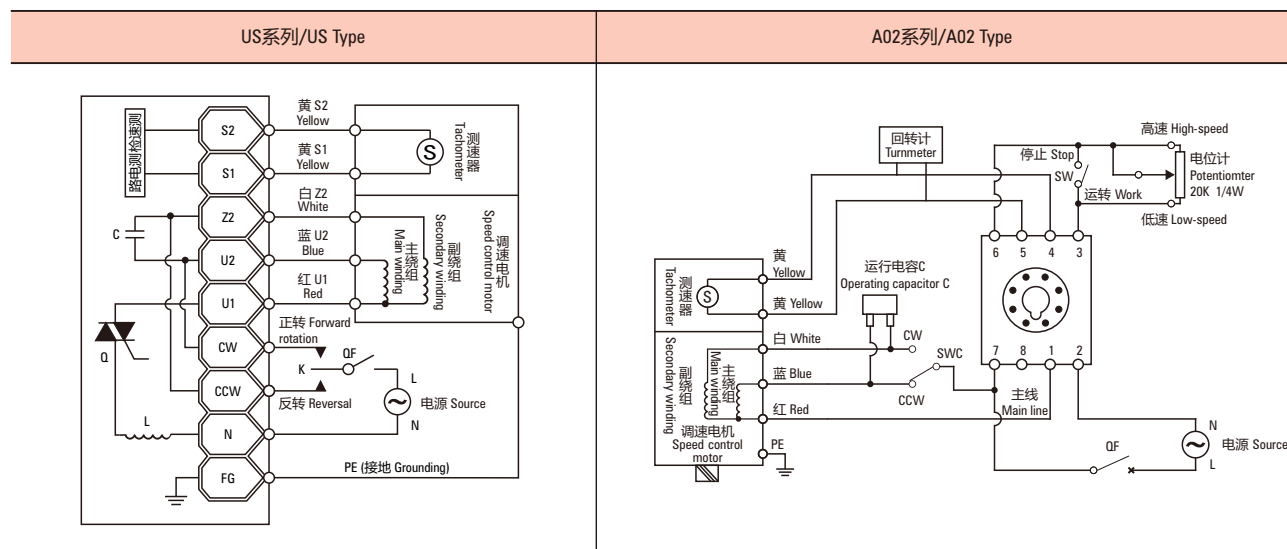


● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
5GN10XK
重量 Weight : 0.6kg

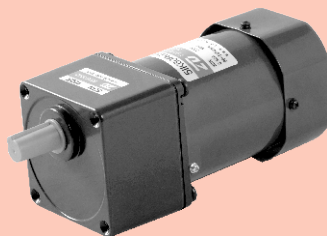


■ 连接图 Wiring Diagram



调速电动机 SPEED ADJUSTABLE MOTOR

■ 60W □ 90mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
5IK60RGN-AF	5IK60RA-AF	60	1ph 100	50	90~1350	460	140	265	1.00	20.0
				60	90~1650	490	160		1.10	
5IK60RGN-EF	5IK60RA-EF	60	1ph 110	60	90~1650	490	160	265	0.80	12.0
			1ph 120						0.85	
5IK60RGN-CF	5IK60RA-CF	60	1ph 220	50	90~1350	490	140	265	0.50	4.0
			1ph 230						0.55	
5IK60RGN-HF	5IK60RA-HF	60	1ph 220	60	90~1650	490	160	265	0.50	4.0
			1ph 230						0.55	

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5IK60RGN-AF	5IK60RA-AF
	5IK60RGN-EF	5IK60RA-EF
	5IK60RGN-CF	5IK60RA-CF
	5IK60RGN-HF	5IK60RA-HF

● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead and mid-gearbox can be sold separately.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为10N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 10N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5IK60RGN-A 5IK60RGN-E 5IK60RGN-C 5IK60RGN-H	5GN□K	50Hz	1.10	1.40	1.90	2.30	2.90	3.40	3.57	4.80	5.70	6.80	7.03	8.60	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			11.2	14.2	19.3	23.4	29.6	34.7	36.4	48.9	58.1	69.3	71.7	87.7	100	100	100	100	100	100	100	100	100	100	100	100
		60Hz	0.92	1.10	1.50	1.80	2.30	2.80	2.99	3.80	4.60	5.50	5.70	6.90	8.30	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
			9.38	11.2	15.3	18.3	23.4	28.5	30.5	38.7	46.9	56.1	58.2	70.1	84.7	100	100	100	100	100	100	100	100	100	100	100

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

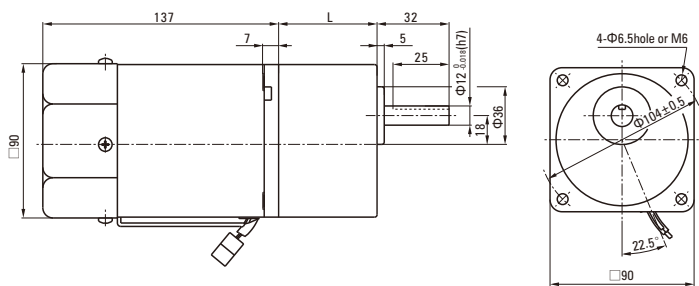
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：2.8kg

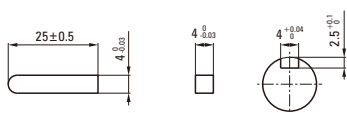
减速机 Gearhead：1.35kg



电动机型号 Motor Model	减速机型号 Gearhead Model	减速比 Gear Ratio	L1
5IK60RGN-A 5IK60RGN-E 5IK60RGN-C 5IK60RGN-H	5GN□K	3~200	60

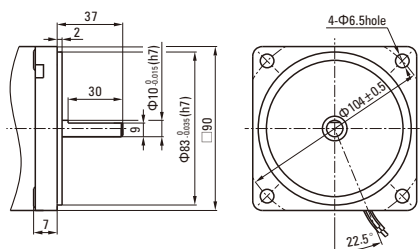
- 减速机型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成长箱体 (L1=42)
Gear ratio 3~18, short case is possible (L1=42)

● 键·键槽（减速器附件）Key·Keyway (Accessory Of Gearhead)



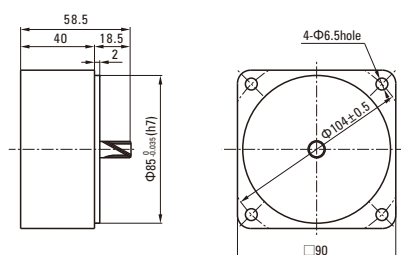
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



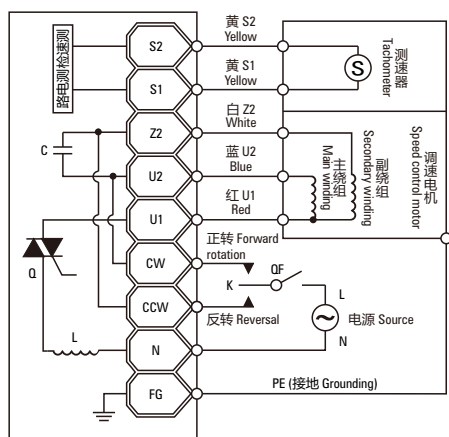
● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
5GN10XK
重量 Weight : 0.6kg

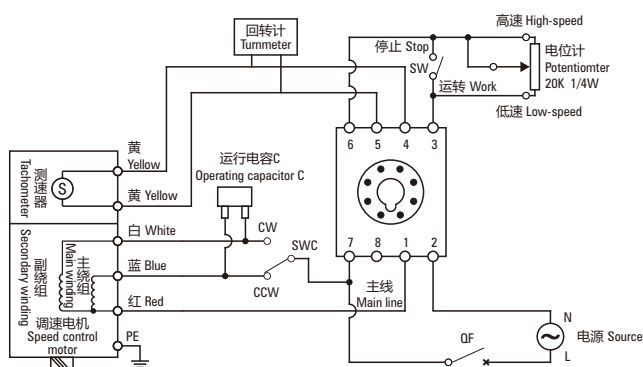


■ 连接图 Wiring Diagram

US系列/US Type

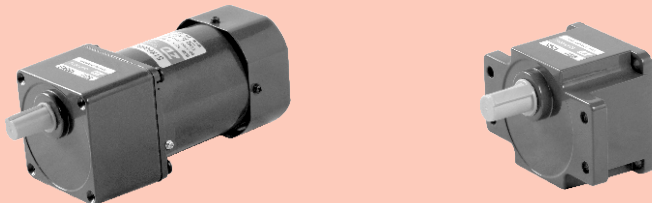


A02系列/A02 Type



调速电动机 SPEED ADJUSTABLE MOTOR

60W 90mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type	最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
					1200r/min mN.m	90r/min mN.m			
齿轮轴型 Pinion Shaft	60	1ph 100	50	90~1350	460	140	265	1.00	20.0
			60	90~1650	490	160		1.10	
5IK60RGU-EF	60	1ph 110	60	90~1650	490	160	265	0.80	12.0
		1ph 120						0.85	
5IK60RGU-CF	60	1ph 220	50	90~1350	490	140	265	0.50	4.0
		1ph 230						0.55	
5IK60RGU-HF	60	1ph 220	60	90~1650	490	160	265	0.50	4.0
		1ph 230						0.55	

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

●电动机 Motor

机型 Type	型号 Model
	齿轮轴型 Pinion Shaft
导线型 Lead Wire Type	5IK60RGU-AF
	5IK60RGU-EF
	5IK60RGU-CF
	5IK60RGU-HF

●平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GU10XK（中间减速器 Middle Gearhead）	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。

Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.

- 减速品型号的□中为减速比的数值。

Enter the gear ratio in the box (□) within the model name.

- 色表示与电动机同一方向运转，其他则为相反方向。

The colored background indicates the same rotating direction of the motor while the rotating direction of others are opposite.

- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。

The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。

To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转 速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5IK60RGU-AF 5IK60RGU-EF 5IK60RGU-CF 5IK60RGU-HF	5GU□KB 5GU□K	50Hz	1.10	1.40	1.90	2.30	2.90	3.40	3.61	4.80	5.70	6.80	7.12	8.60	10.0	10.3	11.6	12.4	15.5	18.6	20.0	20.0	20.0	20.0	20.0	20.0
			11.2	14.2	19.3	23.4	29.6	34.7	36.8	48.9	58.1	69.3	72.6	87.7	100	105	118	126	158	189	200	200	200	200	200	200
		60Hz	0.92	1.10	1.50	1.80	2.30	2.80	3.01	3.80	4.60	5.50	5.73	6.90	8.30	83.0	9.70	10.0	12.5	15.0	18.8	20.0	20.0	20.0	20.0	20.0
			9.38	11.2	15.3	18.3	23.4	28.5	30.7	38.7	46.9	56.1	58.4	70.1	84.7	84.6	98.9	102	127	153	192	200	200	200	200	200

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页

Motor (Round shaft) →P215

减速机→215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215页→P215

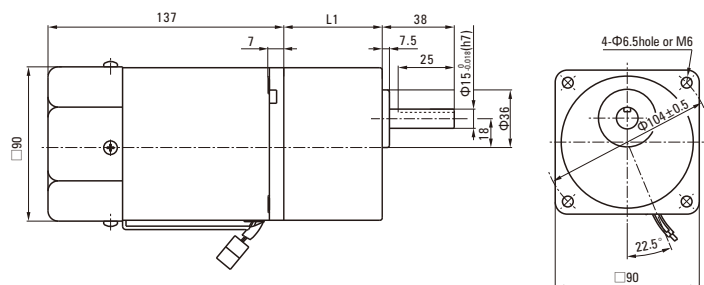
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：2.8kg

减速机 Gearhead：1.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK60RGU-AF 5IK60RGU-EF 5IK60RGU-CF 5IK60RGU-HF	5GU□KB	3~200	65.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

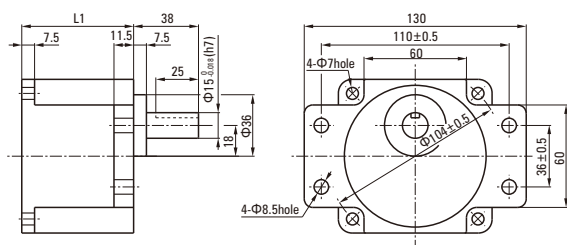
● 凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

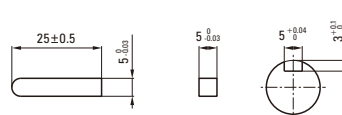
5GU□K

重量Weight:1.5kg



● 键·键槽 (减速器附件)

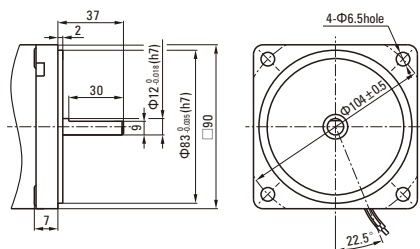
Key · Keyway (Accessory of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



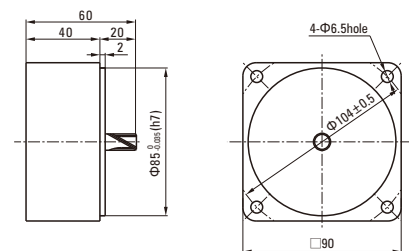
● 中间减速器 Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type

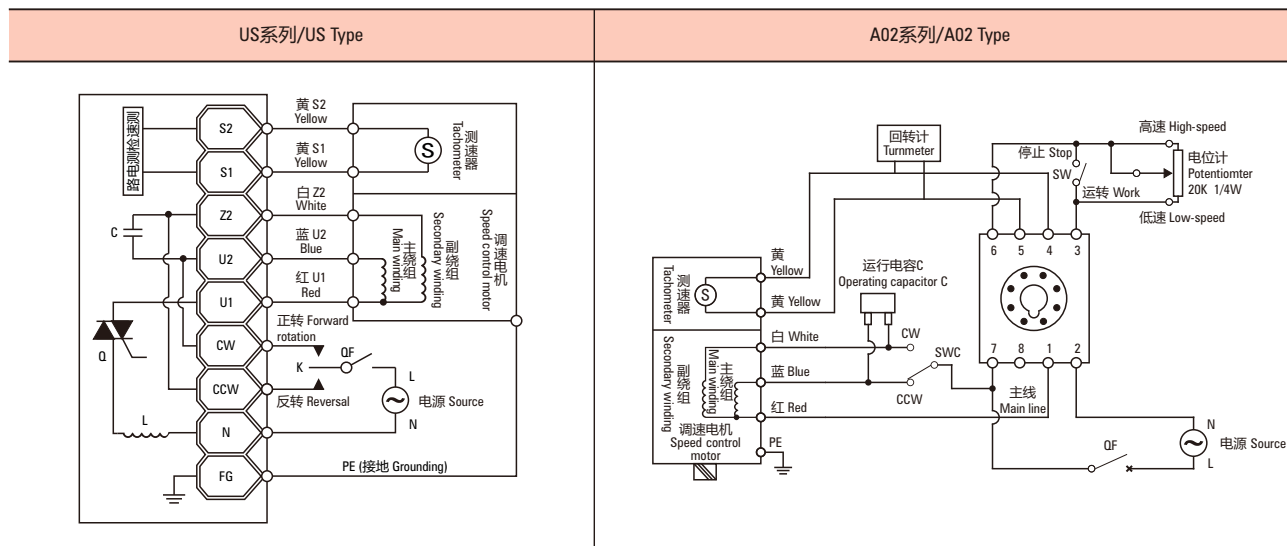
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

5GU10XK

重量 Weight : 0.65kg

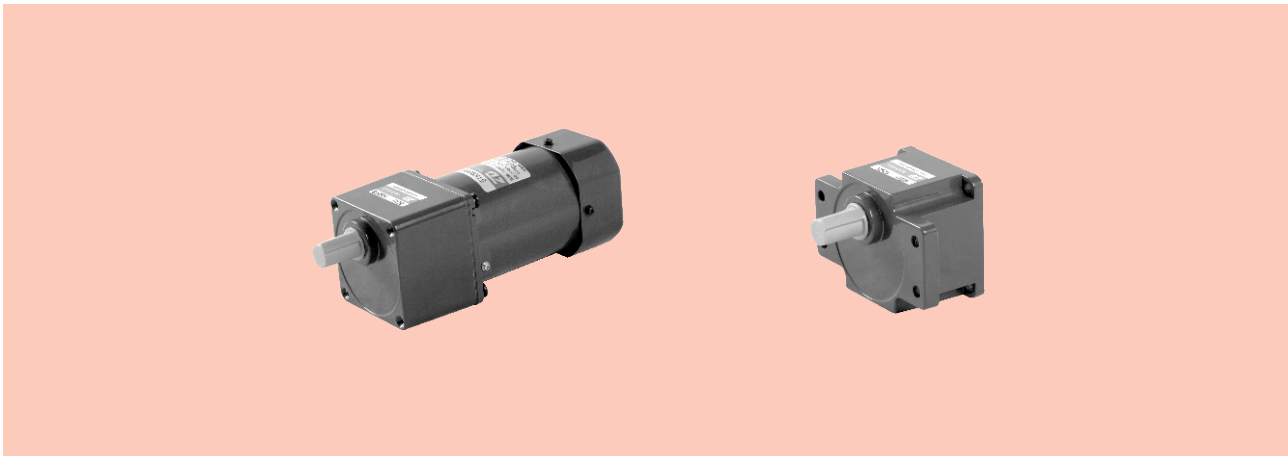


■ 连接图 Wiring Diagram



调速电动机 SPEED ADJUSTABLE MOTOR

90W 90mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
5IK90RGU-AF	5IK90RA-AF	90	1ph 100	50	90~1350	710	230	405	1.55	25.0
				60	90~1650		260		1.85	
5IK90RGU-EF	5IK90RA-EF	90	1ph 110	60	90~1650	710	260	410	1.40	20.0
			1ph 120						1.45	
5IK90RGU-CF	5IK90RA-CF	90	1ph 220	50	90~1350	710	230	410	0.72	5.0
			1ph 230						0.70	
5IK90RGU-HF	5IK90RA-HF	90	1ph 220	60	90~1650	710	260	410	0.71	5.0
			1ph 230						0.75	

- 各种安全规格以电动机铭牌上的型号取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。
Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5IK90RGU-AF	5IK90RA-AF
	5IK90RGU-EF	5IK90RA-EF
	5IK90RGU-CF	5IK90RA-CF
	5IK90RGU-HF	5IK90RA-HF

平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5IK90RGU-AF□ 5IK90RGU-EF□ 5IK90RGU-CF□ 5IK90RGU-HF□	5GU□KB 5GU□K	50Hz	1.70	2.00	2.80	3.40	4.30	5.10	5.31	6.40	7.70	9.20	9.55	11.6	13.6	16.6	18.1	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			17.3	20.4	28.6	34.7	43.9	52.0	54.2	65.3	78.6	93.3	97.4	118	139	169	184	200	200	200	200	200	200	200	200	200
		60Hz	1.40	1.70	2.50	2.80	3.50	4.20	4.43	5.20	6.20	7.50	7.81	9.40	11.3	13.5	14.5	18.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			14.3	17.3	25.5	28.6	35.7	42.9	45.2	53.1	63.3	76.5	79.6	95.9	115	138	148	19.2	200	200	200	200	200	200	200	200

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215 Motor (Round shaft) →P215
减速机→P215 Gearhead→P215

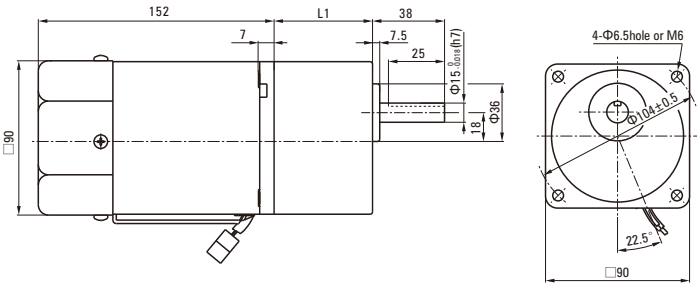
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type
重量 Weight：电动机 Motor：3.3kg 减速机 Gearhead：1.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK90RGU-AF 5IK90RGU-EF 5IK90RGU-CF 5IK90RGU-HF	5GU□KB	3~200	65.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

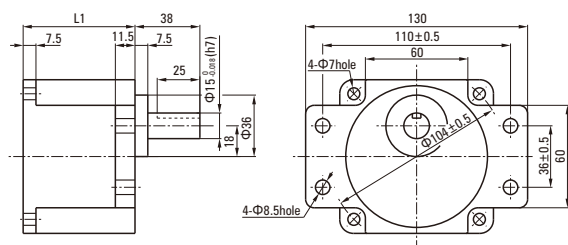
● 凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上

Can be mounted on GU type gear shaft

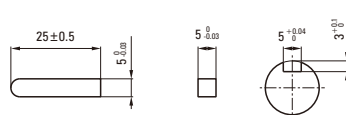
5GU□K

重量Weight:1.5kg



● 键·键槽 (减速器附件)

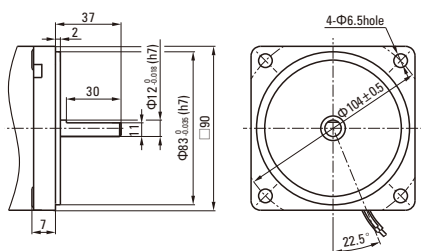
Key · Keyway (Accessory of Gearhead)



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



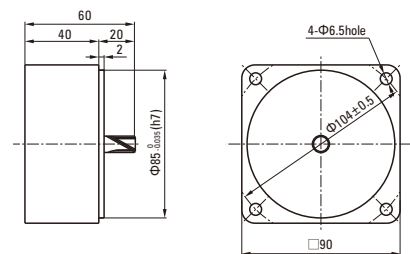
● 中间减速器 Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type

电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

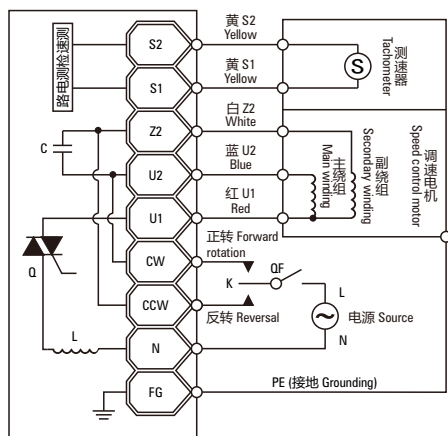
5GU10XK

重量 Weight : 0.65kg

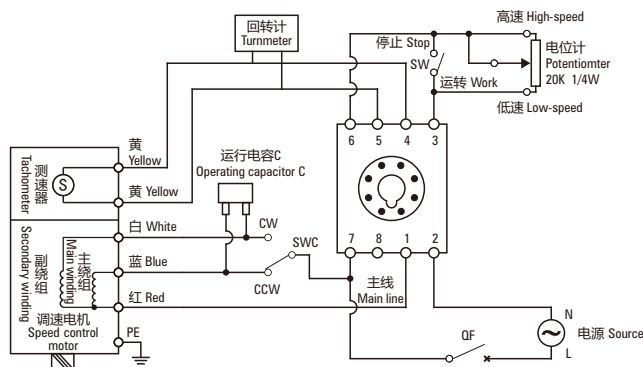


■ 连接图 Wiring Diagram

US系列/US Type

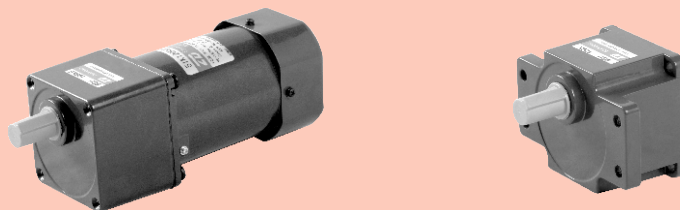


A02系列/A02 Type



调速电动机 SPEED ADJUSTABLE MOTOR

■ 120W □ 90mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
5IK120RGU-AF	5IK120RA-AF	120	1ph 100	50	90~1350	750	330	530	2.10	30.0
				60	90~1650				2.50	
5IK120RGU-EF	5IK120RA-EF	120	1ph 110	60	90~1650	750	360	530	1.65	25.0
			1ph 120						1.80	
5IK120RGU-CF	5IK120RA-CF	120	1ph 220	50	90~1350	750	330	530	1.00	7.0
			1ph 230						0.95	
5IK120RGU-HF	5IK120RA-HF	120	1ph 220	60	90~1650	750	360	530	1.00	7.0
			1ph 230						0.95	

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor value it is according to the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	5IK120RGU-AF	5IK120RA-AF
	5IK120RGU-EF	5IK120RA-EF
	5IK120RGU-CF	5IK120RA-CF
	5IK120RGU-HF	5IK120RA-HF

● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。

Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.

- 减速品型号的□中为减速比的数值。

Enter the gear ratio in the box (□) within the model name.

- 色表示与电动机同一方向运转，其他则为相反方向。

The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.

- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。

The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。这时的容许转矩为20N·m。

To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
5IK120RGU-AF 5IK120RGU-EF 5IK120RGU-CF 5IK120RGU-HF	5GU□KB 5GU□K	50Hz	2.30	2.70	3.80	4.50	5.60	6.80	7.01	8.50	10.2	12.2	12.5	15.3	18.4	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			23.4	27.5	38.7	45.9	57.1	69.3	71.5	86.7	104	124	128	156	187	200	200	200	200	200	200	200	200	200	200	200
		60Hz	1.80	2.20	3.00	3.60	4.60	5.50	5.73	6.80	8.20	9.80	10.1	12.4	14.9	17.8	19.5	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
			18.3	22.4	30.6	36.7	46.9	56.1	58.5	69.5	83.6	100	103	126	152	181	199	200	200	200	200	200	200	200	200	200

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

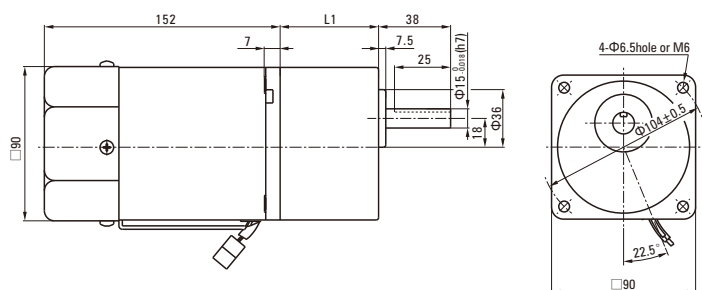
■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：3.5kg

减速机 Gearhead：1.5kg

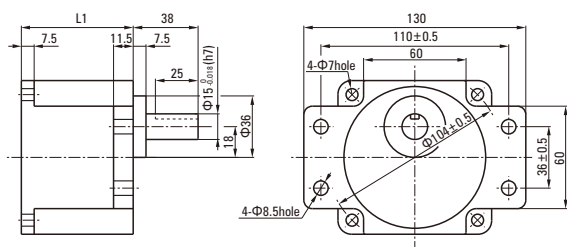


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5IK120RGU-AF 5IK120RGU-EF 5IK120RGU-CF 5IK120RGU-HF	5GU□KB	3~200	65.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

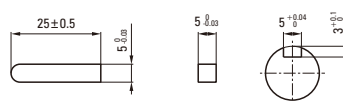
● 凸缘安装型减速器 Flange Mounting Reducer

可安装在GU齿轮轴型上
Can be mounted on GU type gear shaft
5GU□K
重量Weight:1.5kg



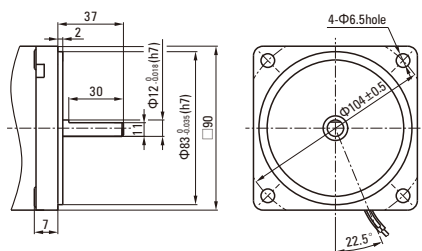
● 键·键槽 (减速器附件)

Key · Keyway (Accessory of Gearhead)



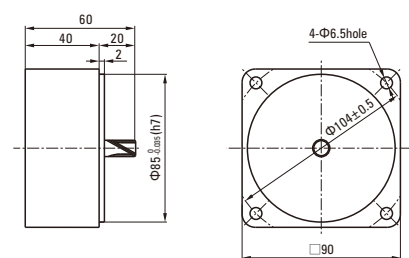
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

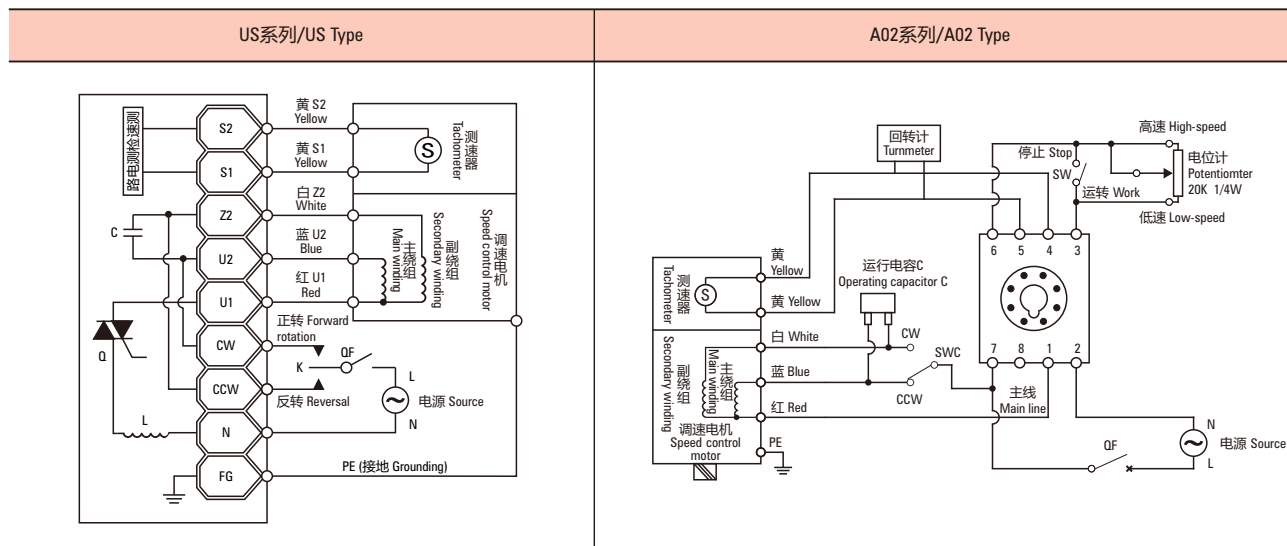


● 中间减速器 Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
5GU10XK
重量 Weight : 0.65kg

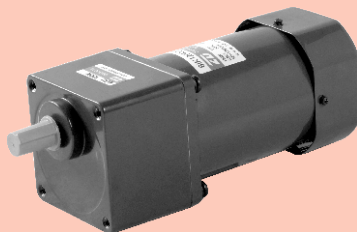


■ 连接图 Wiring Diagram



调速电动机 SPEED ADJUSTABLE MOTOR

■ 120W □ 104mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
6IK120RGU-AF	6IK120RA-AF	120	1ph 100	50	90~1350	750	360	530	2.10	30.0
				60	90~1650				2.50	
6IK120RGU-EF	6IK120RA-EF	120	1ph 110	60	90~1650	750	360	520	1.70	20.0
			1ph 120						1.80	
6IK120RGU-CF	6IK120RA-CF	120	1ph 220	50	90~1350	750	330	530	0.95	8.0
			1ph 230						0.95	
6IK120RGU-HF	6IK120RA-HF	120	1ph 220	60	90~1650	750	360	530	0.95	8.0
			1ph 230						1.00	

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note:“-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6IK120RGU-AF	6IK120RA-AF
	6IK120RGU-EF	6IK120RA-EF
	6IK120RGU-CF	6IK120RA-CF
	6IK120RGU-HF	6IK120RA-HF

● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。
Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
6IK120RGU-AF□ 6IK120RGU-EF□ 6IK120RGU-CF□ 6IK120RGU-HF□	6GU□K	50Hz	2.30	2.70	3.80	4.50	5.60	6.80	6.68	8.50	10.2	12.2	12.0	15.3	18.4	22.1	24.0	30.7	36.8	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			23.4	27.5	38.7	45.9	57.1	69.3	68.2	86.7	104	124	123	156	187	225	245	313	375	400	400	400	400	400	400	400
		60Hz	1.80	2.20	3.00	3.60	4.60	5.50	5.40	6.80	8.20	9.80	9.70	12.4	14.9	17.8	19.4	24.8	29.7	37.1	40.0	40.0	40.0	40.0	40.0	40.0
			18.3	22.4	30.6	36.7	46.9	56.1	55.0	69.3	83.6	100	99.0	126	152	181	198	253	303	378	400	400	400	400	400	400

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

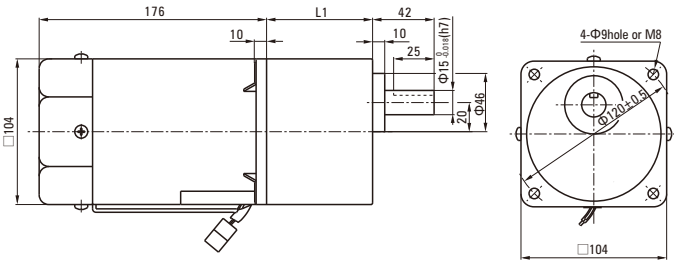
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type
重量 Weight：电动机 Motor：4.9kg 减速器 Gearhead：2.1kg

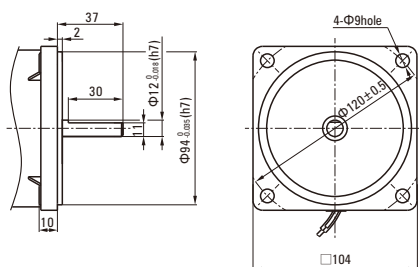


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
6IK120RGU-AF 6IK120RGU-EF 6IK120RGU-CF 6IK120RGU-HF	6GU□K	3~200	72

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

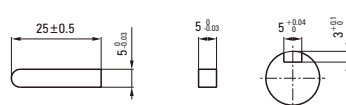
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

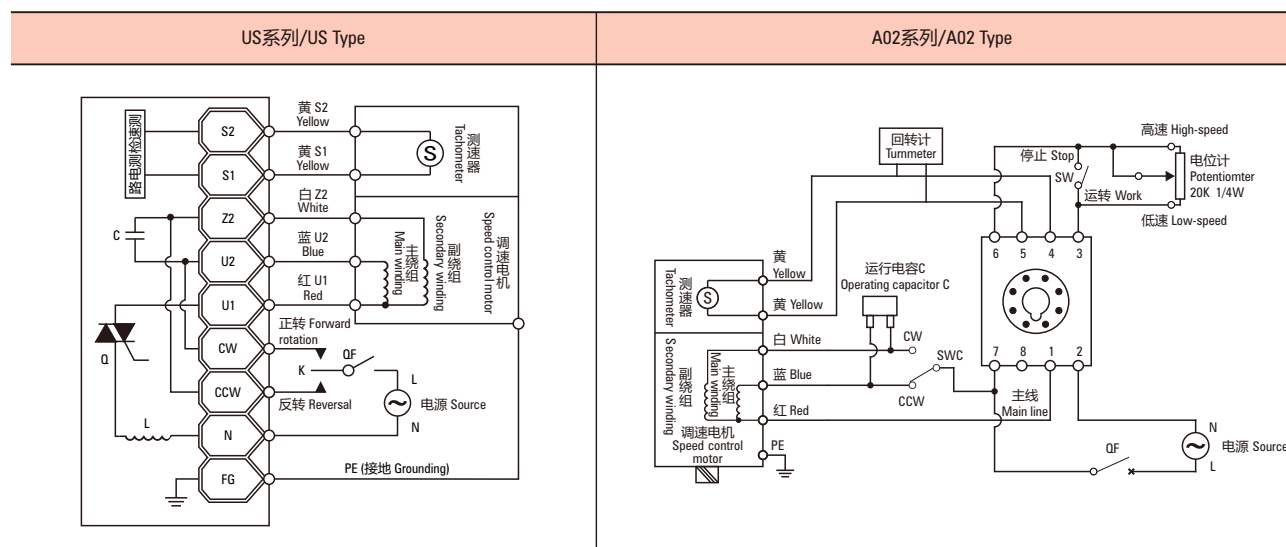


● 键·键槽 (减速器附件)

Key · Keyway (Accessory of Gearhead)



■ 连接图 Wiring Diagram



调速电动机 SPEED ADJUSTABLE MOTOR

140W 104mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
6IK140RGU-AF	6IK140RA-AF	140	1ph 100	50	90~1350	830	420	620	2.70	35.0
				60	90~1650				3.00	
6IK140RGU-EF	6IK140RA-EF	140	1ph 110	60	90~1650	830	450	620	1.80	25.0
			1ph 120						1.95	
6IK140RGU-CF	6IK140RA-CF	140	1ph 220	50	90~1350	830	420	620	1.05	10.0
			1ph 230						1.15	
6IK140RGU-HF	6IK140RA-HF	140	1ph 220	60	90~1650	830	450	620	1.05	10.0
			1ph 230						1.15	

●各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

●注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: "-A" it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

●电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6IK140RGU-AF	6IK140RA-AF
	6IK140RGU-EF	6IK140RA-EF
	6IK140RGU-CF	6IK140RA-CF
	6IK140RGU-HF	6IK140RA-HF

●平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。电动机型号的□中为表示带端子箱型的记号(T)。

Gearhead and mid-gearbox can be sold separately. Enter the code that represents the terminal box type (T) in the box (□) within the model name.

- 减速品型号的□中为减速比的数值。

Enter the gear ratio in the box (□) within the model name.

- 色表示与电动机同一方向运转，其他则为相反方向。

The colored background indicates the same rotating direction of the motor while the rotating direction of others are opposite.

- 转速是以电动机的同步转速 (50Hz : 1500r/min、60Hz : 1800r/min) 为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。

The speed is calculated by dividing the motor's synchronous speed (50Hz : 1500r/min、60Hz : 1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

■ 容许力矩单位 Allowance Torque Unit : 上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio																				
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100
6IK140RGU-AF 6IK140RGU-EF 6IK140RGU-CF 6IK140RGU-HF	6GU□K	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20
		50Hz	2.60	3.10	4.40	5.20	6.60	7.90	7.80	9.90	11.8	14.2	14.0	17.8	21.4	25.7	28.0	35.6	40.0	40.0	40.0
		60Hz	2.10	2.50	3.50	4.20	5.30	6.30	6.30	7.90	9.50	11.4	11.3	14.4	17.2	20.7	22.6	28.7	34.5	40.0	40.0

■ 容许悬挂负载 · 容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) →P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

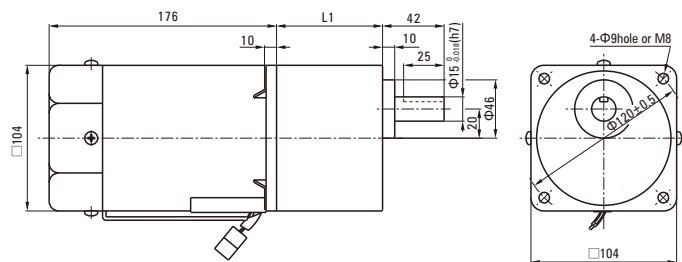
■ 外形图 (单位 mm) Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 5.1kg

减速机 Gearhead : 2.1kg

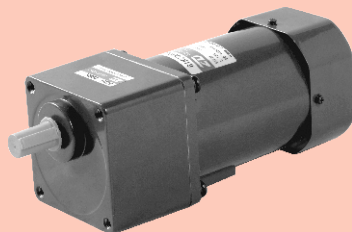


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
6IK140RGU-AF 6IK140RGU-EF 6IK140RGU-CF 6IK140RGU-HF	6GU□K	3~200	72

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

调速电动机 SPEED ADJUSTABLE MOTOR

■ 200W □ 104mm



规格 Specs 连续额定 Cont. Rated

型号 Model · 类型 Type 导线型 Lead Wire Type		最大 输出功率 Output Power W	电压 Voltage V	频率 Frequency Hz	调速范围 Speed Control Range r/min	容许转矩 Allowance Torque		启动转矩 Starting Torque mN.m	电流 Current A	电容器容量 Capacitor μF
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft					1200r/min mN.m	90r/min mN.m			
6IK200RGU-CF	6IK200RA-CF	200	1ph 220 1ph 230	50	90~1350	920	500	1000	1.4	10.0
6IK200RGU-HF	6IK200RA-HF	200	1ph 220 1ph 230	60	90~1650	920	500	1000	1.4	10.0

- 各种安全规格以电动机铭牌上的型号取得认证。

When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

- 注：“-A”型号中电压为110V时，配置电容器容量以实际铭牌为准。

Note: “-A” it means the voltage 110V, the assembly capacitor vaule it is according the label.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	6IK200RGU-CF	6IK200RA-CF
	6IK200RGU-HF	6IK200RA-HF

- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearhead are sold separately. Decimal gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的同步转速（50Hz：1500r/min、60Hz：1800r/min）为基准除以减速比而算出来的数值。实际转速将随负载大小变化所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed (50Hz：1500r/min、60Hz：1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

类型 Type 电动机/减速机 Motor/Gearhead	减速比 Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
	转速 Speed r/min	50Hz	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
		60Hz	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
6IK200RGU-CF 6IK200RGU-HF	6GU□K	50Hz	3.71	4.46	6.19	7.43	9.28	11.1	11.9	13.9	16.7	20.1	20.8	25.2	30.3	36.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			37.9	45.5	63.1	75.8	94.7	114	121	142	171	205	212	257	309	370	400	400	400	400	400	400	400	400	400	400
		60Hz	2.99	3.59	4.99	5.99	7.49	8.98	9.70	11.2	13.5	16.2	17.2	20.3	24.4	29.3	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
			30.6	36.7	50.9	61.1	76.4	91.7	98.9	115	138	165	175	207	249	299	400	400	400	400	400	400	400	400	400	400

■ 容许悬挂负载・容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→P215页 Motor (Round shaft) →P215
减速机→P215页 Gearhead→P215

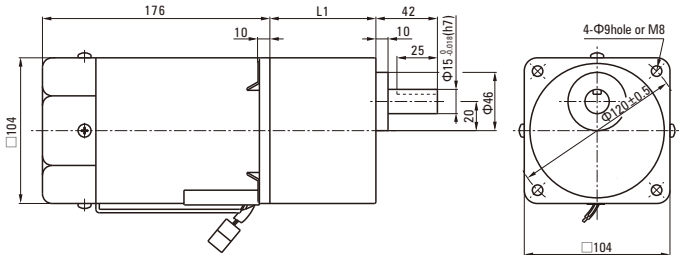
■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

■ 外形图（单位 mm）Dimensions (Unit mm)

减速机附有安装用螺丝 Mounting screws are included with gearhead.

- 导线型 Lead Wiring Type
重量 Weight：电动机 Motor：5.1kg 减速机 Gearhead：2.1kg

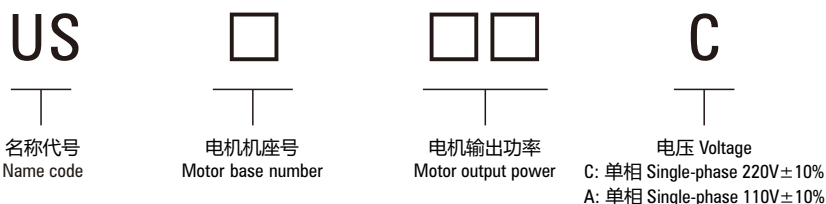


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
6IK200RGU-CF 6IK200RGU-HF	6GU□K	3~200	72

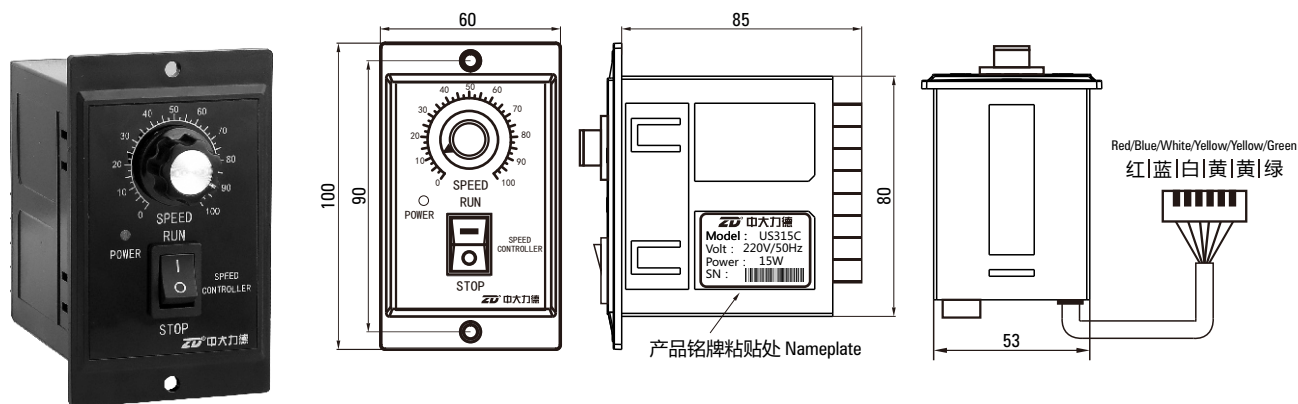
- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

交流调速器 AC SPEED CONTROLLER

控制器型号说明 Description Of Controller Model



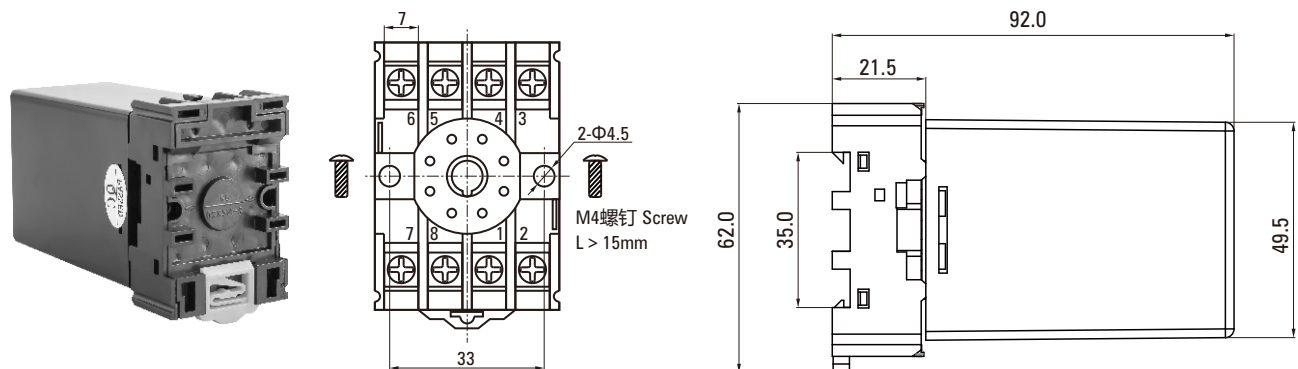
面板型 Panel Type CW, CCW 正、反转变速 Clockwise And Anti-Clockwise Speed Change



注意事项 Notes:

1. 用M4组合螺钉在2处安装孔固定 Fix the mounting holes at 2 points using M4 combination screws
2. 紧固转矩 Tightening torque 0.4-0.7 N·m

拔插型 Pula And Play Type CW, CCW 正、反转变速 Clockwise And Anti-Clockwise Speed Change



运行电容C规格表 Capacitor Specification

电源电压 Supply Voltage	220V	110V
电机功率 Motor Power		
6W	0.8μF/450V	2.0μF/250V
15W	1.2μF/450V	5.0μF/250V
25W	1.8μF/450V	7.0μF/250V
40W	2.5μF/450V	8.0μF/250V
60W	4.0μF/450V	12.0μF/250V
90W	6.0μF/450V	20.0μF/250V
120W机座号5 Frame size	7.0μF/450V	25.0μF/250V
120W机座号6 Frame size	8.0μF/450V	20.0μF/250V

断路器QF规格表 Breaker QF Specification

电源电压 Supply Voltage	电机功率 Motor Power	QF电流规格 Current Specifications
220W	6~90W	1A
220W	120W	2A
110W	6~90W	2A
110W	120W	4A

注 Note: 运行电容按中大电机型号配，放置于调速电机包装内。
The operating capacitor should be matched according to the model of ZD motors and placed in the packaging of the speed control motor.

交流调速器 AC SPEED CONTROLLER

■ 调速器型号命名方法 Controller Type Designation Method

ZF

C

名称代号
Name code

电机机座号
Motor base number

2: 60mm*60mm
3: 70mm*70mm
4: 80mm*80mm
5: 90mm*90mm
6: 104mm*104mm

电机输出功率
Motor output power

电压 Voltage
C: 单相 Single-phase 220V±10%
A: 单相 Single-phase 110V±10%

调速器性能参数 Controller Performance Parameter

型号 Model	ZF206C(A)	ZF315C(A)	ZF425C(A)	ZF540C(A)	ZF560C(A)	ZF590C(A)	ZF5120C(A)	ZF6120C(A)	ZF6140C(A)	ZF6200C(A)
适用电机功率 Applicable motor power	6W	15W	25W	40W	60W	90W	120W	120W	140W	200W
适用电机类型 Applicable motor type	调速电机 Speed control motor									
安装方式 Installation method	数显面板式 Digital display panel type									
调速方法 Speed adjustable method	面板 “▲” “▼” 按键，面板旋钮 Panel “▲” “▼” buttons, Panel knob									
运行电容 Operating capacitor	内置（内置于调速器内） Built-in (Built into the controller)									
调速范围 Speed adjustable range	50Hz: 90-1400r/min, 60Hz: 90-1700r/min,									
输入电源 Input power supply	单相 Single-phase 110V±10%/单相 Single-phase 220V±10%, 50Hz-60Hz									
使用环境 Usage environment	-20℃~+40℃（无冻结 No freeze），85%（无结露 No condensation）									

调速器性能参数 Controller Performance Parameter

类别 Category	A20系列面板式调速器 A20 Panel Type Speed Controller		A22系列面板式调速器 A22 Panel Type Speed Controller
	110V	220V	220V
电机功率 Motor Power			
6W	ZF206A	ZF206C	ZDRV.A22-6S2-DB
15W	ZF315A	ZF315C	ZDRV.A22-15S2-DB
25W	ZF425A	ZF425C	ZDRV.A22-25S2-DB
40W	ZF540A	ZF540C	ZDRV.A22-40S2-DB
60W	ZF560A	ZF560C	ZDRV.A22-60S2-DB
90W	ZF590A	ZF590C	ZDRV.A22-90S2-DB
120W	ZF6120A (ZF5120A)	ZF6120C (ZF5120C)	ZDRV.A22-120S2-DB
140W	ZF6140A	ZF6140C	ZDRV.A22-140S2-DB
200W	ZF6200A	ZF6200C	ZDRV.A22-200S2-DB

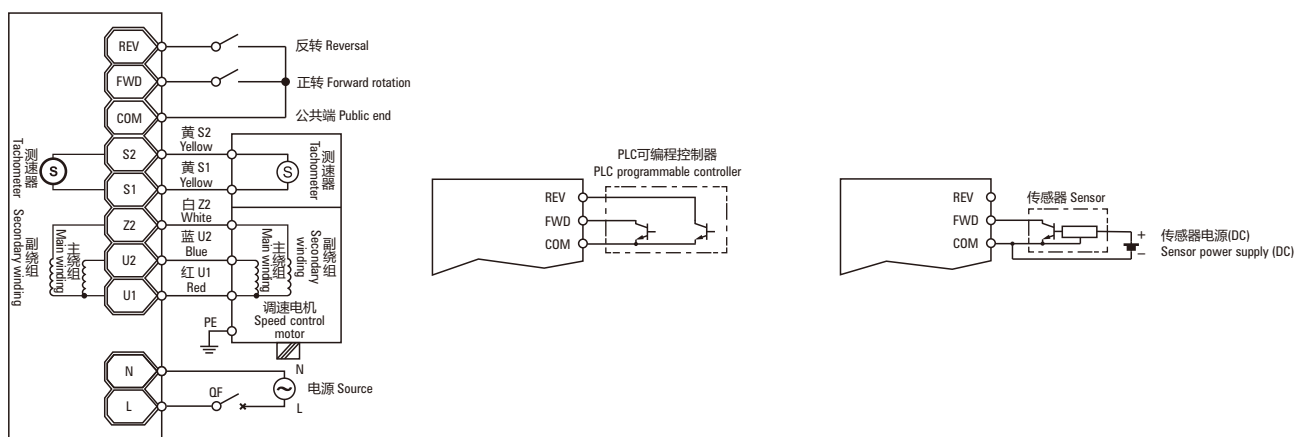
面板式调速器 PANEL TYPE SPEED CONTROLLER



■ 面板式特点 Panel Features

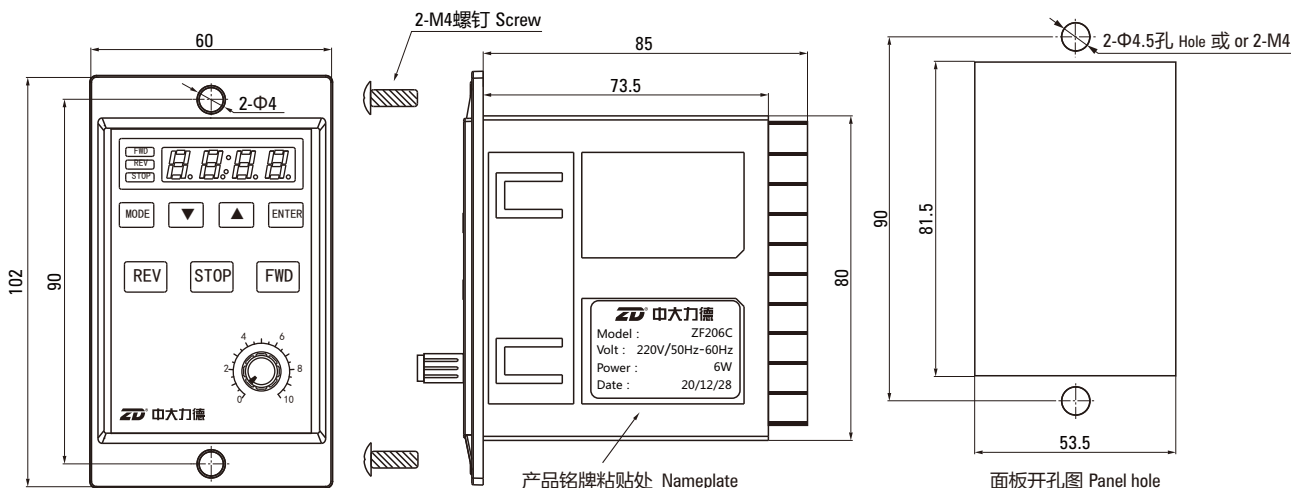
- 采用MCU数字控制技术，功能丰富，性能优异。
Adopt MCU digital control technology, feature rich, excellent performance.
- 采用数显菜单式选项，修改设定方便快捷。
Use display menu options, modify the settings conveniently.
- 可根据用户显示需要显示倍率，自动换算显示目标值。
According to the user needs to display magnification, automatic conversion display target value.
- 可实现缓慢加速，缓慢减速。It can realize the slow acceleration, deceleration.
- 可面板操作、外接开关控制。Panel operation, external switch control.
- 面板旋钮自动匹配最高转速，调速控制方便，安全。
Automatic matching of maximum speed-speed control panel knob, convenient and safe.
- 内置运行电容。The built-in running capacitor.
- 输入电源频率: 50/60Hz。Input power frequency: 50/60Hz.
- 堵转保护功能，防止电机、调速器因堵转烧坏。
The blocking protection function, prevent motor and speed controller burning down due to blockage.
(此功能可保护堵转过载，但无法保护非堵转过载)
(This function can protect against locked rotor overload, but it cannot protect against locked rotor overload)

■ 面板式调速器接线图 Panel Type Controller Connection Diagram



■ 面板式调速器安装规格图 Panel Controller Installation Specifications

单位 Unit: mm

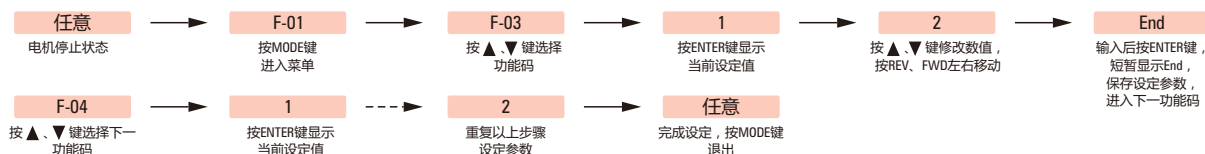


■ 面板式调速器菜单 Panel Controller Menu

● 菜单修改：Menu modification:

为保证安全，请在电机停止的状态下进行修改，运行状态下不可修改。

To ensure safety, please make modifications while the motor is stopped and cannot be modified while running.



注：在驱动器处于运行或者停机界面时，同时按下MODE和ENTER两个按键，按键将处于上锁状态，按键不再具有控制电机或者进入菜单等功能；同时按下DOWN和ENTER两个按键，可以解除按键上锁状态，恢复按键功能。

■ 面板式调速菜单清单 Panel Speed Control Menu List

功能码列表（R/W: 可读/写；R0: 只读）

参数码	名称	参数详情说明	设定范围	缺省值	更改
F-01	显示内容	1. 电机转速设定值 2. 倍率转速设定值	1~2	1	R/W
F-02	倍率设定	倍率值1.0~999.9, 倍率转速设定值=电机转速设定值/倍率	1.0~999.9	1.0	R/W
F-03	运转控制模式	1. 操作面板控制 2. 外接开关控制, 面板“STOP”键无效 3. 外接开关控制, 面板“STOP”键有效	1~3	1	R/W
F-04	旋转方式	1. 允许正反转 2. 允许正转, 禁止反转 3. 允许反转, 禁止正转	1~3	1	R/W
F-05	旋转方向	1. 不取反 2. 取反	1~2	1	R/W
F-07	最高转速	F-08（最低转速）~1700；限制最高转速，防止超速， 发生损坏（50Hz: 1400; 60Hz: 1700）	F-08~1700	1400	R/W
F-08	最低转速	90~F-07（最高转速） 限制最低转速，防止过低转速运行导致电机不稳定	90~F-07	120	R/W
F-10	正转停止方式	1. 自由停止 2. 减速停止	1~2	1	R/W
F-11	正转停止减速时间	0.1~10.0秒（F-10=2时有效）	0.1~10.0	1.0	R/W
F-12	反转启动加速时间	0.1~10.0秒	0.1~10.0	1.0	R/W
F-13	反转停止方式	1. 自由停止 2. 减速停止	1~2	1	R/W
F-14	反转停止减速时间	0.1~10.0秒（F-13=2时有效）	0.1~10.0	1.0	R/W
F-15	电源频率设定	1. 驱动器自动检测 2. 电源频率50Hz 3. 电源频率60Hz	1~3	1	R/W
F-16	恢复出厂设置	1. 不恢复 2. 恢复	1~2	1	R/W
F-17	当前适配电源频率	50: 适配50Hz交流电源 60: 适配60Hz交流电源	50, 60	**	R0
F-18	程序版本		50, 60	*, **	R0
F-19	端子控制运行模式	1: FWD正转; REV反转 2: FWD方向; REV使能	1~2	1	R/W
F-20	按键掉电锁存功能	1: 不锁存 2: 锁存（保存调速器当前状态）	1~2	1	R/W
F-21	开关量滤波时间	0~1000毫秒	0~1000	50	R/W

■ 故障维护和状态显示 Fault Maintenance And Status Display

显示	名称	原因	处理方法
故障码	E.LOC	电机堵转故障	检查调速器与电机的连接；检查机械故障；按STOP键复位
	E.EEP	参数存储故障	重新上电解除警报
提示码	S.run	电机当前处于运行状态，禁止修改功能码	按STOP键停机后修改
	S.not.	该按键当前处于无效状态	修改F-03、F-04或F-06功能码
	S.Err	驱动器当前处于故障状态	清除故障后重试
	S.loc	按键当前处于上锁状态	同时按下DOWN和ENTER键解锁

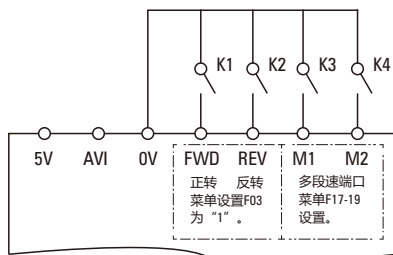
内置式调速器 BUILT IN CONTROLLER



■ 内置式特点 Built In Features

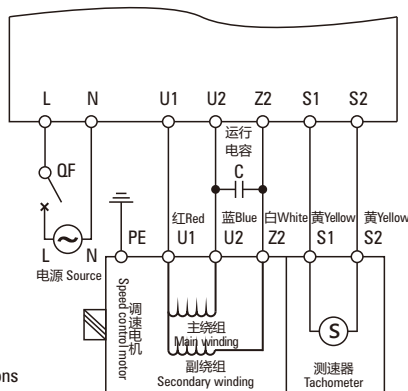
- 采用MCU数字控制技术，功能丰富，性能优异。
Adopt MCU digital control technology, feature rich, excellent performance.
- 采用数显菜单式选项，修改设定方便快捷。
Use display menu options, modify the settings conveniently.
- 可根据用户显示需要显示倍率，自动换算显示目标值。
According to the user needs to display magnification, automatic conversion display target value.
- 可实现缓慢加速、缓慢减速、快速停止、4段速等复杂运动控制。
It can realize the slow acceleration, deceleration, quick stop, 4 speed complex motion control.
- 可外接开关控制、0-5V模拟量控制。The external control switch, 0-5V analog control.
- 模拟量控制可自动匹配最高转速，调节控制方便、安全。
The analog value control can automatically match the highest speed, convenient control and safe.
- 堵转保护功能，防止电机、调速器因堵转烧坏。
The blocking protection function, prevent motor and speed controller burning down due to blockage.
(此功能可保护堵转过载，但无法保护非堵转过载)
(This function can protect against locked rotor overload, but it cannot protect against locked rotor overload)

■ 内置式调速器接线图 Built-in Controller Connection Diagram



● 电源 Source

电源电压必须与调速器电源电压规格一致。
QF为断路器，发生短路时保护调速器和电机。
Power supply voltage must be consistent with specifications of controller voltage. QF is a circuit breaker that protects the speed controller and motor in event of a short circuit.



● 运转控制模式 Operation Control Mode

当菜单设置F03为“2”：K1控制方向，K2控制启停。
When F03 is set to “2” in the menu: K1 control direction, K2 control start stop

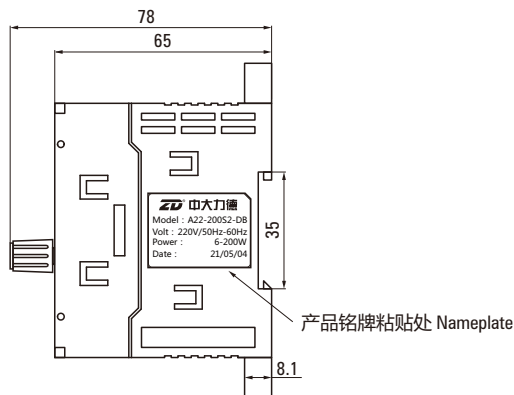
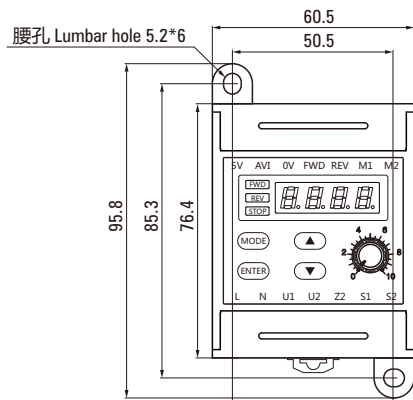
K2 \ K1	打开 Open	闭合 Close
打开 Open	停止 Stop	停止 Stop
闭合 Close	反转 Reversal	正转 Forward

● QF断路器规格表 QF Circuit Breaker Specification Sheet

电源电压 Supply Voltage	电机功率 Motor Power	QF电流规格 QF Current Specification
220V	6~90W	1A
220V	120~200W	2A
110V	6~90W	2A
110V	120~200W	4A

■ 内置式调速器安装规格图 Built-in Controller Installation Specifications

单位 Unit: mm



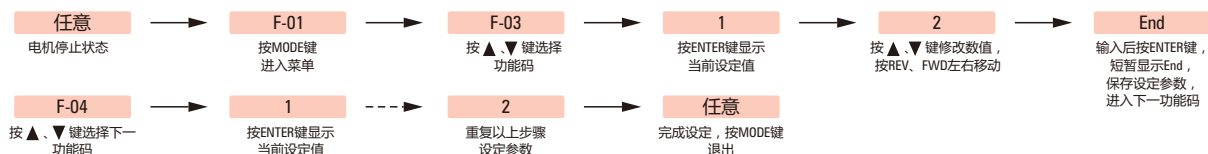
产品铭牌粘贴处 Nameplate

■ 内置式调速器菜单 Built-in Controller Menu

● 菜单修改：Menu modification:

为保证安全，请在电机停止的状态下进行修改，运行状态下不可修改。

To ensure safety, please make modifications while the motor is stopped and cannot be modified while running.



注：在驱动器处于运行或者停机界面时，同时按下MODE和ENTER两个按键，按键将处于上锁状态，按键不再具有控制电机或者进入菜单等功能；同时按下DOWN和ENTER两个按键，可以解除按键上锁状态，恢复按键功能。

■ 内置式调速菜单清单 Built-in Speed Control Menu List:

功能码列表（R/W: 可读/写；R0: 只读）

参数码	名称	参数详情说明	设定范围	缺省值	更改
F-01	显示内容	1. 电机转速设定值 2. 倍率转速设定值	1~2	1	R/W
F-02	倍率设定	倍率值1.0-999.9, 倍率转速设定值=电机转速设定值/倍率	1.0~999.9	1.0	R/W
F-03	运转控制模式	1. 正转/反转 2. 正转/停机	1~2	1	R/W
F-04	旋转方式	1. 正转/反转 2. 正转, 禁止反转 3. 允许反转, 禁止正转	1~3	1	R/W
F-05	旋转方向	1. 不取反 2. 取反	1~2	1	R/W
F-06	调速方式	1. 面板UP/DOWN按键调速 2. 面板旋钮调速 3. 外部模拟量	1~3	1400	R/W
F-07	最高转速	F-08（最低转速）~1700；限制最高转速，防止超速，发生损坏	F-08~1700	1400	R/W
F-08	最低转速	90-F-07（最高转速） 限制最低转速，防止过低转速运行导致电机不稳定	90~F-07	120	R/W
F-09	正转启动加速时间	0.1~10.0秒	0.1~10.0	1.0	R/W
F-10	正转停止方式	1. 自由停止 2. 减速停止 3. 缓慢停止	1~2	1	R/W
F-11	正转快速停机强度	F-10=2时有效，参数值越大，停止越快	1~10	5	R/W
F-12	正转停机减速时间	0.1~10.0秒（F-10=3时有效）	0.1~10.0	1.0	R/W
F-13	反转启动加速时间	0.1~10.0秒	0.1~10.0	1.0	R/W
F-14	反转停止方式	1. 自由停止 2. 减速停止 3. 缓慢停止	1~3	1	R/W
F-15	反转快速停机强度	F-14=2时有效，参数值越大，停止越快	1~10	5	R/W
F-16	反转停止减速时间	0.1~10.0秒（F-14=3时有效）	0.1~10.0	1.0	R/W
F-17	第一阶段	M, M2选择多段速的第一段速	F-08~F07	500	R/W
F-18	第二阶段	M, M2选择多段速的第二段速	F-08~F07	500	R/W
F-19	第三阶段	M, M2选择多段速的第三段速	F-08~F07	500	R/W
F-20	电机频率设定	1. 驱动器自动检测 2. 电源频率50Hz 3. 电源频率60Hz	1~3	1	R/W
F-21	恢复出厂设置	1. 不恢复 2. 恢复	1~2	1	R/W
F-22	当前适配电源频率	50: 适配50Hz交流电源 60: 适配60Hz交流电源		**	R0
F-23	驱动器内部温度	当前时刻驱动器内部温度值			R0
F-24	程序版本			*, **	R0

■ 故障维护和状态显示 Fault Maintenance And Status Display

显示	名称	原因	处理方法
故障码	E.LOC	电机堵转故障	检查调速器与电机的连接；检查机械故障；按STOP键复位
	E.EEP	参数存储故障	重新上电解除警报
提示码	S.run	电机当前处于运行状态，禁止修改功能码	按STOP键停机后修改
	S.not.	该按键当前处于无效状态	修改F-04或F-06功能码
	S.Err	驱动器当前处于故障状态	清除故障后重试
	S.loc	按键当前处于上锁状态	同时按下DOWN和ENTER键解锁

转矩电动机 TORQUE MOTOR

■ 特征 Feature

- 具有垂下特征，调速范围宽大 The Speed Can Vary Widely, Depending on the Sloping Characteristics

转矩电动机由于起动转矩大，具有垂下的特征，因此，能够通过改变电压进行调速。（电动机的转矩与电压的平方成正比）

Torque motors have a high starting torque and Torque motors have a high starting torque and sloping characteristics, allowing easy speed control simply by changing the voltage of the power supply. (The motor torque changes approximately proportion to the square of the voltage)

- 适用于卷取作业 Suitable For Winding Applications

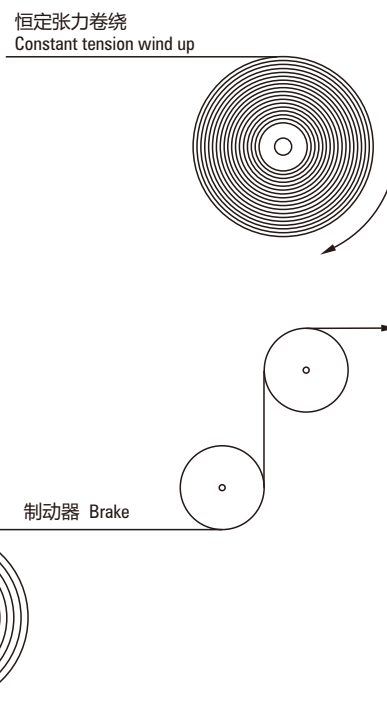
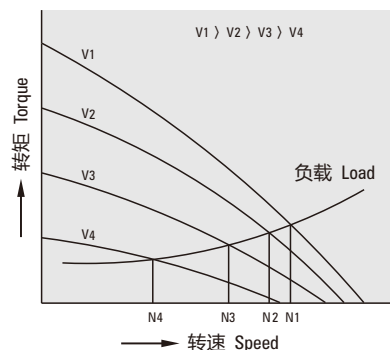
以固定的张力连续卷取定速运转的物体时，若卷轴机直径增大至2倍，则电动机的输出转矩亦增大至2倍，而电动机转速则减半。作业时须保持这一比例关系。

In an application where an object is released continuously at a constant speed and wound up with constant tension, the torque must be doubled and the speed must be halved if the diameter of the winding spool is doubled.

- 可作为制动使用 Use As A Brake

电动机在转速-转矩特性的制动领域，可作为制动来使用。此外，也可以通过直流励磁进行固定张力控制。

By using the motor in the braking region of the speed-torque characteristics, it can serve as a brake. Constant tension operation can be achieved by applying a DC voltage.



■ 转速-转矩特性图的阅读方法 How To Read Speed - Torque Characteristics

转矩电动机的转矩几乎与电压的平方成正比变化。通过改变电动机通电电压，就能够得到各电压下分别具有垂下特性的转速-转矩特性曲线。

The motor torque changes approximately proportion to the square of the voltage. When the voltage supplied to the motor is changed, speed - torque curves with a sloping characteristics (torque is highest at zero speed and decreases steadily with increasing speed) shifts to that of the corresponding voltage.

负载转矩为T0时，将电压调整为100V、80V、60V的话，电动机将分别以N1、N2、N3转速旋转。如上所述，通过改变电压，能够很简单地改变转速。

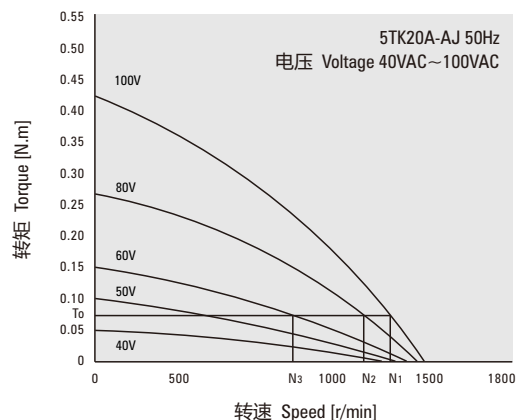
When the voltage is changed to 100V, 80V and 60V while the load torque is T0, the motor rotates at the speeds N1, N2 and N3 respectively. Thus, the speed can be changed easily by varying the voltage.

使用转矩电动机时，请了解必需的转矩和转速，根据是连续使用还是短时间使用，参照转速-转矩特性作出选择。在堵转状态下使用时，选择基准只考虑转矩。

When choosing a torque motor, first determine the required torque and speed. Then select a motor using the speed - torque characteristics curves to determine whether the motor should be operated under continuous duty or limited duty. When used under locked rotor conditions, only the torque factor is considered.

用于连续运转等会造成温度上升问题的场合时，可通过选用较大输出功率的产品以调整电压方式控制转速、转矩。

The temperature rise of the motor may cause a problem during continuous operation. In this case, choose a motor with an output power large enough for continuous operation and adjust the voltage to control the torque and speed.



■ 转矩电动机电压控制方法 Voltage Control Of Torque Motors

电压控制的一般方法是，使用双向可控硅中等的相位控制方式。是一种如图所示，通过改变触发双向可控硅的相位角 α ，使输入电压像斜线部分那样变化的控制方法。

The method most commonly used to control voltage is by phase control using a triac. As shown in Fig.1, by changing the phase angle α at which the triac switches, the input voltage is controlled as represented by the phase angle areas of the graph.

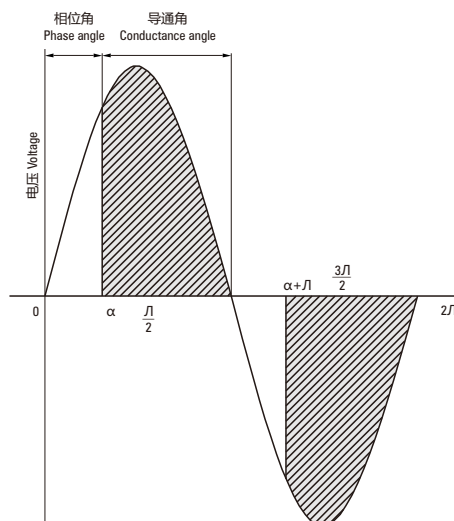


图-1 相位控制
Fig-1 Phase control

■ 装有减速器时的输出转矩 Gear Motor – Torque Table

由于具有垂下特性，因此，转矩电动机可以实现从停止状态到最高转速之间的任一转速。装有减速器·中间减速器时的容许转矩，请参照转速转矩特性曲线图，根据所使用的转速和转矩，按照下面的公式算出。

减速器输出轴转速 NG =电动机转速 $\times 1/\text{减速器减速比}$

减速器输出轴转矩 TG =电动机转矩 $\times \text{减速器减速比} \times \text{减速器传动效率}$

Due to the sloping characteristics, torque motors can be operated over a wide speed range, from locked rotor condition to the maximum speed. The permissible torque when a gearhead and a middle gearhead are directly connected can be calculated according to the following formula, using the speed and torque determined from the speed – torque characteristics.

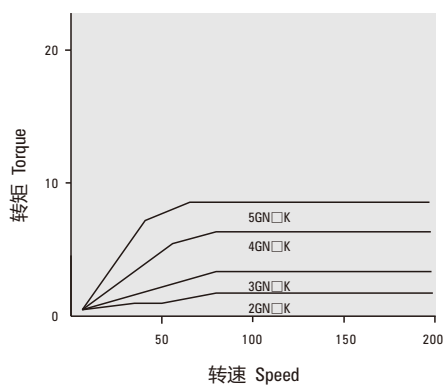
Speed of gearhead output shaft NG =Motor speed $\times 1/\text{gearhead gear ratio}$

Output torque of gearhead TG =Motor torque $\times \text{gearhead gear ratio} \times \text{gearhead efficiency}$

■ 请注意，减速器的输出轴转矩不可大于减速器的最大的最大容许转矩

Please Note, The Output Torque Of The Gearhead Must Be Lower Than The Maximum Permissible Torque

● 减速器的最大容许转矩 Maximum Permissible Torque Of Gearheads



减速器型号 Gearhead Model	减速器减速比 Gearhead Gear Ratio	减速器传动效率 Gearhead Efficiency
2GN□K	3~18	81%
3GN□K	25~36	73%
4GN□K	50~200	66%
5GN□K		

● 减速器、中间减速器另售。

Gearheads and middle gearheads are sold separately.

● 减速器型号的□中为减速比的数值。

Enter the gear ratio in the box (□) within the model name.

规格Specifications

3W、6W、10W、20W

型号Model · 类型 Type 导线型 Lead Wire Type		使用额定 (堵转) Rating At Locked Rotor	电压 Voltage	频率 Frequency	起动转矩 Starting Torque	最大输出 功率 Max. Output Power W	最大输出功 率时转速 Speed At Max. Output Power r/min	最大输出功 率时转矩 Torque At Max. Output Power mN.m	电容器容量 Capacitor
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft		V	Hz	mN.m				μF
2TK3GN-A	2TK3A-A	5min 连续 Cont	110	50	69	3.2	750	41	7.0/250
			60		25	1.3		16	
		5min 连续 Cont	110	60	69	3.2	900	37	6.0/250
			60		25	1.3		11	
2TK3GN-C	2TK3A-C	5min 连续 Cont	220	50	69	3.2	750	41	1.5/450
			140		25	1.2		16	
		5min 连续 Cont	220	60	69	3.2	900	37	1.2/450
			140		25	1.2		11	
3TK6GN-A	3TK6A-A	5min 连续 Cont	110	50	134	6.0	750	80	8.0/250
			60		68	2.5		36	
		5min 连续 Cont	110	60	134	6.5	900	74	7.0/250
			60		68	2.8		30	
3TK6GN-C	3TK6A-C	5min 连续 Cont	220	50	134	6.0	750	80	2.0/450
			140		68	2.5		36	
		5min 连续 Cont	220	60	134	6.5	900	74	1.5/450
			140		68	2.8		30	
4TK10GN-A	4TK10A-A	5min 连续 Cont	110	50	235	10	750	127	10.0/250
			60		74	3.0		46	
		5min 连续 Cont	110	60	25	10	900	127	8.0/250
			60		69	3.0		38	
4TK10GN-C	4TK10A-C	5min 连续 Cont	220	50	265	10	750	127	2.5/450
			140		98	3.0		46	
		5min 连续 Cont	220	60	225	10	900	127	2.0/450
			140		90	3.0		38	
5TK20GN-A	5TK20A-A	5min 连续 Cont	110	50	363	20	750	224	15.0/250
			60		137	6.0		76	
		5min 连续 Cont	110	60	294	26	900	216	12.0/250
			60		108	6.0		64	
5TK20GN-C	5TK20A-C	5min 连续 Cont	220	50	363	20	750	224	3.5/450
			140		137	6.0		76	
		5min 连续 Cont	220	60	294	26	900	216	3.0/450
			140		108	6.0		64	

●各种安全规格以电动机铭牌上的型号取得认证。
When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

种类 Type

● 电动机 Motor

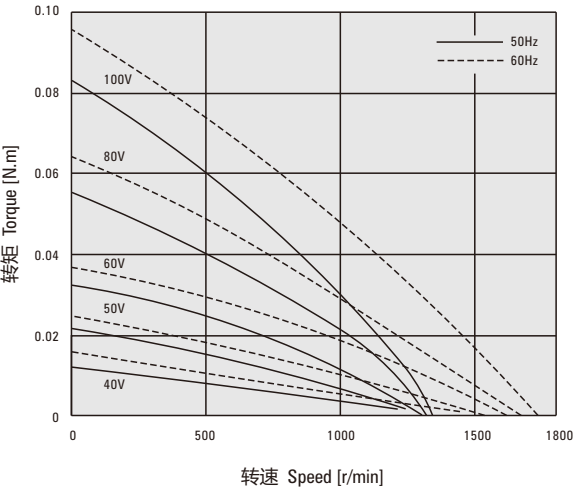
机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
3W	2TK3GN-A	2TK3A-A
	2TK3GN-C	2TK3A-C
6W	3TK6GN-A	3TK6A-A
	3TK6GN-C	3TK6A-C
10W	4TK10GN-A	4TK10A-A
	4TK10GN-C	4TK10A-C
20W	5TK20GN-A	5TK20A-A
	5TK20GN-C	5TK20A-C

适用电动机输出功率 (齿轮轴) Applicable Motor Output Power (Pinion Shaft Type)	减速器型号 Gearhead Model	减速比 Gear Ratio
3W	2GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	2GN10XK (中间减速器 Decimal gearhead)	
6W	3GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	3GN10XK (中间减速器 Decimal gearhead)	
10W	4GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	4GN10XK (中间减速器 Decimal gearhead)	
20W	5GN□K	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GN10XK (中间减速器 Decimal gearhead)	

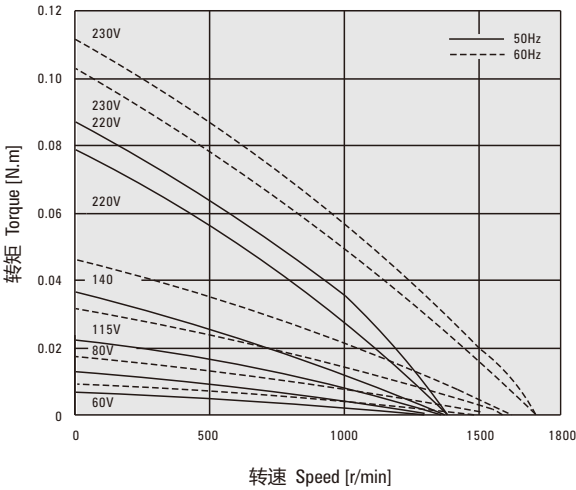
●减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

转速—转矩特性 (参考值) Speed - Torque Characteristics (Reference Values)

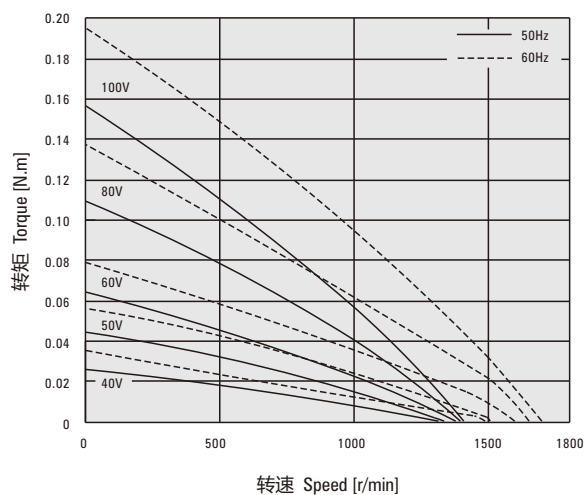
● 2TK3GN-A、2TK3A-A



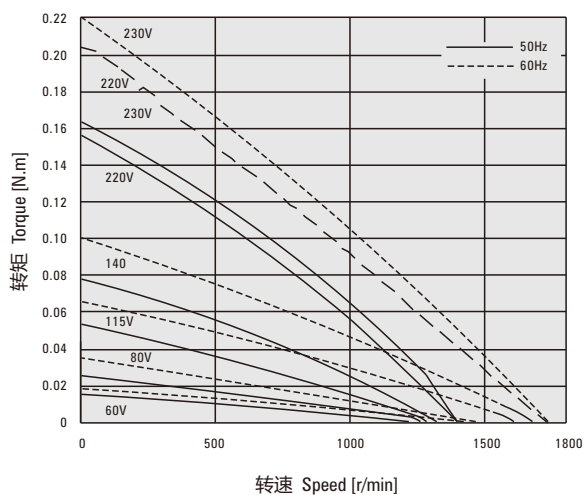
● 2TK3GN-C、2TK3A-C



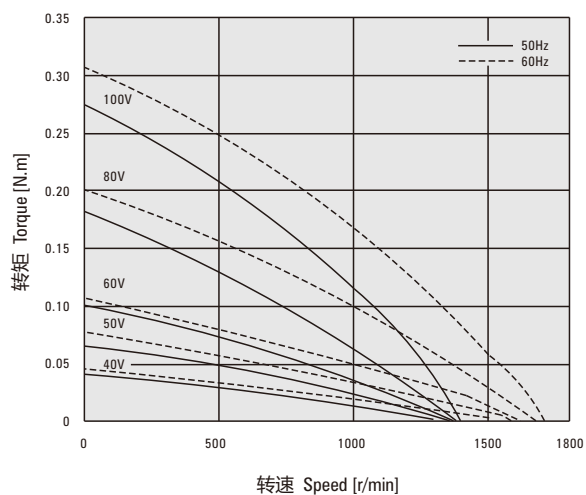
● 3TK6GN-A、3TK6A-A



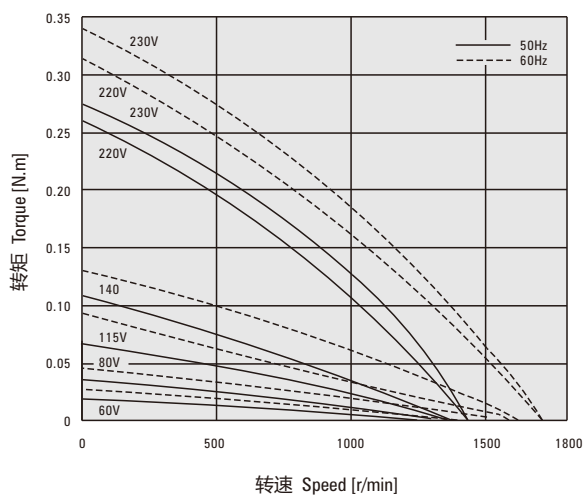
● 3TK6GN-C、3TK6A-C



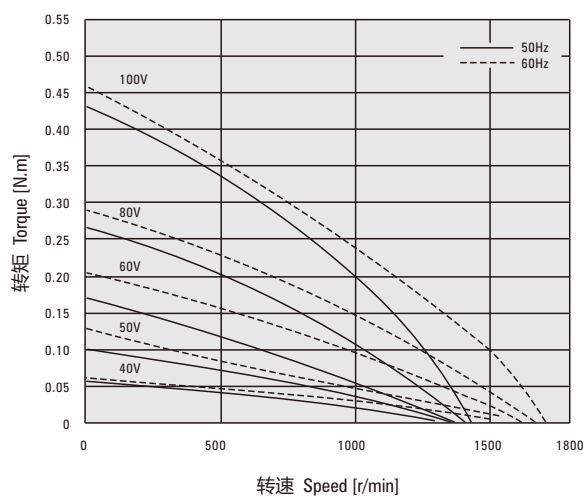
● 4TK10GN-A、4TK10A-A



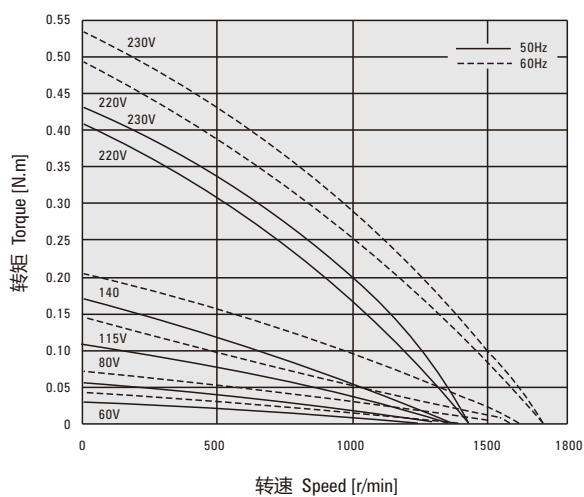
● 4TK10GN-C、4TK10A-C



● 5TK20GN-A、5TK20A-A



● 5TK20GN-C、5TK20A-C



外形图 (单位 mm) Dimensions (Unit mm)

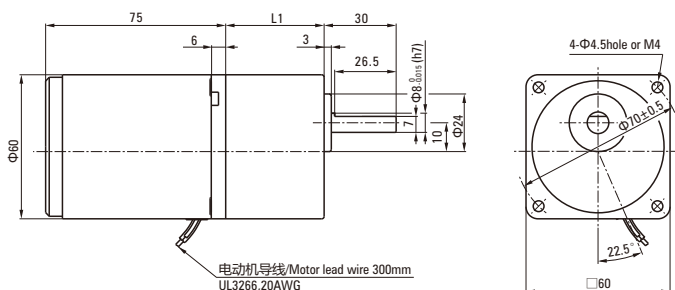
减速器附有安装用螺丝 Mounting screws are included with gearhead.

3W

电动机/减速器 Motor/Gearhead

重量 Weight : 电动机 Motor : 0.75kg

减速器 Gearhead : 0.4kg

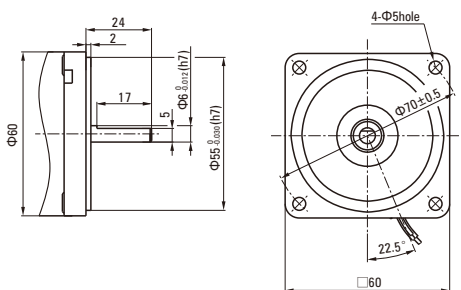


圆轴型的转轴部分 Shaft Section Of Round Shaft Type

2TK3A-A 2TK3A-C

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



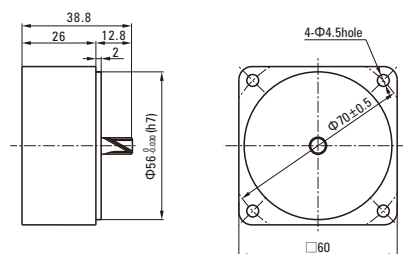
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
2TK3GN-A 2TK3GN-C	2GN□K	3~200	41.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

中间减速器 Middle Gearhead

可安装2TK3GN型 Can be connected to 2TK3GN type
2GN10XK

重量 Weight : 0.24kg



外形图 (单位 mm) Dimensions (Unit mm)

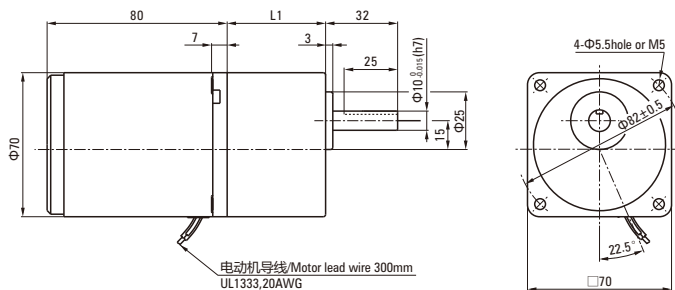
减速器附有安装用螺丝 Mounting screws are included with gearhead.

6W

电动机/减速器 Motor/Gearhead

重量 Weight : 电动机 Motor : 1.1kg

减速器 Gearhead : 0.5kg

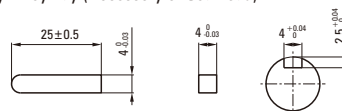


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
3TK6GN-A 3TK6GN-C	3GN□K	3~200	42

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

键·键槽 (减速器附件)

Key · keyway (Accessory of Gearhead)

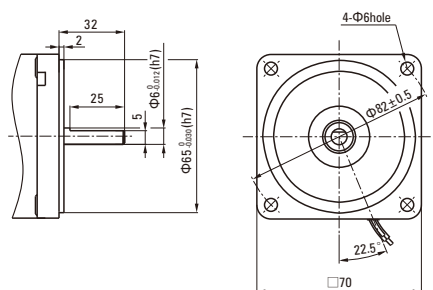


● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

3TK6A-A 3TK6A-C

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



■ 外形图 (单位 mm) Dimensions (Unit mm)

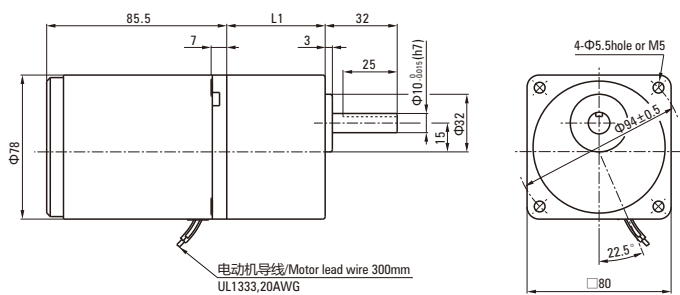
减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 10W

● 电动机/减速器 Motor/Gearhead

重量 Weight : 电动机 Motor : 1.6kg

减速器 Gearhead : 0.8kg

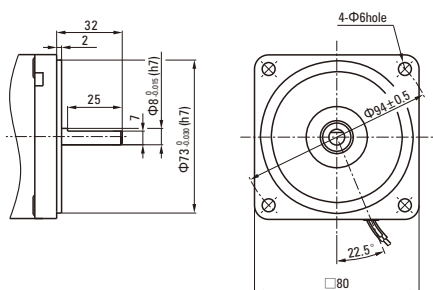


● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

4TK10A-A 4TK10A-C

除重量及轴部外电动机外形与齿轮轴型相同。

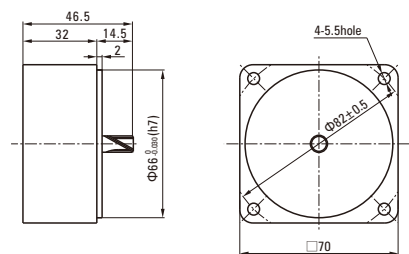
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



● 中间减速器 Middle Gearhead

可安装3TK6GN型Can be connected to 3TK6GN type 3GN10XK

重量 Weight : 0.31kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
4TK10GN-A 4TK10GN-C	4GN□K	3~200	43.5

● 减速器型号的□中为减速比的数值

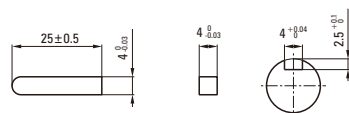
Enter the gear ratio in the box (□) within the model name

● 减速比3~18可以做成短箱体 (L1=32)

Gear ratio 3~18, short case is possible (L1=32)

● 键·键槽 (减速器附件)

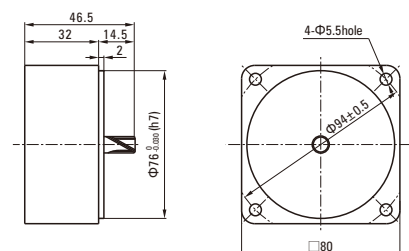
Key · Keyway (Accessory Of Gearhead)



● 中间减速器 Middle Gearhead

可安装4TK10GN型Can be connected to 4TK10GN type 4GN10XK

重量 Weight : 0.41kg



外形图 (单位 mm) Dimensions (Unit mm)

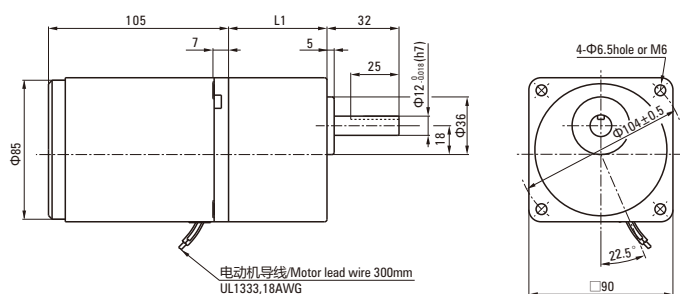
减速器附有安装用螺丝 Mounting screws are included with gearhead.

20W

电动机/减速器 Motor/Gearhead

重量 Weight : 电动机 Motor : 2.4kg

减速器 Gearhead : 1.35kg

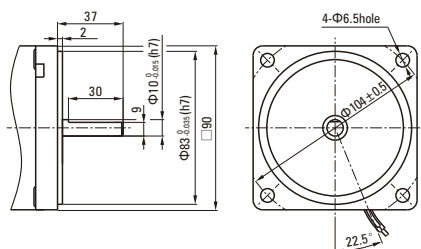


圆轴型的转轴部分 Shaft Section Of Round Shaft Type

5TK20A-A 5TK20A-C

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
5TK20GN-A 5TK20GN-C	5GN□K	3~200	60

减速器型号的□中为减速比的数值

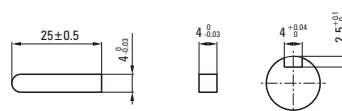
Enter the gear ratio in the box (□) within the model name

减速比3~18可以做短箱体 (L1=32)

Gear ratio 3~18, short case is possible (L1=32)

键·键槽 (减速器附件)

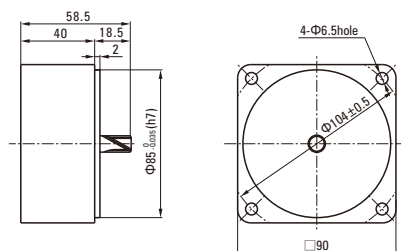
Key · Keyway (Accessory Of Gearhead)



中间减速器 Middle Gearhead

可安装5TK20GN型 Can be connected to 5TK20GN type
5GN10XK

重量 Weight : 0.6kg



电容器外形尺寸 Formal Dimension Of Capacitor

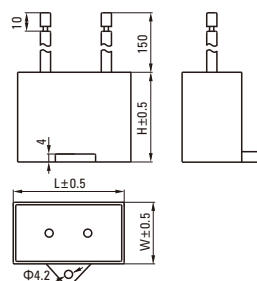
型号 Model		电容器型号 Capacitor Model	L	W	H
齿轮轴型 Pinion Shaft	圆轴型 Round Shaft				
2TK3GN-A	2TK3A-A	ZD70CFAUL	47	24.0	37
		ZD60CFAUL	48	23.0	32
3TK6GN-A	3TK6A-A	ZD80CFAUL	48	26.5	38
		ZD70CFAUL	47	24.0	37
4TK10GN-A	4TK10A-A	ZD100CFAUL	58	26.0	38
		ZD80CFAUL	48	26.5	38
5TK20GN-A	5TK20A-A	ZD150CFAUL	58	32.0	43
		ZD120CFAUL	58	30.0	40
2TK3GN-C	2TK3A-C	ZD15BFAUL	36	12.5	24
		ZD12BFAUL	36	12.0	22
3TK6GN-C	3TK6A-C	ZD20BFAUL	36	15.0	25
		ZD15BFAUL	36	12.5	24
4TK10GN-C	4TK10A-C	ZD25BFAUL	38	17.0	28
		ZD20BFAUL	36	15.0	25
5TK20GN-C	5TK20A-C	ZD35BFAUL	38	19.5	31
		ZD30BFAUL	38	18.5	29

常规电容器出线为引线,也可根据客户要求配置插片式187#

Note: Conventional capacitor is a lead wire type. Inserted 187# is optional

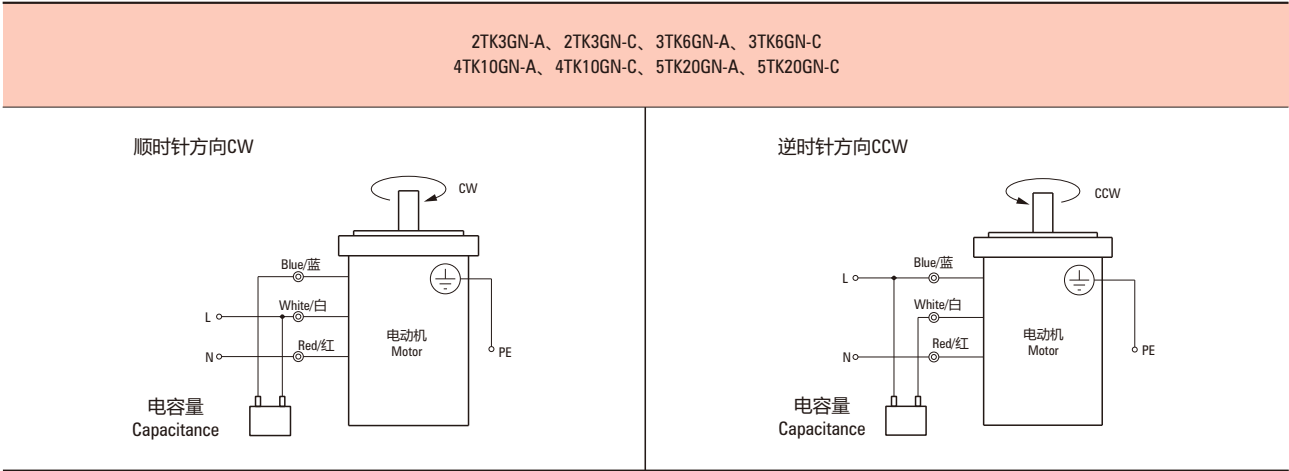
电动机型号的□中为表示带端子箱型的记号(T)

Enter the code that represents the terminal box type (T) in the box (□) within the model name



连接图 Wiring Diagram

- 运转方向指从电动机轴看来的方向。CW表示顺时针方向，CCW表示逆时针方向。
The direction of motor rotation is as viewed from the shaft end of motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 表中所记品名为齿轮轴型，圆轴型亦同。
Name indicated in the list is pinion shaft type, also valid for the equivalent round shaft type.
- 品名的□中为附属电容器种类的J、U或E记号。
Specify the type of the capacitor to be included by entering J、U or E in the box (□) within the model name.



请注意 Note:
单相电动机运转方向的转换应在电动机停止后进行。
Change the direction of single-phase motor rotation only after motor stop.
若在电动机运转时转换运转方向，可能发生无法转换运转方向或须费时较久的情况。
If an attempt is made to change the direction of rotation while the motor is rotating, motor may ignore reversing command or change its direction of rotation after some delay.

AC&DC GEAR MOTOR CATALOGUE

181-218

ZD LEADER

DC GEAR MOTOR 直流减速电动机



电动机型号说明 Description Of Motor Model

Z 5(5) D(W) 60 - 24 GU - 30S
① ② ③ ④ ⑤ ⑥ ⑦

①	公司名称 Comanpy	中大电机 ZD MOTOR					
②	型号尺寸 (Model dimension)						
	机座号 Code	2	3	4	5	55	6
	电机安装法兰 Mounting flange (mm)	60×60	70×70	80×80	90×90	90×90	104×104
	机壳直径 Case diameter (mm)	60	60	80	80	90	90
③	电机种类 Motor type	D: 直流电动机 DC motor DW: 针对60、70系列电机D后加W表示外置电刷电机 For 60、70 series motor, DW means external brush motor					
④	输出功率 Output power	(例 Example) 60:60W					
⑤	电源电压 Voltage	(例 Example) 24:24V					
⑥	电机轴形状 Shape of motor shaft	GN: 普通型斜齿 GN: General helical gear GU: 加强型斜齿 GU: Reinforced helical gear			A1: 铣键槽 A1: Milling keyway A: 铣扁 A: Flat type		
⑦	电机转速 Speed	(例 Example) 30S:3000RPM					

备注：如果电机需刹车器可在型号最好增加-M符号，如Z5(5)D60-24GU-30S-M，刹车器电压与电机额定电压相同；型号中电机可解读为机壳外径90mm、GU型、额定电压24VDC、额定功率60W、额定转速3000RPM、配24VDC刹车器。

Note: we use M to symbolise the brake, such as Z5(5)D60-24GU-30S-M, the brake voltage is the same as the rated voltage of the motor, Type of motor can be interpreted as a case diameter of 90mm, GU type, rated voltage 24VDC, rated power 60W, rated speed of 3000RPM, with brake 24VDC.

减速器型号说明 Description Of Reducer Model

5 GN 50 K
① ② ③ ④

①	型号尺寸 Model dimension	2: 60mm 3: 70mm 4: 80mm 5: 90mm 6: 104mm
②	齿轮种类 Gear type	Gn: 普通型斜齿轴 GN: General helical gear GU: 加强型斜齿轴 GU: Reinforced helical gear
③	减速比 Gear ratio	例 Example: 50 减速比 Gear ratio of 1:50 10X 仅限减速器1:10的中间减速比 10X denotes the middle gearhead of ratio 1:10
④	轴承种类 Bearing type	K: 滚珠轴承 (对GU型方箱体标注为KB) K: Bearing (Make KB for type GU square case)

备注：非标准分体式的编号为：在电动型号或减速型号前加“V”（请在订货时写明具体参数要求）

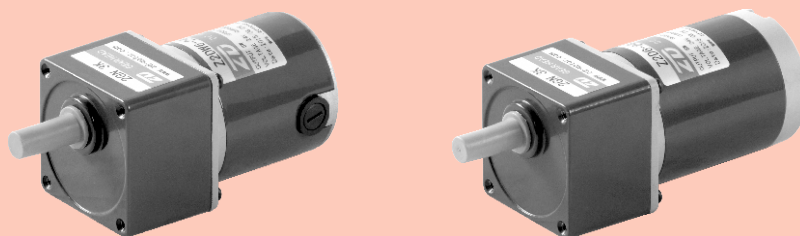
Note: The code of the non-standard split type is to add "V" before the model number of the motor or reducer (Please specify the detailed parameter requirement in the purchase order)

电动机的一般规格 Specification Of Motors

项 目 Items	规 格 Specifications
绝缘电阻 Insulation resistance	于常温·常湿下的电动机额定运行后，以DC 500V电阻表测量线圈-外壳间时，测量值为20兆欧以上。 In the circumstance of normal ambient temperature and humidity, the resistance can be up to 20MΩ or more when DC 500V megger is applied between the windings and the frame after rated motor operations.
绝缘耐压 Dielectric withstanding	于常温·常湿下电动机额定运行后，在线圈和机壳间施加一分钟50Hz或60Hz、1.5kV的电压，亦无异常。 In the circumstance of normal ambient temperature and humidity, there will be no problem to withstand 1.5kV at 50/60hz between the windings and the frame for 1 minute after rated motor operation.
温度上升 Temperature rise	运转电机后，用温度计法来测量时，电机表面最热点温升数值在80℃以下。 The temperature rise should be lower than 80℃ measured by resistance method when the motor is working.
绝缘等级 Insulation class	B级 (130℃) Class B (130℃)
使用温度 Use temperature	-10℃~+40℃ (无冰冻) -10℃~+40℃ (Non freezing)
使用湿度 Use humidity	85%以下 (无结露的场所) ≤85% (Place without dew)

直流电动机 DC MOTORS

■ 6W □ 60mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage V	功率 Power W	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life H	电机重量 Motor Weight kg
			转速 Speed r/min	电流 Current A	转速 Speed r/min	力矩 Torque mN.m	电流 Current A		
Z2D06-12 □	12	6	3200	0.6Max.	2950	19	0.8	2000	0.6
Z2DW06-12□	12	6	3200	0.6Max.	2950	19	0.8	2000	0.6
Z2D06-24 □	24	6	3200	0.3Max.	2950	19	0.5	2000	0.6
Z2DW06-24□	24	6	3200	0.3Max.	2950	19	0.5	2000	0.6
Z2D06-90 □	90	6	3000	0.2Max.	2800	20	0.3	2000	0.6
Z2DW06-90□	90	6	3000	0.2Max.	2800	20	0.3	2000	0.6

- 电机电压、功率及转速可在配件尺寸等条件下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

- D后如加W即Z2DW06-12GN表示外置电刷齿轴电机，如无W则为标准内置电刷齿轴电机：外置电刷电机，用户可自行在外部更换电刷；内置电刷电机更换电刷时需将电机拆装后方可更换。

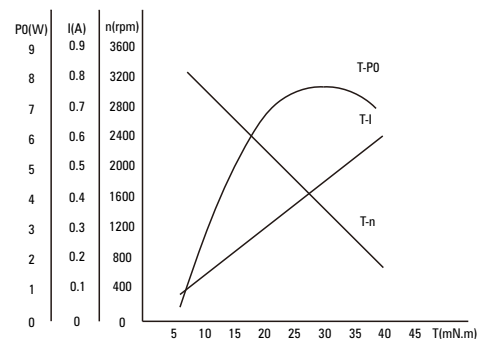
We use W after D in the model to express the external brush motor, such as Z2DW06-12GN. If no W, it means the standard internal brush motor. For external brush motor, you can replace the brush directly. For internal ones, we need to disassembly the motor first.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z2D06-12GN	Z2D06-12A
	Z2DW06-12GN	Z2DW06-12A
	Z2D06-24GN	Z2D06-24A
	Z2DW06-24GN	Z2D06-24A
	Z2D06-90GN	Z2D06-90A
	Z2DW06-90GN	Z2DW06-90A

- 电机特性曲线 Characteristic Curve Of Motor



- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	2GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	2GN10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

- 电机接线图 Wiring Diagram Of Motor



- 标准引出线长度：300mm±10，型号：UL1015，规格：AWG20；电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为3N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 3N·m.

容许力矩单位 Allowance Torque Unit : 上段 Upside (N.m) / 下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Z2D06-24GN	转速 Speed r/min	983	819	590	492	393	328	295	236	197	164	148	118	98	82	74	59	49	39	33	30	25	20	16	15
	2GN□K	0.05	0.06	0.08	0.09	0.12	0.14	0.16	0.20	0.24	0.28	0.28	0.35	0.42	0.51	0.57	0.71	0.76	0.96	1.15	1.27	1.53	1.91	2.29	2.55
		0.46	0.56	0.77	0.93	1.16	1.39	1.54	1.93	2.31	2.78	2.78	3.47	4.16	5.00	5.55	6.94	7.49	9.37	11.2	12.5	15.0	18.7	22.5	25.0

容许悬挂负载 · 容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页

Motor (Round shaft) → P215

减速机→215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215頁→P215

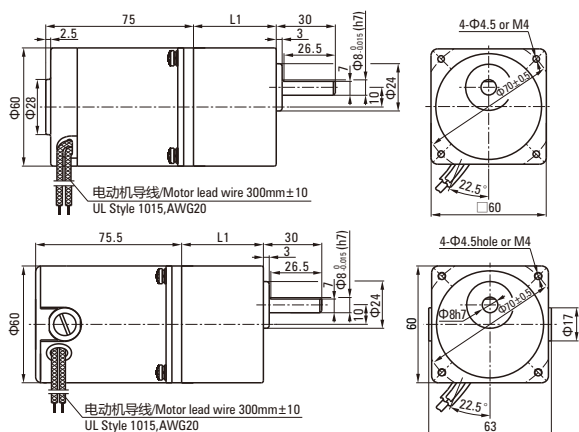
■外形图 (单位 mm) Dimensions (Unit mm)

減速器附有安裝用螺絲 Mounting screws are included with gearhead.

- **导线型** Lead Wiring Type

重量 Weight : 电动机 Motor : 0.6kg

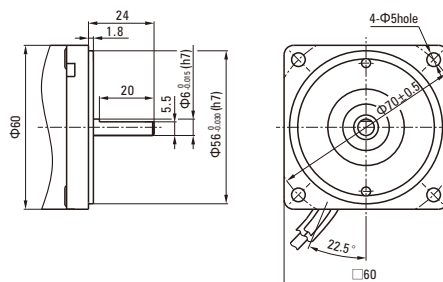
減速器 Gearhead : 0.4kg



- 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

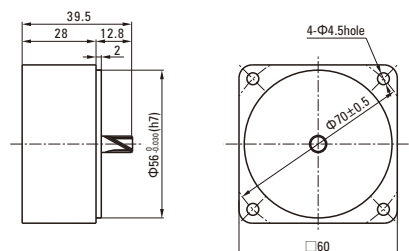


- **中间减速器** Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor
is the same as that of the gear shaft type

2GN10X

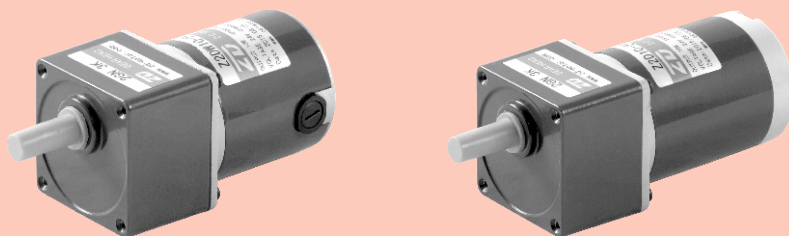
重量 Weight : 0.24kg



- 減速器型號的□中為減速比的數值 Enter the gear ratio in the box (□) within the model name
- 減速比3~18可以做成長箱體 (L1=32) Gear ratio 3~18, short case is possible (L1=32)

直流电动机 DC MOTORS

10W 60mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage V	功率 Power W	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life H	电机重量 Motor Weight kg
			转速 Speed r/min	电流 Current A	转速 Speed r/min	力矩 Torque mN.m	电流 Current A		
Z2D10-12 □	12	10	3200	1.0Max.	2800	34	2.0	2000	0.7
Z2DW10-12□	12	10	3200	1.0Max.	2800	34	2.0	2000	0.7
Z2D10-24 □	24	10	3300	0.5Max.	3000	32	0.9	2000	0.7
Z2DW10-24□	24	10	3300	0.5Max.	3000	32	0.9	2000	0.7
Z2D10-90 □	90	10	3200	0.3Max.	2800	34	0.6	2000	0.7
Z2DW10-90□	90	10	3200	0.3Max.	2800	34	0.6	2000	0.7

●电机电压、功率及转速可在配件尺寸等条件下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

●D后如加W即Z2DW06-12GN表示外置电刷齿轴电机，如无W则为标准内置电刷齿轴电机：外置电刷电机，用户可自行在外部更换电刷：内置电刷电机更换电刷时需将电机拆装后方可更换。

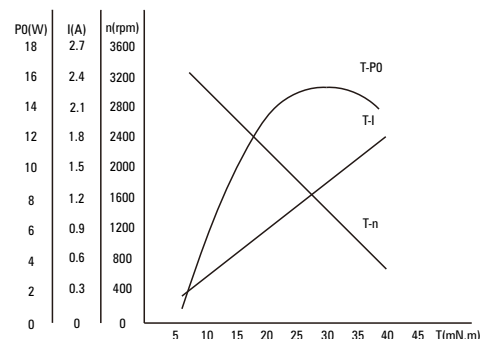
We use W after D in the model to express the external brush motor, such as Z2DW06-12GN. If no W, it means the standard internal brush motor. For external brush motor, you can replace the brush directly. For internal ones, we need to disassembly the motor first.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z2D10-12GN	Z2D10-12A
	Z2DW10-12GN	Z2DW10-12A
	Z2D10-24GN	Z2D10-24A
	Z2DW10-24GN	Z2D10-24A
	Z2D10-90GN	Z2D10-90A
	Z2DW10-90GN	Z2DW10-90A

● 电机特性曲线 Characteristic Curve Of Motor



● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	2GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	2GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机接线图 Wiring Diagram Of Motor



●标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG20; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为3N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 3N·m.

容许力矩单位 Allowance Torque Unit : 上段 Upside (N.m) / 下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Z2D10-24GN	转 速 Speed r/min	1000	833	600	500	400	333	300	240	200	167	150	120	100	83	75	60	50	40	33	30	25	20	17	15
	2GN□K	0.08	0.09	0.13	0.15	0.19	0.23	0.26	0.32	0.39	0.46	0.46	0.58	0.70	0.84	0.93	1.16	1.25	1.75	1.88	2.09	2.51	3.00	3.00	3.00
		0.76	0.91	1.26	1.52	1.90	2.27	2.53	3.16	3.79	4.55	4.55	5.69	6.82	8.19	9.10	11.4	12.3	15.4	18.4	20.5	24.6	30.0	30.0	30.0

容许悬挂负载 · 容许轴向负载 Allowable Hang Load - Axial Load

电动机（圆轴型）→215页

Motor (Round shaft) → P215

减速机→215页

Gearhead→P215

减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→215页→P215

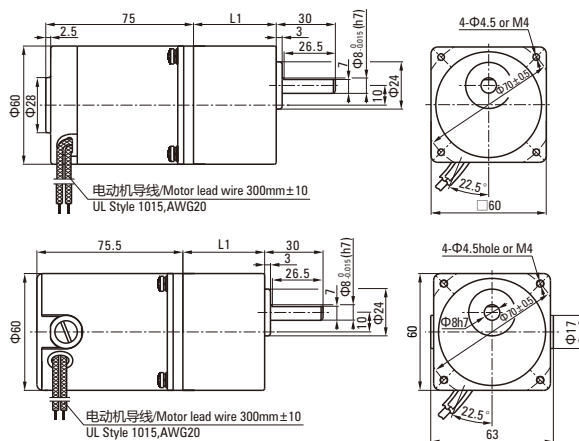
■ 外形图 (单位 mm) Dimensions (Unit mm)

減速器附有安裝用螺絲 Mounting screws are included with gearhead.

● **导线型** Lead Wiring Type

重量 Weight : 电动机, Motor : 0.7kg

減速器 Gearhead : 0.4kg



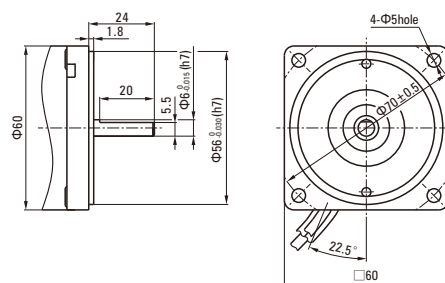
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
Z2D10-12GN Z2DW10-12GN Z2D10-24GN Z2DW10-24GN Z2D10-90GN Z2DW10-90GN	2GN□K	3~200	41

- 减速器型号的□中为减速比的数值 Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32) Gear ratio 3~18, short case is possible (L1=32)

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



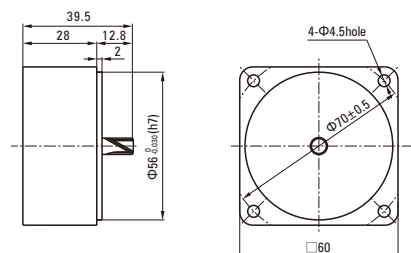
● **中间减速器** Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type

电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

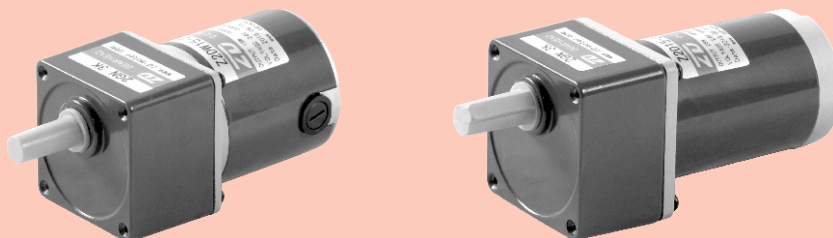
2GN10X

重量 Weight : 0.24kg



直流电动机 DC MOTORS

15W 60mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage V	功率 Power W	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life H	电机重量 Motor Weight kg
			转速 Speed r/min	电流 Current A	转速 Speed r/min	力矩 Torque mN.m	电流 Current A		
Z2D15-12 □	12	15	3200	0.8Max.	2950	48	2.0	2000	0.9
Z2DW15-12□	12	15	3200	0.8Max.	2950	48	2.0	2000	0.9
Z2D15-24 □	24	15	3300	0.4Max.	3000	48	1.0	2000	0.9
Z2DW15-24□	24	15	3300	0.4Max.	3000	48	1.0	2000	0.9
Z2D15-90 □	90	15	3200	0.2Max.	3000	48	0.4	2000	0.9
Z2DW15-90□	90	15	3200	0.2Max.	3000	48	0.4	2000	0.9

●电机电压、功率及转速可在配件尺寸等条件下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

●D后如加W即Z2DW06-12GN表示外置电刷齿轴电机，如无W则为标准内置电刷齿轴电机：外置电刷电机，用户可自行在外部更换电刷：内置电刷电机更换电刷时需将电机拆装后方可更换。

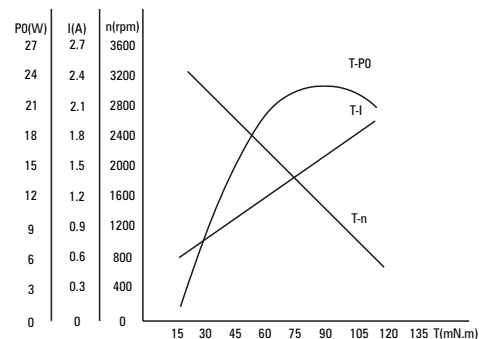
We use W after D in the model to express the external brush motor, such as Z2DW06-12GN. If no W, it means the standard internal brush motor. For external brush motor, you can replace the brush directly. For internal ones, we need to disassembly the motor first.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z2D15-12GN	Z2D15-12A
	Z2DW15-12GN	Z2DW15-12A
	Z2D15-24GN	Z2D15-24A
	Z2DW15-24GN	Z2D15-24A
	Z2D15-90GN	Z2D15-90A
	Z2DW15-90GN	Z2DW15-90A

● 电机特性曲线 Characteristic Curve Of Motor



● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	Z2GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	Z2GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机接线图 Wiring Diagram Of Motor

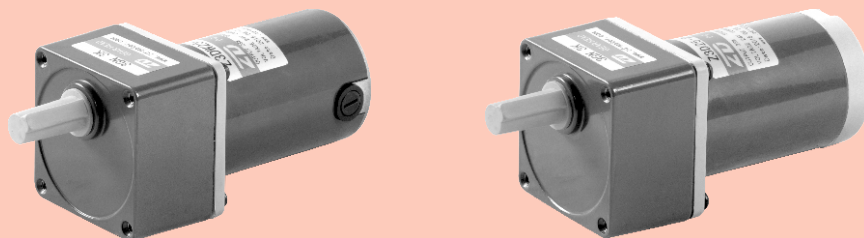


●标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG20; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

直流电动机 DC MOTORS

■ 25W □ 70mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage V	功率 Power W	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life H	电机重量 Motor Weight kg
			转速 Speed r/min	电流 Current A	转速 Speed r/min	力矩 Torque mN.m	电流 Current A		
Z3D25-12 □	12	25	3300	1.0Max.	3000	80	3.5	2000	1.0
Z3DW25-12□	12	25	3300	1.0Max.	3000	80	3.5	2000	1.0
Z3D25-24 □	24	25	3200	0.5Max.	2800	85	1.6	2000	1.0
Z3DW25-24□	24	25	3200	0.5Max.	2800	85	1.6	2000	1.0
Z3D25-90 □	90	25	3100	0.3Max.	2700	88	0.6	2000	1.0
Z3DW25-90□	90	25	3100	0.3Max.	2700	88	0.6	2000	1.0

- 电机电压、功率及转速可在配件尺寸等条件允许下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

- D后如加W即Z2DW06-12GN表示外置电刷齿轴电机，如无W则为标准内置电刷齿轴电机：外置电刷电机，用户可自行在外部更换电刷：内置电刷电机更换电刷时需将电机拆装后方可更换。

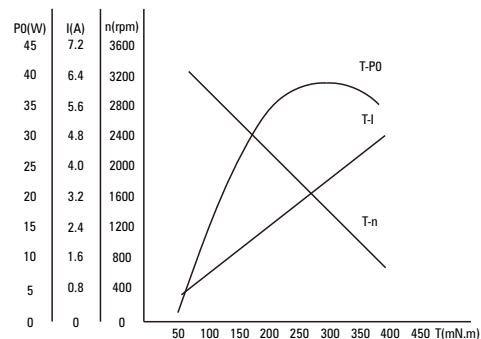
We use W after D in the model to express the external brush motor, such as Z2DW06-12GN. If no W, it means the standard internal brush motor. For external brush motor, you can replace the brush directly. For internal ones, we need to disassembly the motor first.

种类 Type

- 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z3D25-12GN	Z3D25-12A
	Z3DW25-12GN	Z3DW25-12A
	Z3D25-24GN	Z3D25-24A
	Z3DW25-24GN	Z3D25-24A
	Z3D25-90GN	Z3D25-90A
	Z3DW25-90GN	Z3DW25-90A

- 电机特性曲线 Characteristic Curve Of Motor



- 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	3GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	3GN10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

- 电机接线图 Wiring Diagram Of Motor



- 标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG20; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为5N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 5N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Z3D25-24GN	转速 Speed r/min	933	778	560	467	373	311	280	224	187	156	140	112	93	78	70	56	47	37	31	28	23	19	16	14
	3GN□K	0.21	0.25	0.35	0.41	0.52	0.62	0.69	0.86	1.04	1.24	1.24	1.55	1.86	2.24	2.49	3.11	3.73	4.66	5.00	5.00	5.00	5.00	5.00	5.00
		2.03	2.44	3.38	4.06	5.08	6.09	6.77	8.46	10.2	12.2	12.2	15.2	18.3	21.9	24.4	30.5	36.6	45.7	50.0	50.0	50.0	50.0	50.0	50.0

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) →P215页

Motor (Round shaft) →P215

减速机→P215页

Gearhead→P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→P215页→P215

● 键·键槽 (减速器附件)

Key●Keyway (The Key Is Included With The Gearhead)



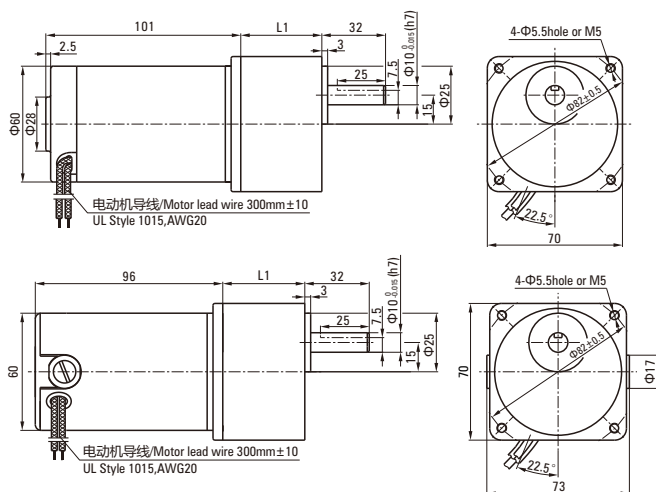
■ 外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：1.0kg

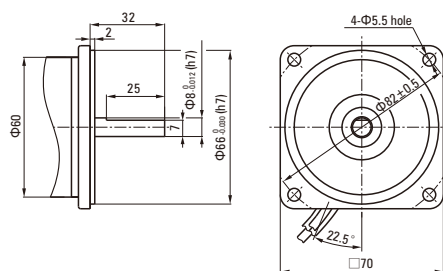
减速器 Gearhead：0.55kg



● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



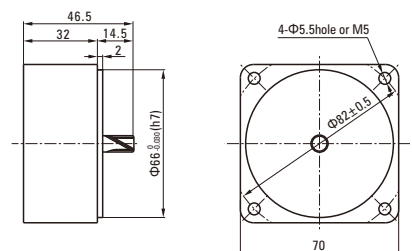
● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type

电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

3GN10X

重量 Weight：0.31kg

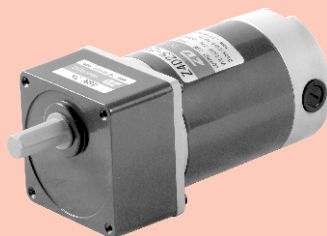


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
Z3D25-12GN Z3DW25-12GN Z3D25-24GN Z3DW25-24GN Z3D25-90GN Z3DW25-90GN	3GN□K	3~200	42

- 减速器型号的□中为减速比的数值 Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32) Gear ratio 3~18, short case is possible (L1=32)

直流电动机 DC MOTORS

■ 25W □ 80mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage	功率 Power	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
			r/min	A	r/min	mN.m	A		
Z4D25-12□	12	25	3200	1.4Max.	3100	77	3.6	2000	1.7
Z4D25-24□	24	25	3000	0.7Max.	2850	84	1.7	2000	1.7
Z4D25-90□	90	25	3200	0.2Max.	3000	80	0.5	2000	1.7

● 电机电压、功率及转速可在配件尺寸等条件下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z4D25-12GN	Z4D25-12A
	Z4D25-24GN	Z4D25-24A
	Z4D25-90GN	Z4D25-90A

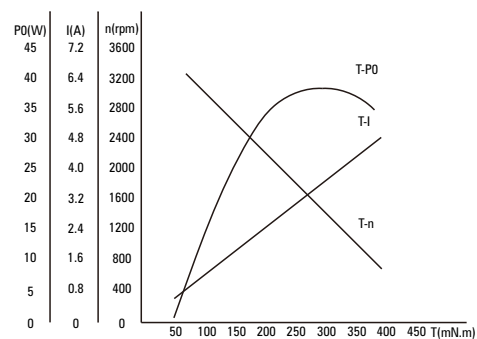
● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	4GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	4GN10XK (中间减速器 Middle Gearhead)	

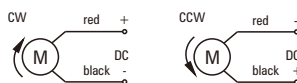
● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机特性曲线 Characteristic Curve Of Motor



● 电机接线图 Wiring Diagram Of Motor



● 标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG20; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为8N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 8N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Z4D25-24GN	转速 Speed r/min	950	792	570	475	380	317	285	228	190	158	143	114	95	79	71	57	48	38	32	29	24	19	16	14
	4GN□K	0.20	0.24	0.34	0.41	0.51	0.61	0.68	0.85	1.02	1.22	1.36	1.53	1.83	2.20	2.44	3.05	3.30	4.12	4.95	5.50	6.60	8.00	8.00	8.00
		1.99	2.39	3.32	3.99	4.99	5.98	6.65	8.31	10.0	12.0	13.3	15.0	18.0	21.5	23.9	29.9	32.3	40.4	48.5	53.9	64.6	80.0	80.0	80.0

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) → P215页

Motor (Round shaft) → P215

减速机 → P215页

Gearhead → P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→ P215页 → P215

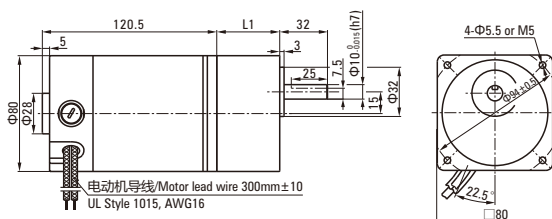
■ 外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：1.7kg

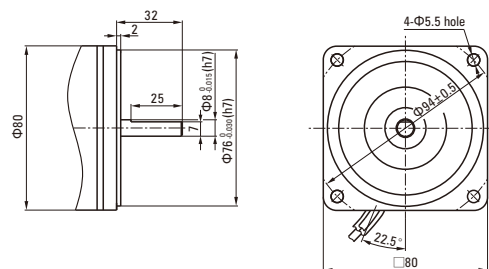
减速器 Gearhead：0.80kg



● 圆轴型的转轴部分 Shaft Section of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。

Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
Z4D25-12GN Z4D25-24GN Z4D25-90GN	4GN□K	3~200	42.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 键·键槽 (减速器附件)

Key·Keyway (The Key Is Included With The Gearhead)

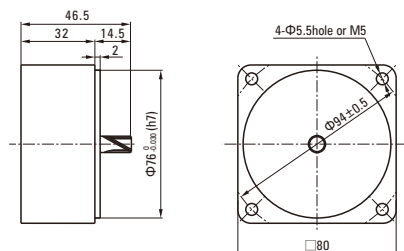


● 中间减速器 Middle gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

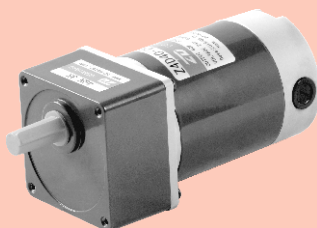
4GN10X

重量 Weight：0.41kg



直流电动机 DC MOTORS

■ 40W □ 80mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage	功率 Power	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
			r/min	A	r/min	mN.m	A		
Z4D40-12□	12	40	3100	2.0Max.	2800	136	5.2	2000	1.8
Z4D40-24□	24	40	3100	0.8Max.	3000	127	2.1	2000	1.8
Z4D40-90□	90	40	3200	0.3Max.	3000	127	0.7	2000	1.8

● 电机电压、功率及转速可在配件尺寸等条件下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

种类 Type

● 电动机 Motor

机型 Type	型号 Model	
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z4D40-12GN	Z4D40-12A
	Z4D40-24GN	Z4D40-24A
	Z4D40-90GN	Z4D40-90A

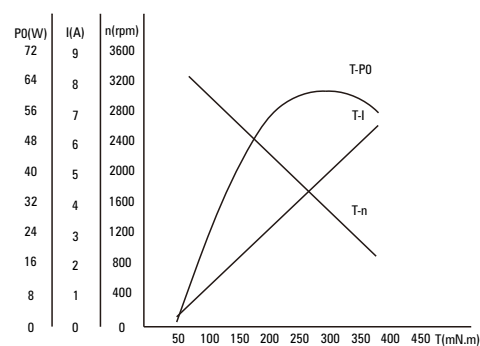
● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	4GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	4GN10XK (中间减速器 Middle Gearhead)	

● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机特性曲线 Characteristic Curve Of Motor



● 电机接线图 Wiring Diagram Of Motor



● 标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG16; 电机引出线长度、型号在配件尺寸等条件下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为8N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 8N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Z4D40-24GN	转速 Speed r/min	1000	833	600	500	400	333	300	240	200	167	150	120	100	83	75	60	50	40	33	30	25	20	17	15
	4GN□K	0.31	0.37	0.52	0.62	0.77	0.93	1.03	1.29	1.55	1.86	2.06	2.32	2.78	3.34	3.71	4.64	5.01	6.27	7.52	8.00	8.00	8.00	8.00	8.00
		3.03	3.64	5.05	6.06	7.58	9.10	10.1	12.6	15.2	18.2	20.2	22.7	27.3	32.7	36.4	45.5	49.1	61.4	73.7	80.0	80.0	80.0	80.0	80.0

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) → P215页

Motor (Round shaft) → P215

减速机 → P215页

Gearhead → P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→ P215页 → P215

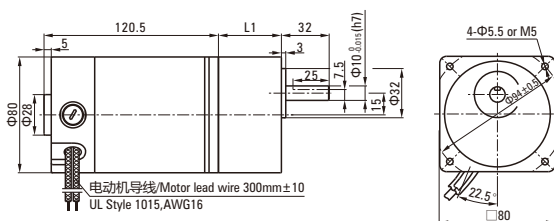
■ 外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

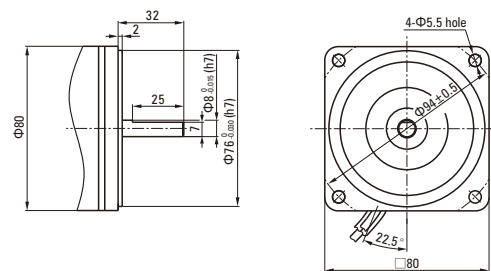
重量 Weight：电动机 Motor：1.8kg

减速器 Gearhead：0.80kg



● 圆轴型的转轴部分 Shaft Section of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
Z4D40-12GN Z4D40-24GN Z4D40-90GN	4GN□K	3~200	42.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成短箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

● 键·键槽 (减速器附件)

Key·Keyway (The Key Is Included With The Gearhead)

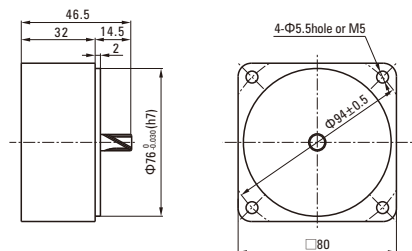


● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

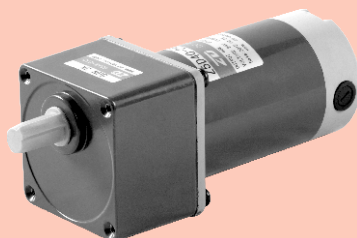
4GN10X

重量 Weight：0.41kg



直流电动机 DC MOTORS

40W 90mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage	功率 Power	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
			r/min	A	r/min	mN.m	A		
Z5D40-12□	12	40	3100	2.0Max.	2800	136	5.2	2000	1.9
Z5D40-24□	24	40	3000	1.0Max.	2800	136	2.6	2000	1.9
Z5D40-90□	90	40	3200	0.3Max.	3000	127	0.7	2000	1.9

●电机电压、功率及转速可在配件尺寸等条件下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

种类 Type

● 电动机 Motor

机型 Type	型号 Model		
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z5D40-12GN	Z5D40-12A	Z5D40-12A1
	Z5D40-24GN	Z5D40-24A	Z5D40-24A1
	Z5D40-90GN	Z5D40-90A	Z5D40-90A1

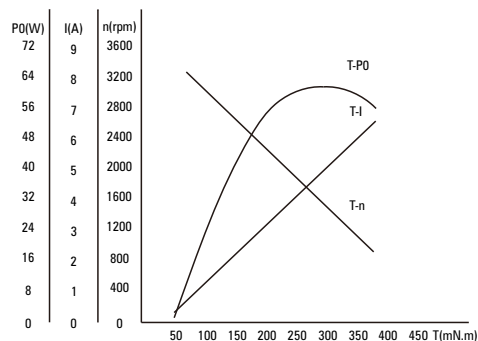
● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GN□K	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GN10XK (中间减速器 Middle Gearhead)	

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机特性曲线 Characteristic Curve Of Motor



● 电机接线图 Wiring Diagram Of Motor



●标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG16; 电机引出线长度、型号在配件尺寸等条件下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为10N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 10N·m.

■ 容许力矩单位 Allowance Torque Unit : 上段 Upside (N.m) / 下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Z5D40-24GN	转速 Speed r/min	933	778	560	467	373	311	280	224	187	156	140	112	93	78	70	56	47	37	31	28	23	19	16	14
	5GN□K	0.33	0.40	0.55	0.66	0.83	0.99	1.11	1.38	1.66	1.79	1.99	2.49	2.98	3.58	3.58	4.48	5.37	6.71	8.06	8.95	10.0	10.0	10.0	10.0
		3.25	3.90	5.41	6.50	8.12	9.75	10.8	13.5	16.2	17.5	19.5	24.4	29.2	35.1	35.1	43.9	52.6	65.8	78.9	87.7	100	100	100	100

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) → P215页

Motor (Round shaft) → P215

减速机 → P215页

Gearhead → P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→ P215页 → P215

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

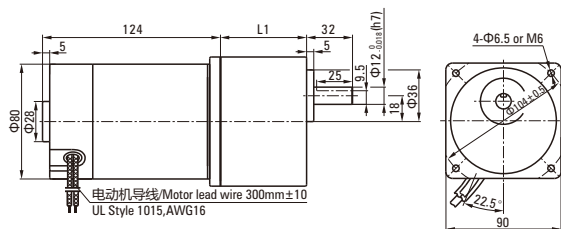
■ 外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 1.9kg

减速器 Gearhead : 1.35kg

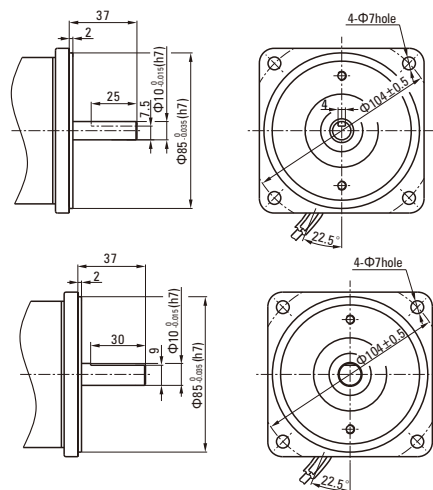
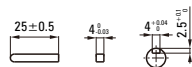


电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
Z5D40-12GN Z5D40-24GN Z5D40-90GN	5GN□K	3~200	42.5

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name
- 减速比3~18可以做成长箱体 (L1=32)
Gear ratio 3~18, short case is possible (L1=32)

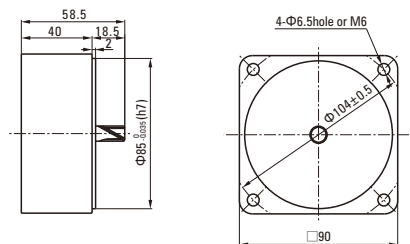
● 键·键槽 (减速器附件)

Key·Keyway (The Key Is Included With The Gearhead)



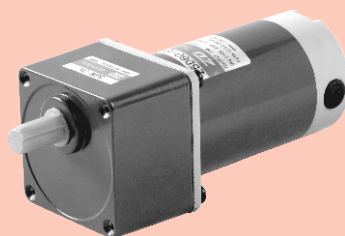
● 中间减速器 Middle Gearhead

可安装在GN齿轮轴型上 Can be connected to GN pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
5GN10X
重量 Weight : 0.41kg



直流电动机 DC MOTORS

60W 90mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage	功率 Power	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
			r/min	A	r/min	mN.m	A		
Z5D60-12□	12	60	3000	2.0Max.	2600	220	9.0	2000	2.2
Z5D60-24□	24	60	3100	1.0Max.	2800	205	3.8	2000	2.2
Z5D60-90□	90	60	3100	0.3Max.	2900	198	1.0	2000	2.2

● 电机电压、功率及转速可在配件尺寸等条件允许下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

种类 Type

● 电动机 Motor

机型 Type	型号 Model		
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z5D60-12GU	Z5D60-12A	Z5D60-12A1
	Z5D60-24GU	Z5D60-24A	Z5D60-24A1
	Z5D60-90GU	Z5D60-90A	Z5D60-90A1

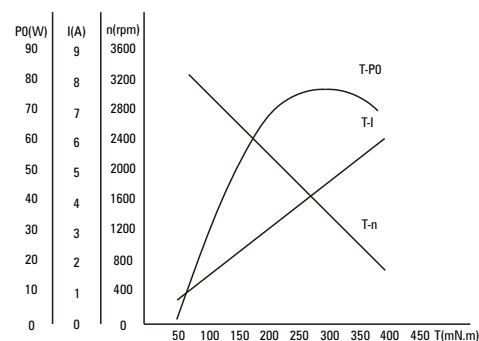
● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机特性曲线 Characteristic Curve Of Motor



● 电机接线图 Wiring Diagram Of Motor

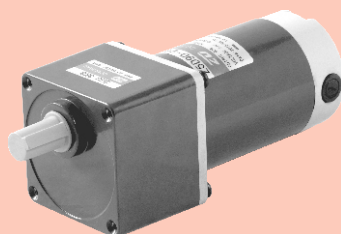


● 标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG16; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

直流电动机 DC MOTORS

■ 90W □ 90mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage	功率 Power	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
			r/min	A	r/min	mN.m	A		
Z5D90-12□	12	90	3100	2.0Max.	2600	330	12.0	2000	2.2
Z5D90-24□	24	90	3300	1.0Max.	2800	307	5.00	2000	2.2
Z5D90-90□	90	90	3000	0.3Max.	2900	307	1.40	2000	2.2

● 电机电压、功率及转速可在配件尺寸等条件允许下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

种类 Type

● 电动机 Motor

机型 Type	型号 Model		
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z5D90-12GN	Z5D90-12A	Z5D90-12A1
	Z5D90-24GN	Z5D90-24A	Z5D90-24A1
	Z5D90-90GN	Z5D90-90A	Z5D90-90A1

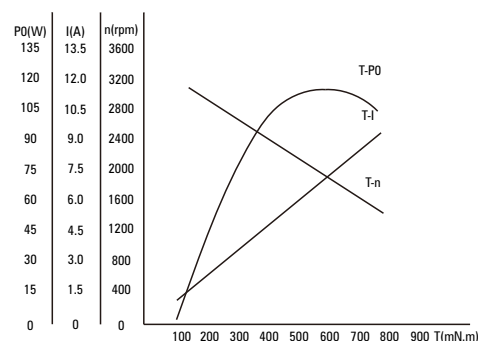
● 平行轴减速器（另售）Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、 12.5、15、18、20、25、30、 36、40、50、60、75、90、 100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

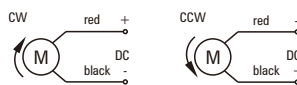
● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机特性曲线 Characteristic Curve Of Motor



● 电机接线图 Wiring Diagram Of Motor

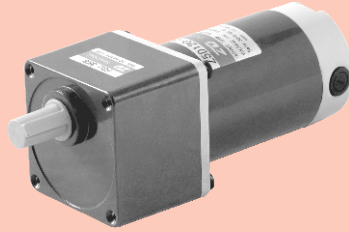


● 标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG16; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

直流电动机 DC MOTORS

■ 120W □ 90mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage	功率 Power	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
			r/min	A	r/min	mN.m	A		
Z5D120-12□	12	120	3100	2.0Max.	2500	458	15.0	2000	2.2
Z5D120-24□	24	120	3200	1.0Max.	2600	441	7.00	2000	2.2
Z5D120-90□	90	120	3000	0.3Max.	2600	441	2.00	2000	2.2

- 电机电压、功率及转速可在配件尺寸等条件允许下根据客户要求定制。
Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

种类 Type

电动机 Motor

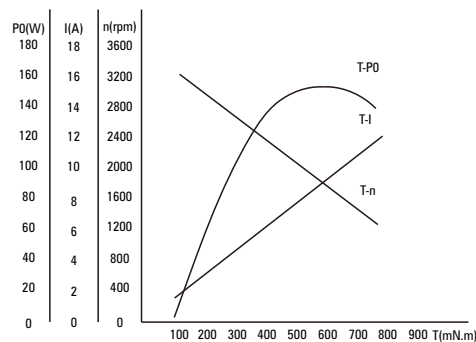
机型 Type	型号 Model		
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z5D120-12GN	Z5D120-12A	Z5D120-12A1
	Z5D120-24GN	Z5D120-24A	Z5D120-24A1
	Z5D120-90GN	Z5D120-90A	Z5D120-90A1

平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

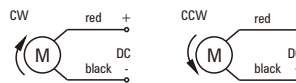
减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

电机特性曲线 Characteristic Curve Of Motor



电机接线图 Wiring Diagram Of Motor



- 标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG16; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。
Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Z5D120-24GU	转速 Speed r/min	867	722	520	433	347	289	260	208	173	144	130	104	87	72	65	52	43	35	29	26	22	17	14	13
	5GU□KB	1.07	1.29	1.79	2.14	2.68	3.21	3.21	4.02	4.82	5.78	5.78	7.23	8.68	10.4	11.6	14.5	17.4	20.0	20.0	20.0	20.0	20.0	20.0	20.0
		10.5	12.6	17.5	21.0	26.2	31.5	31.5	39.4	47.2	56.7	56.7	70.9	85.0	102	113	142	170	200	200	200	200	200	200	200

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) → P215页

Motor (Round shaft) → P215

减速机 → P215页

Gearhead → P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→ P215页 → P215

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

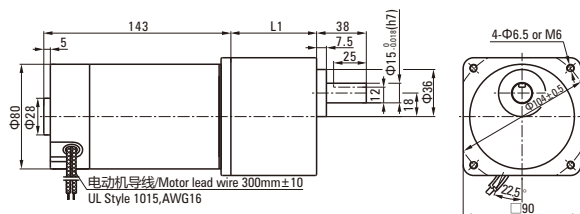
■ 外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：2.2kg

减速器 Gearhead：1.5kg



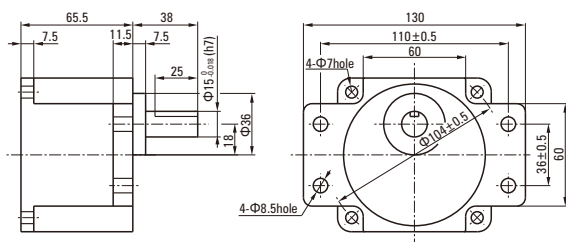
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
Z5D120-12GU Z5D120-24GU Z5D120-90GU	5GU□KB	3~200	65.5

● 减速器型号的□中为减速比的数值 Enter the gear ratio in the box (□) within the model name

● 凸缘安装型减速器 Flange Mounting Reducer

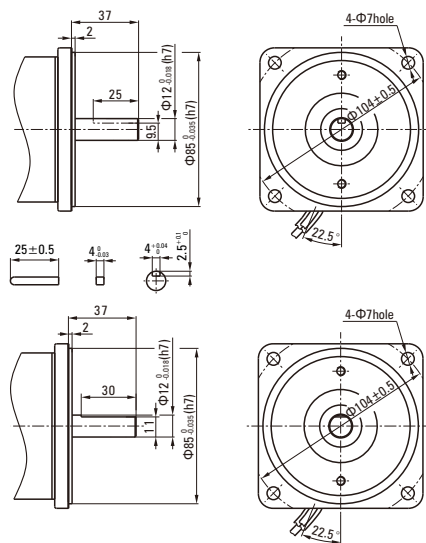
可安装在GU齿轮轴型上 Can be mounted on GU type gear shaft 5GU□K

重量 Weight: 1.5kg



● 键·键槽 (减速器附件)

Key·Keyway (The Key Is Included With The Gearhead)

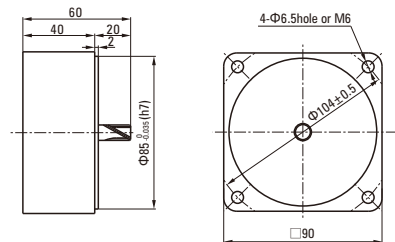


● 中间减速器 Middle Gearhead

可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type

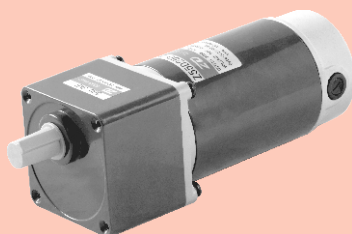
5GU10X

重量 Weight：0.651kg



直流电动机 DC MOTORS

■ 250W □ 90mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage	功率 Power	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
			r/min	A	r/min	mN.m	A		
Z55D250-24 □	24	250	3400	3.0Max.	3000	796	16.0	2000	3.2
Z55D250-90 □	90	250	3300	1.2Max.	3000	796	4.20	2000	3.2
Z55D250-220 □	220	250	3300	0.9Max.	3000	796	2.20	2000	3.2

● 电机电压、功率及转速可在配件尺寸等条件允许下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

种类 Type

● 电动机 Motor

机型 Type	型号 Model		
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z55D250-24GN	Z55D250-24A	Z55D250-24A1
	Z55D250-90GN	Z55D250-90A	Z55D250-90A1
	Z55D250-220GN	Z55D250-220A	Z55D250-220A1

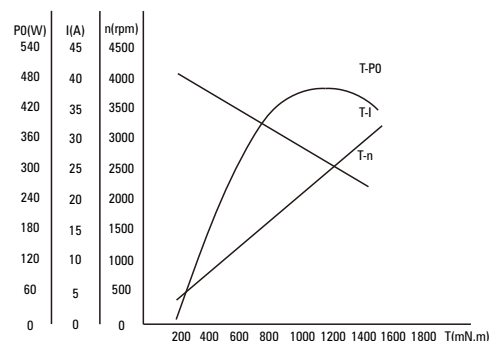
● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	5GU□KB	3、3.6、5、6、7.5、9、10、12.5、15、18、20、25、30、36、40、50、60、75、90、100、120、150、180、200
	5GU10XK (中间减速器 Middle Gearhead)	

● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机特性曲线 Characteristic Curve Of Motor



● 电机接线图 Wiring Diagram Of Motor



● 标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG14; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为20N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
Z55D250-24GU	转速 Speed r/min	1000	833	600	500	400	333	300	240	200	167	150	120	100	83	75	60	50	40	33	30	25	20	17	15
	5GU□KB	1.93	2.32	3.22	3.87	4.83	5.80	5.80	7.25	8.70	10.4	10.4	13.1	15.7	18.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
		19.0	22.7	31.6	37.9	47.4	56.9	56.9	71.1	85.3	102	102	128	154	184	200	200	200	200	200	200	200	200	200	200

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) → P215页

Motor (Round shaft) → P215

减速机 → P215页

Gearhead → P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→ P215页 → P215

● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

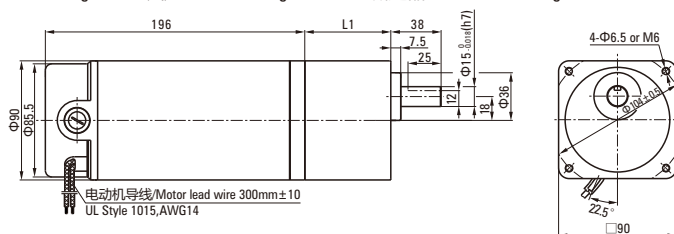
■ 外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：3.2kg

减速器 Gearhead：1.5kg



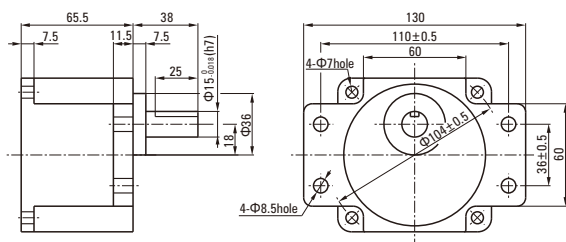
电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
Z55D250-24GU Z55D250-90GU Z55D250-220GU	5GU□KB	3~200	65.5

● 减速器型号的□中为减速比的数值 Enter the gear ratio in the box (□) within the model name

● 凸缘安装型减速器 Flange Mounting Reducer

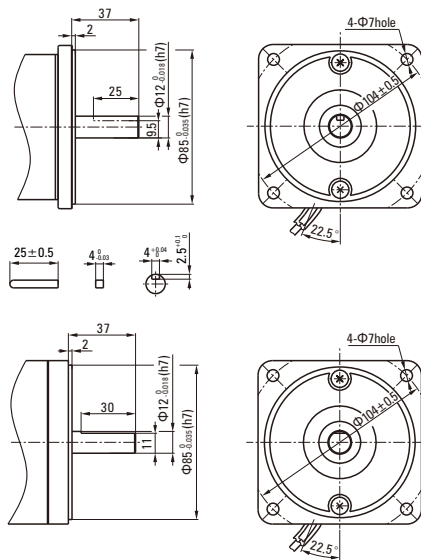
可安装在GU齿轮轴型上 Can be mounted on GU type gear shaft 5GU□K

重量 Weight: 1.5kg



● 键·键槽 (减速器附件)

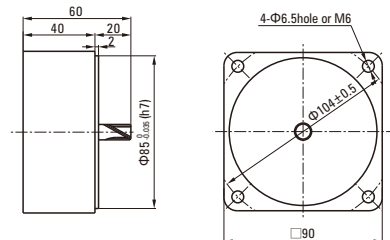
Key·Keyway (The Key Is Included With The Gearhead)



● 中间减速器 Middle Gearhead

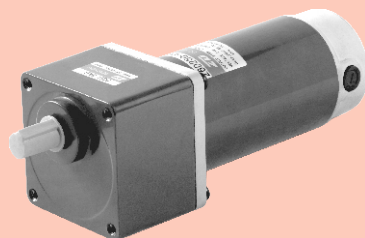
可安装在GU齿轮轴型上 Can be connected to GU pinion shaft type
电动机外形与齿轮轴型相同 The appearance of the electric motor is the same as that of the gear shaft type
5GU10X

重量 Weight：0.651kg



直流电动机 DC MOTORS

■ 250W □ 104mm



电机性能参数 Motor Performance Parameters

型号 Model	电压 Voltage	功率 Power	空载参数 No-load Parameters		负载参数 Load Parameters			电刷寿命 Brush Life	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
			r/min	A	r/min	mN.m	A		
Z6D250-24 □	24	250	3400	3.0Max.	3000	796	16.0	2000	3.2
Z6D250-90 □	90	250	3300	1.0Max.	3000	796	4.00	2000	3.2
Z6D250-220□	220	250	3300	0.8Max.	3000	796	2.00	2000	3.2

● 电机电压、功率及转速可在配件尺寸等条件允许下根据客户要求定制。

Motor voltage, power and speed will be customized according to his request under the allowed circumstance of adoptable dimension.

种类 Type

● 电动机 Motor

机型 Type	型号 Model		
	齿轮轴型 Pinion Shaft	圆轴型 Round Shaft	圆轴型 Round Shaft
导线型 Lead Wire Type	Z6D250-24GU	Z6D250-24A	Z6D250-24A1
	Z6D250-90GU	Z6D250-90A	Z6D250-90A1
	Z6D250-220GU	Z6D250-220A	Z6D250-220A1

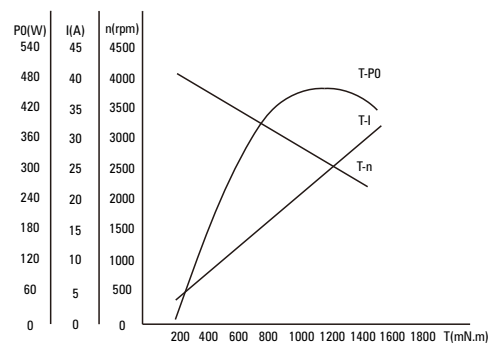
● 平行轴减速器 (另售) Parallel Shaft Gearhead (Sold Separately)

减速器种类 Gearhead Type	减速器型号 Gearhead Model	减速比 Gear Ratio
长寿命●低噪音 Long Life ● Low Noise	6GU□K	3、3.6、5、6、7.5、9、 12.5、15、18、25、30、 36、50、60、75、90、 100、120、150、180、200

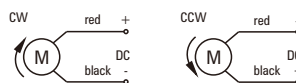
● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● 电机特性曲线 Characteristic Curve Of Motor



● 电机接线图 Wiring Diagram Of Motor



● 标准引出线长度: 300mm±10, 型号: UL1015, 规格: AWG14; 电机引出线长度、型号在配件尺寸等条件允许的情况下可根据客户要求定制。

Standard length of lead wire: 300mm±10, model: UL1015, type: AWG16; lead wire length, model will be customized by client request under allowed circumstance of adoptable dimension.

■ 装有减速器时的容许转矩 Gear Motor-Torque Table

- 减速器另售·中间减速器另售。
Gearheads are sold separately. Middle gearheads are not available.
- 减速品型号的□中为减速比的数值。
Enter the gear ratio in the box (□) within the model name.
- □色表示与电动机同一方向运转，其他则为相反方向。
The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- 转速是以电动机的额定转速为基准除以减速比而算出来的数值。实际转速将随负载大小变化而比所示数值减少2%~20%左右。
The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- 希望以大于下表的减速比进行进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
这时的容许转矩为40N·m。
To reduce the speed beyond the gear ratio in the table, attach a middle gearhead (gear ratio:10) between the gearhead and motor. In that case, the permissible torque is 40N·m.

■ 容许力矩单位 Allowance Torque Unit：上段 Upside (N.m) /下段 Belowside (kgf.cm)

型号 Type	减速比 Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
Z6D250-24GN	转速 Speed r/min	1000	833	600	500	400	333	240	200	166	120	100	83	60	50	40	33	30	25	20	16	15
	6GU□K	1.93	2.32	3.22	3.87	4.83	5.80	7.25	8.70	10.4	13.1	15.7	18.8	26.1	31.3	39.2	40.0	40.0	40.0	40.0	40.0	40.0
		19.0	22.7	31.6	37.9	47.4	56.9	71.1	85.3	102	128	154	184	256	307	384	400	400	400	400	400	400

■ 容许悬挂负载·容许轴向负载 Allowable Hang Load - Axial Load

电动机 (圆轴型) → P215页

Motor (Round shaft) → P215

减速机 → P215页

Gearhead → P215

■ 减速机的容许负载惯性惯量 J Permissible Load Inertia J For Gearhead

→ P215页 → P215

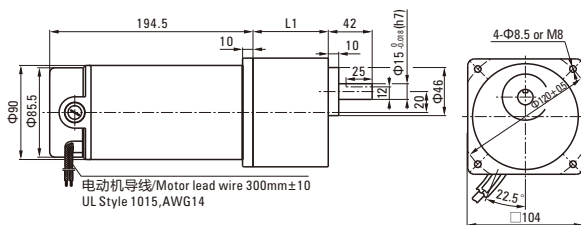
■ 外形图 (单位 mm) Dimensions (Unit mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead.

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：3.2kg

减速器 Gearhead：1.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio	L1
Z6D250-24GU Z6D250-90GU Z6D250-220GU	6GU□K	3~200	72

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

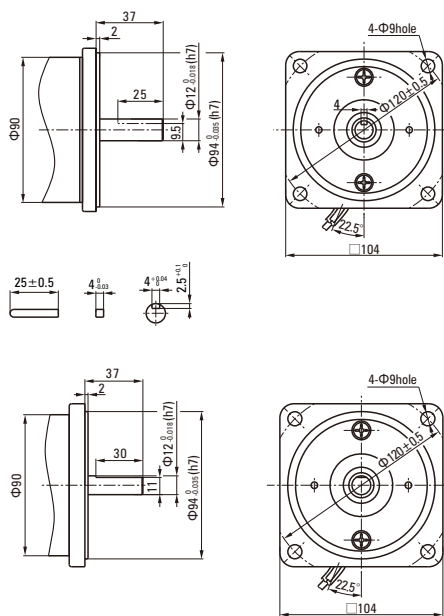
● 键·键槽 (减速器附件)

Key●Keyway (The Key Is Included With The Gearhead)

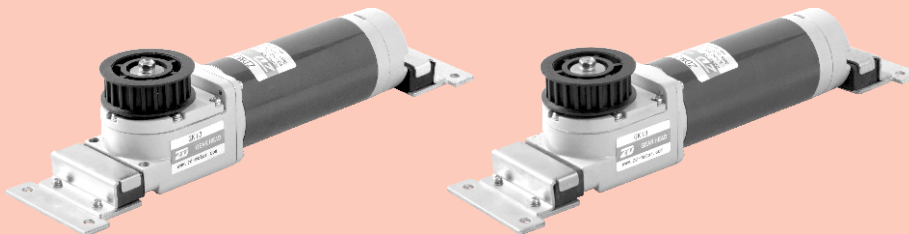


● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type

除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.



有刷开门电机 BRUSH DOOR MOTORS



产品特点 Product Characters

本产品采用DC永磁有刷马达做运转主体，可与微电脑控制系统方面对接，与电脑控制系统配合实现自我监察，制定最佳运作模式产品具有：噪声低、体积小、重量轻、寿命长、适用范围广等优点；同时可满足客户对自动门升级的需要。

This product uses DC permanent magnet brush motor to drive the whole system. It's possible to connect with microcomputer control system, it can achieve self-monitoring by working with computer control system, to develop the best mode of operation. Product has advantages as: low noise, small size, light weight, long life, wide range of applications etc. At the same time, it can meet the needs of customers to upgrade the automatic doors.

电机性能参数 Motor Performance Parameters

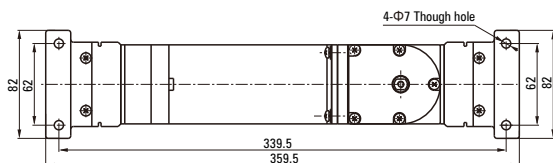
型号 Model	功率 Power	电压 Voltage	空载参数 No-load Parameters		负载参数 Load Parameters			整机允许力矩 Allowable Torque Motor		电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current	GK8.5	GK13	
	W	V	r/min	A	r/min	mN.m	A	mN.m	mN.m	kg
ZDMJ-1	60	24	2300	0.4Max.	1800	318	4.0	1840	2650	1.2
ZDMJ-2	60	90	2300	0.3Max.	1800	318	1.1			1.0

外形图 Dimensions (单位Unit:mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead

● 导线型 Lead Wiring Type

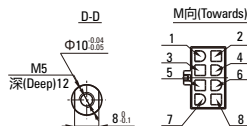
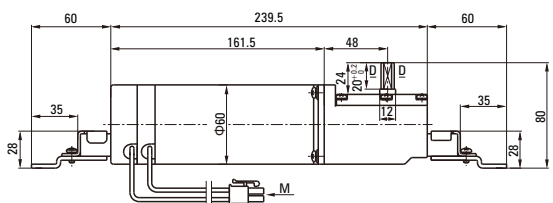
重量 Weight : 电动机 Motor : 1.8kg 减速器 Gearhead : 0.8kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio
ZDMJ-1	GK□	8.5
ZDMJ-2		13

● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name



插孔意义 Meanings Of Pins							
1	2	3	4	5	6	7	8
Hcw	Hccw	+5V	Hgend	/	MOTOR	MOTOR	MOTOR
					GND	+	-

● 电机引出线型号:UL1015, AWG20, 红色&黑色, 引出线长度为500

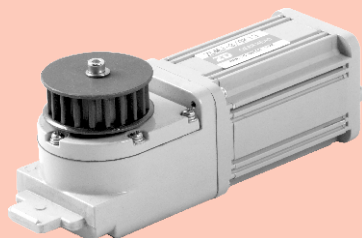
Motor lead wire specs: UL1015, AWG20, Red or Black, The length of lead wire is 500

主要技术要求 Main Data

- 1.基本技术参数: DC24V, 600W, 2500RPM S1, B CLASS, IP40
- 2.额定力矩: 229mN.m
- 3.光机空载噪音: < 50dB, L=50cm
- 4.耐电压: AC660V, 1S, 泄漏电流 < 5mA
- 5.绝缘电阻: > 50MΩ500V
- 6.工作寿命: 4000H
- 7.环保要求: 符合ROHS指令

- 1.Basic specification: DC24V, 600W, 2500RPM S1, B CLASS, IP40
- 2.Rated torque of bare motor: 229mN.m
- 3.No-load noise of whole motor: < 50dB, L=50cm
- 4.VE: AC660V, 1S, 5mA
- 5.Insulation resistance > 50MΩ500V
- 6.Life: 4000H
- 7.ROHS conformable

无刷开门电机 BRUSHLESS DOOR MOTORS



产品特点 Product Characters

本产品采用DC无刷直流马达做运转主体，可更方便的与微电脑控制系统对接，更方便的与电脑控制系统配合实现自我监察，制定最佳运作模式，如速度、推动力、制动力等。产品具有：寿命长、噪声低、体积小、重量轻、适用范围广等优点；同时可满足客户对自动门升级的需要。

This product uses DC brushless motor to drive the whole system. Being able to be connected with microcomputer control system, it can achieve self-monitoring by working with computer control system more convenient, to develop the best mode of operation, such as speed, impetus, brake force, etc. Product has advantages as: long life, low noise, small size, light weight, wide range of applications etc. At the same time, it can meet the needs of customers to upgrade the automatic doors.

电机性能参数 Motor Performance Parameters

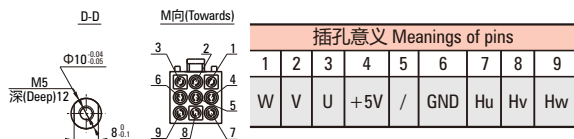
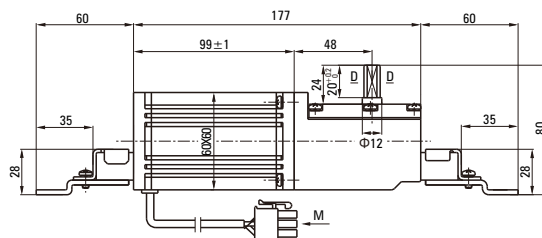
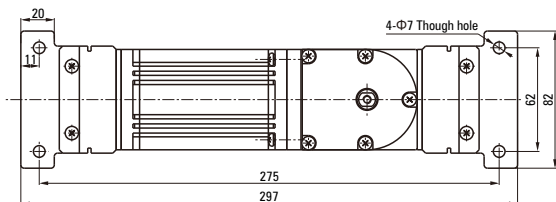
型号 Model	功率 Power W	电压 Voltage V	空载参数 No-load Parameters		负载参数 Load Parameters			整机允许力矩 Allowable Torque Motor		电机重量 Motor Weight kg
			转速 Speed r/min	电流 Current A	转速 Speed r/min	力矩 Torque mN.m	电流 Current A	GK8.5 mN.m	GK13 mN.m	
ZDMJ-3	60	24	3000	0.6Max.	2500	229	4.0	1320	2000	1.2

外形图 Dimensions (单位Unit:mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead

● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：1.2kg 减速器 Gearhead：0.8kg



插孔意义 Meanings of pins

1	2	3	4	5	6	7	8	9
W	V	U	+5V	/	GND	Hu	Hv	Hw

电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio
ZDMJ-3	GK□	8.5 13

● 减速器型号的□中为减速比的数值

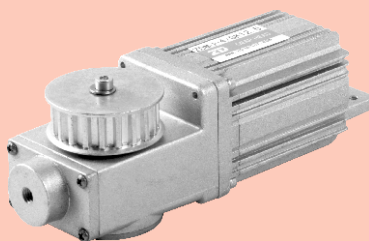
Enter the gear ratio in the box (□) within the model name

主要技术要求 Main Data

- 1.基本技术参数: DC24V, 60W, 2500RPM S1, B CLASS, IP40
- 2.额定力矩: 229mN.m
- 3.光机空载噪音: < 50dB, L=40cm
- 4.耐电压: AC660V, 1S, 泄漏电流 < 5mA
- 5.绝缘电阻: > 50MΩ500V
- 6.工作寿命: 4000H
- 7.环保要求: 符合ROHS指令

- 1.Basic specification: DC24V, 60W, 2500RPM S1, B CLASS, IP40
- 2.Rated torque of bare motor: 229mN.m
- 3.No-load noise of whole motor: < 50dB, L=50cm
- 4.VE: AC660V, 1S, 5mA
- 5.Insulation resistance > 50MΩ500V
- 6.Life: 4000H
- 7.ROHS conformable

无刷开门电机 BRUSHLESS DOOR MOTORS



产品特点 Product Characters

本产品采用DC无刷直流马达做运转主体，可更方便的与微电脑控制系统对接，更方便的与电脑控制系统配合实现自我监察，制定最佳运作模式，如速度、推动力、制动力等。产品具有：寿命长、噪声低、体积小、重量轻、适用范围广等优点；同时可满足客户对自动门升级的需要。

This product uses DC brushless motor to drive the whole system. It's possible to connect with microcomputer control system, it can achieve self-monitoring by working with computer control system more convenient, to develop the best mode of operation, such as speed, impetus, brake force, etc. Product has advantages as: long life, low noise, small size, light weight, wide range of applications etc. At the same time, it can meet the needs of customers to upgrade the automatic doors.

电机性能参数 Motor Performance Paramters

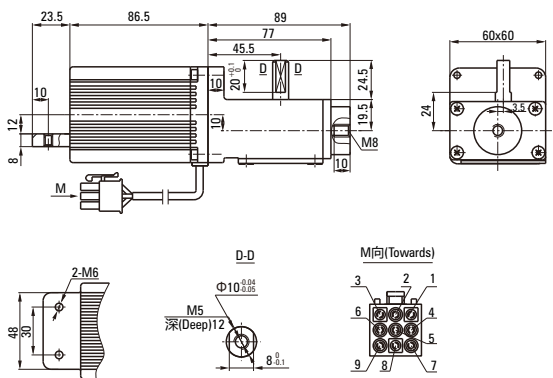
型号 Model	功率 Power	电压 Voltage	空载参数 No-load Parameters		负载参数 Load Parameters			整机允许力矩 Allowable Torque Motor	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current	GK12.5	
	W	V	r/min	A	r/min	mN.m	A	mN.m	kg
ZDMJ-4	60	24	3000	0.6Max.	2500	229	4.0	1950	1.0

外形图 Dimensions (单位Unit:mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead

● 导线型 Lead Wiring Type

重量 Weight : 电动机 Motor : 1.0kg 减速器 Gearhead : 0.5kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio
ZDMJ-4	GK□	12.5

● 减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

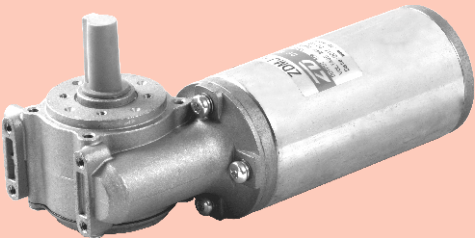
插孔意义 Meanings Of Pins								
1	2	3	4	5	6	7	8	9
U	V	W	+5V	/	GND	Hu	Hv	Hw

主要技术要求 Main Data

- 1.基本技术参数: DC24V, 60W, 2500RPM S1, B CLASS, IP40
- 2.额定力矩: 229mN.m
- 3.光机空载噪音: < 50dB, L=50cm
- 4.耐电压: AC660V, 1S, 泄漏电流 < 5mA
- 5.绝缘电阻: > 50MΩ500V
- 6.工作寿命: 4000H
- 7.环保要求: 符合ROHS指令

- 1.Basic specification: DC24V, 60W, 2500RPM S1, B CLASS, IP40
- 2.Rated torque of bare motor: 229mN.m
- 3.No-load noise of whole motor: < 50dB, L=50cm
- 4.VE: AC660V, 1S, 5mA
- 5.Insulation resistance > 50MΩ500V
- 6.Life: 4000H
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有刷开门电机 BRUSH DOOR MOTORS



产品特点 Product Characters

本产品采用DC永磁有刷马达做运转主体，可与微电脑控制系统方面对接，与电脑控制系统配合实现自我监察，制定最佳运作模式产品具有：噪声低、体积小、重量轻、寿命长、适用范围广等优点；同时可满足客户对自动门升级的需要。

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电机性能参数 Motor Performance Parameters

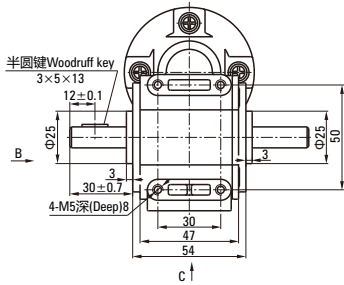
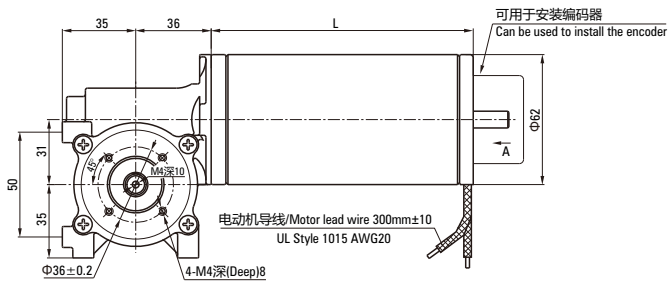
型号 Model	功率 Power W	电压 Voltage V	空载参数 No-load Parameters		负载参数 Load Parameters			整机允许力矩 Allowable Torque Motor		电机重量 Motor Weight kg
			转速 Speed r/min	电流 Current A	转速 Speed r/min	力矩 Torque mN.m	电流 Current A	GX10 mN.m	GX15 mN.m	
ZDMJ-5A	90	24	3900	1.1Max.	3350	257	5.4	1539	2309	1.8
ZDMJ-5B	90	36	4250	0.9Max.	3350		3.7			1.8
ZDMJ-5C	90	48	3900	0.7Max.	3350		2.7			1.8
ZDMJ-5D	90	60	4000	0.5Max.	3350		2.2			1.8

外形图 Dimensions (单位Unit:mm)

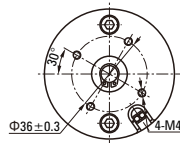
减速器附有安装用螺丝 Mounting screws are included with gearhead

● 导线型 Lead Wiring Type

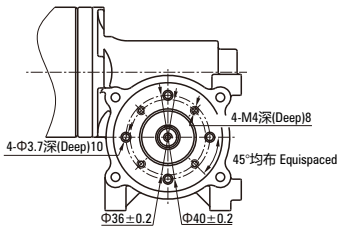
重量 Weight：电动机 Motor：1.8kg 减速器 Gearhead：0.8kg



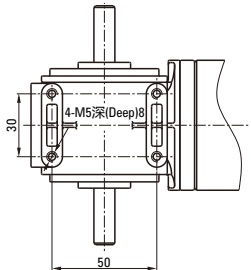
A向(Towards)



B向(Towards)



C向(Towards)



电动机型号 Motor Model	电动机长度 (L) Motor Length(L)	减速器型号 Gearhead Model	减速比 Gear Ratio
ZDMJ-5A	125.0	GK□	10
ZDMJ-5B	113.5		
ZDMJ-5C	113.5		15
ZDMJ-5D	125.0		

- 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

● 电机接线图 Wiring Diagram Of Motor

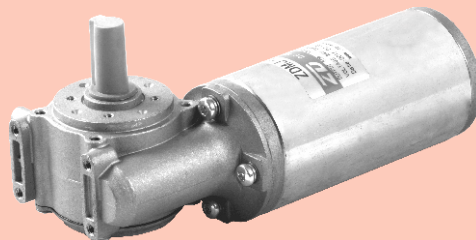


- 转向：红"+"、黑"-"时，从轴伸端看为顺时针；客户要求或特殊情况除外；
Turn: red "+", black "-", from the axis of the shaft to see the end of the clockwise; Exception of the user requirements or special circumstances;
- 标准引出线长度：300mm±10，型号：UL1015 规格：AWG20；
Standard lead length: 300mm±10, type: UL1015 specification: AWG20;

■ 主要技术要求 Main Data

- | | |
|--|--|
| <ol style="list-style-type: none"> 1.基本技术参数: 详见参数性能表 2.其他参数: S1工作制, B 级绝缘, IP20 ; 3.光机空载噪音: < 50dB, L= 40cm 4.耐电压: AC660V, 1S, 5mA 5.绝缘电阻: > 20MΩ, 500V 6.工作寿命: > 2500H 7.环保要求: 符合ROHS指令 | <ol style="list-style-type: none"> 1.Basic specification: See parameter performance table 2.Rated torque of bare motor: S1 working system, class B insulation, IP20; 3.No-load noise of whole motor: < 50dB, L= 40cm 4.VE: AC660V, 1S, 5mA 5. Insulation resistance > 20MΩ5,00V 6.Life: > 2500H 7.ROHS conformable |
|--|--|

无刷开门电机 BRUSHLESS DOOR MOTORS



产品特点 Product Characters

本产品采用DC无刷直流马达做运转主体，可更方便的与微电脑控制系统对接，更方便的与电脑控制系统配合实现自我监察，制定最佳运作模式，如速度、推动力、制动力等。产品具有：寿命长、噪声低、体积小、重量轻、适用范围广等优点；同时可满足客户对自动门升级的需要。

This product uses DC brushless motor to drive the whole system. It's possible to connect microcomputer control system, it can achieve self-monitoring by working with computer control system more convenient, to develop the best mode of operation, such as speed, impetus, brake force, etc. Product has advantages as: long life, low noise, small size, light weight, wide range of applications etc. At the same time, it can meet the needs of customers to upgrade the automatic doors.

电机性能参数 Motor Performance Parameters

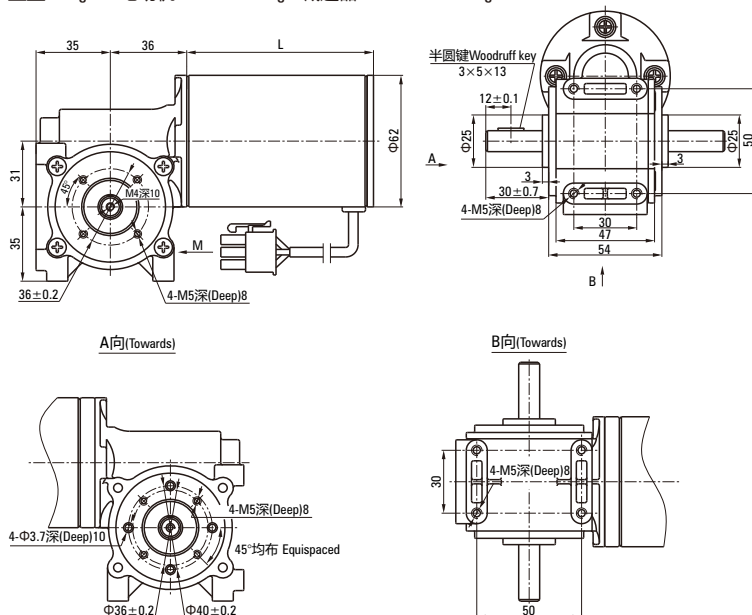
型号 Model	功率 Power W	电压 Voltage V	空载参数 No-load Parameters		负载参数 Load Parameters			整机允许力矩 Allowable Torque Motor		电机重量 Motor Weight kg
			转速 Speed r/min	电流 Current A	转速 Speed r/min	力矩 Torque mN.m	电流 Current A	GX10 mN.m	GX15 mN.m	
ZDMJ-6	60	24	3400	0.7Max.	3000	191	3.5	1146	1719	1.8

外形图 Dimensions (单位Unit:mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead

● 导线型 Lead Wiring Type

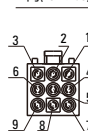
重量 Weight：电动机 Motor：1.8kg 减速器 Gearhead：0.8kg



电动机型号 Motor Model	电动机长度 (L) Motor Length(L)	减速器型号 Gearhead Model	减速比 Gear Ratio
ZDMJ-6	88	GK□	10 15

● 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

M向(Towards)



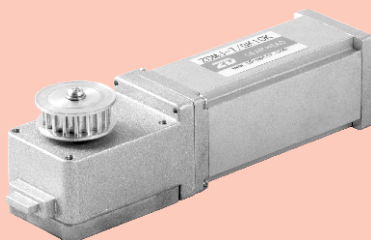
插孔意义 Meanings Of Pins								
1	2	3	4	5	6	7	8	9
U	V	W	Vcc	/	GND	Hu	Hv	Hw

主要技术要求 Main Data

- 1.基本技术参数: DC24V, 60W, 3000RPM S1, B CLASS, IP20
- 2.电机空载噪音: < 50dB, L=40cm
- 3.耐压: AC660V, 1S, 5mA
- 4.绝缘电阻: > 50MΩ500V
- 5.工作寿命: ≥ 5000H

- 1.Basic specification: DC24V,60W,2500RPM S1,B CLASS,IP20
- 2.No-load noise of whole motor: < 50dB,L=40cm
- 3.VE: AC660V,1S,5mA
4. Insulation resistance > 50MΩ500V
- 5.Life: ≥ 5000H

无刷开门电机 BRUSHLESS DOOR MOTORS



产品特点 Product Characters

本产品采用DC无刷直流马达做运转主体，可更方便的与微电脑控制系统对接，更方便的与电脑控制系统配合实现自我监察，制定最佳运作模式，如速度、推动力、制动力等。产品具有：寿命长、噪声低、体积小、重量轻、适用范围广等优点；同时可满足客户对自动门升级的需要。

This product uses DC brushless motor to drive the whole system. It's possible to connect microcomputer control system, it can achieve self-monitoring by working with computer control system more convenient, to develop the best mode of operation, such as speed, impetus, brake force, etc. Product has advantages as: long life, low noise, small size, light weight, wide range of applications etc. At the same time, it can meet the needs of customers to upgrade the automatic doors.

电机性能参数 Motor Performance Paramters

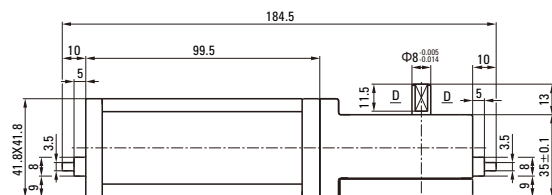
型号 Model	功率 Power	电压 Voltage	空载参数 No-load Parameters		负载参数 Load Parameters			整机允许力矩 Allowable Torque Motor	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current	GK10 mN.m	
ZDMJ-7	25	24	3100	0.6Max.	2500	95.5	1.8	573	1.0

外形图 Dimensions (单位Unit:mm)

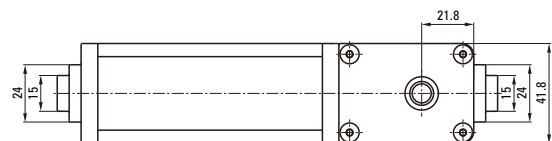
减速器附有安装用螺丝 Mounting screws are included with gearhead

● 导线型 Lead Wiring Type

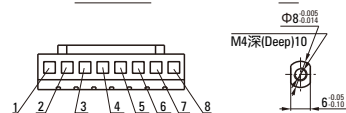
重量 Weight : 电动机 Motor : 1.0kg 减速器 Gearhead : 0.4kg



引线Lead: 8*AWG24
彩色排线 Rainbow cable, L=350mm



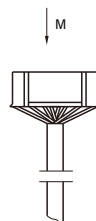
M向(Towards)



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio
ZDMJ-7	GK□	10

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name



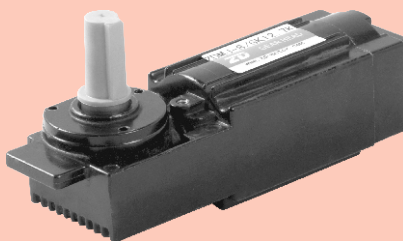
插孔意义 Meanings Of Pins							
1	2	3	4	5	6	7	8
U	W	V	Hw	Hu	Hv	Vcc	GND

主要技术要求 Main Data

- 1.基本技术参数: DC24V, 25W, 250RPM S1, B CLASS, IP20
- 2.光机空载噪音: < 50dB, L=40cm
- 3.耐电压: AC660V, 1S, 5mA
- 4.绝缘电阻: > 50MΩ500V
- 5.工作寿命: ≥ 5000H

- 1.Basic specification: DC24V,25W,250RPM S1,B CLASS,IP20
- 2.No-load noise of whole motor: < 50dB,L=40cm
- 3.VE: AC660V,1S,5mA
- 4.Insulation resistance > 50MΩ500V
- 5.Life: ≥ 5000H

无刷开门电机 BRUSHLESS DOOR MOTORS



产品特点 Product Characters

本产品采用DC无刷直流马达做运转主体，可更方便的与微电脑控制系统对接，更方便的与电脑控制系统配合实现自我监察，制定最佳运作模式，如速度、推动力、制动力等。产品具有：寿命长、噪声低、体积小、重量轻、适用范围广等优点；同时可满足客户对自动门升级的需要。

This product uses DC brushless motor to drive the whole system. It's possible to connect with microcomputer control system, it can achieve self-monitoring by working with computer control system more convenient, to develop the best mode of operation, such as speed, impetus, brake force, etc. Product has advantages as: long life, low noise, small size, light weight, wide range of applications etc. At the same time, it can meet the needs of customers to upgrade the automatic doors.

电机性能参数 Motor Performance Parameters

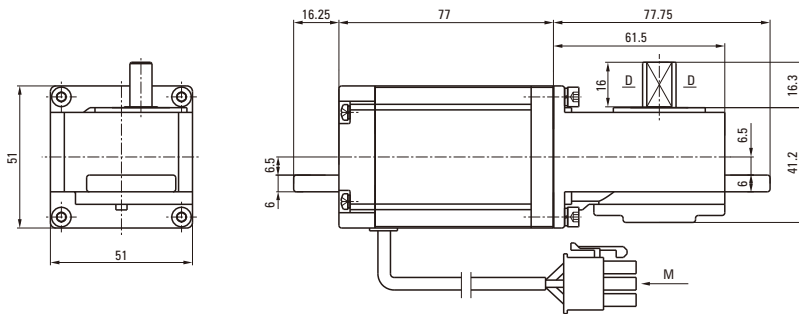
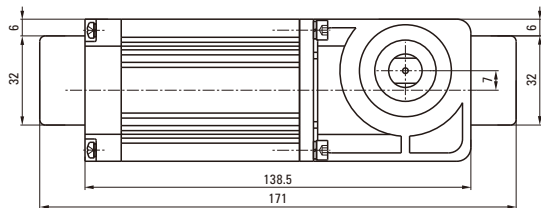
型号 Model	功率 Power	电压 Voltage	空载参数 No-load Parameters		负载参数 Load Parameters			整机允许力矩 Allowable Torque Motor	电机重量 Motor Weight
			转速 Speed	电流 Current	转速 Speed	力矩 Torque	电流 Current		
	W	V	r/min	A	r/min	mN.m	A	mN.m	kg
ZDMJ-8	40	24	4300	0.6Max.	3000	127	2.5	1455	1.5

外形图 Dimensions (单位Unit:mm)

减速器附有安装用螺丝 Mounting screws are included with gearhead

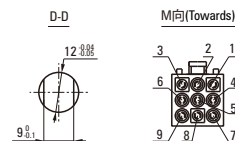
● 导线型 Lead Wiring Type

重量 Weight：电动机 Motor：1.5kg 减速器 Gearhead：0.7kg



电动机型号 Motor Model	减速器型号 Gearhead Model	减速比 Gear Ratio
ZDMJ-8	GK□	12.7

● 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name



插孔意义 MeaningsOf Pins								
1	2	3	4	5	6	7	8	9
U	V	W	Vcc	/	GND	Hu	Hv	Hw

主要技术要求 Main Data

- 1.基本技术参数: DC24V, 40W, 236RPM S1, B CLASS, IP40
- 2.光机空载噪音: < 50dB, L=40cm
- 3.耐电压: AC660V, 1S, 5mA
- 4.绝缘电阻: > 50MΩ500V
- 5.工作寿命: ≥ 5000H

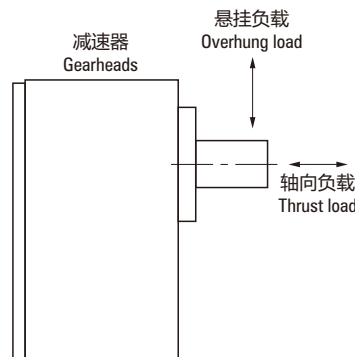
1. Basic specification: DC24V, 40W, 236RPM S1, B CLASS, IP40
2. No-load noise of whole motor: < 50dB, L=40cm
3. VE: AC660V, 1S, 5mA
4. Insulation resistance > 50MΩ500V
5. Life: ≥ 5000H

通用规格 COMMON SPECIFICATIONS

■ 电动机的容许悬挂负载·容许轴向负载 Permissible Overhung Load And Permissible Thrust Load Of Motor

容许悬挂负载 Permissible overhung load

电动机Motor		容许悬挂负载 Permissible Overhung Load	
安装尺寸 Motor Frame Size □(mm)	输出轴直径 Output Shaft Diameter □(mm)	距轴端的距离 Distance From Shaft End	
		10mm	10mm
42	5	40	-
60	6	50	110
70	6	40	60
80	8	90	140
	10	110	120
90	10	140	200
	12	240	270
100	15	320	350



容许轴向负载。

Permissible thrust load.

请尽量不要施加轴向负载。即使不得已的情况下，请将轴向负载控制在电动机重量的一半以下。

Avoid thrust loads as much as possible. If thrust load is unavoidable, keep it below half the weight of the motor.

■ 电动机的容许悬挂负载·容许轴向负载 Permissible Overhung Load And Permissible Thrust Load Of Motor

型号 Model	减速比 Gear Ratio	最大容许转矩 Maximum Permissible Torque N.m	容许悬挂负载 Permissible Overhung Load N		容许轴向 Permissible Thrust Load N
			距轴端10mm 10mm From Shaft End	距轴端20mm 20mm From Shaft End	
0GN□K	3~60	1.0	20	-	15
2GN□K	3~18	3.0	50	80	30
	25~200		120	180	
3GN□K	3~18	5.0	80	120	40
	25~200		150	250	
4GN□K	3~18	8.0	100	150	50
	25~200		200	300	
5GN□K	3~18	10	250	350	100
	25~200		300	450	
5GU□KB 5GU□K	3~9	20	400	500	150
	12.5~18		450	600	
	25~200		500	700	
5GU□K	3~200	40	1100	1500	300

■ 减速器的容许负载惯性惯量J Permissible Load Inertia for Gearhead J

连接到减速器上的负载惯性惯量（J）较大的情况下，在频繁的间歇运转的起动瞬间（或以电磁制动及制动器进行急停时）会出现瞬时较大的转矩。该冲击负载过大会导致减速器及电动机损坏。

When a high load inertia (J) is connected to a gearhead, high torque is exerted instantaneously on the gearhead when starting up in frequent, discontinuous operations (or when stopped by an electromagnetic brake, or when stopped instantaneously by a brake pack). Excessive impact loads can cause the gearhead or motor damage.

下面列出了电动机轴上的容许负载惯性惯量的值，使用时请控制在此数值下。三相电动机的容许负载惯性惯量是指从一旦停止运转后再进行反转时的数值。

The table below gives values for permissible load inertia on the motor shaft. Use the motor and gearhead within these parameters. The permissible inertial load value shown for three-phase motors is the value when reversing after a stop.

请利用下面的公式计算减速器输出轴上的容许惯性惯量（J）。

The permissible load inertia (J) on the gearhead output shaft is calculated with the following equation.

通过带电磁制动电动机、制动器及速度控制电动机的瞬时停止来运转容许负载惯性惯量时的使用寿命为200万次。

The life of the gearhead when operating at the permissible inertial load with instantaneous stops of the motors with electromagnetic brakes, brake packs or speed control motors is at least 2 million cycles.

■ 减速器输出轴上的容许负载惯性惯量 Permissible Load Inertia For GearHead Output Shaft

减速比1/3~1/50时 $JG = JM \times I$

减速比1/60以上时 $JG = JM \times 2500$

Gear ratio 1/3 ~ 1/50 $JG = JM \times I$

Gear ratio 1/60 or high $JG = JM \times 2500$

JG: 减速器输出轴容许负载惯性惯量 $J (\times 10 \text{ kg.m}^2)$

JM: 减速器输出轴容许负载惯性惯量 $J (\times 10 \text{ kg.m}^2)$

I: 减速比 (例: 减速比1/3时 $i=3$)

JG: Permissible load inertia gearhead output shaft $J (\times 10 \text{ kg.m}^2)$

JM: Permissible load inertia at the motor shaft $J (\times 10 \text{ kg.m}^2)$

I: Gear ratio (Example: $i=3$ means the gear ratio or 1/3)

■ 电动机轴上的容许负载惯性惯量 Permissible Load Inertia At The Motor Shaft

电动机电源相数 No. Of Phase	安装尺寸 Motor Frame Size	输出功率 Output Power	电动机轴上的容许负载惯性惯量 Permissible Load Inertia At The Motor Shaft	
			$J (\times 10^{-4} \text{ kg.m}^2)$	$GD^2 (\text{kg.m}^2)$
单相 Single-phase	42	1W、3W	0.016	0.07
	60	3W※、6W	0.062	0.25
	70	6W※、15W	0.14	0.52
	80	10W※、25W	0.31	1.2
	90	20W※、40W	0.75	3
		60W	1.1	4.6
		90W	1.1	4.6
		120W	1.1	4.6
	100	120W	2	8
		140W	2	8
		180W	2	8
三相 Three-phase	60	6W	0.062	0.25
	70	15W	0.14	0.52
	80	25W	0.31	1.2
	90	40W	0.75	3
		60W	1.1	4.6
		90W	1.1	4.6
		120W	1.1	4.6
	100	120W	2	8
		140W	2	8
		180W	2	8
直流 DC Power	60	6W、10W、15W	0.062	0.25
	70	15W	0.14	0.52
	80	25W、40W	0.31	1.2
	90	40W	0.75	3
		60W	1.1	4.6
		90W	1.1	4.6
		120W	1.1	4.6
	100	250W	2	8

※是指转矩电动机的输出功率

※Output power for torque motors

■ 减速器容许转矩的计算 The Calculation For The Permissible Torque Of Gearhead

部分机型并未列在容许转矩表上，需要时可按以下公式计算。

Permissible torque for some products are omitted. In that case, use the equation below to calculate the permissible torque.

容许转矩 Permissible torque $TG = TM \times i \times \eta$

TG: 减速器容许转矩 Permissible torque of gearhead

TM: 电动机转矩 Motor torque

i: 减速器减速比 Gear ratio of gearhead

η : 减速器传动效率 Gearhead efficiency

■ 减速器传动效率 Gearhead Efficiency

减速比Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
型号Model																					
0GN□K 2GN□K 3GN□K 4GN□K 5GN□K	81%									73%			66%								
5GU□KB (K)	81%						73%			66%						59%					
6GU□K	81%						73%			66%											

电动机·减速器用安装底座 Motor • Gearhead Mounting Brackets

便于安装固定电动机、减速器的专用安装底座。为可对应大功率电动机、减速器的高强度型产品。安装底座上钻有螺孔，请用减速器附属的螺丝来组合电动机与减速器。安装电动机单体时，请另用安装用螺丝。

Mounting Brackets for attaching and securing a motor and gearhead. They are high-strength type, Which can be used with high power motors/gearheads. These brackets come with tapped holes. To mount the motor and gearhead, simply fasten with screws provided to the gearhead. To mount the motor alone, mounting screws must be provided separately.

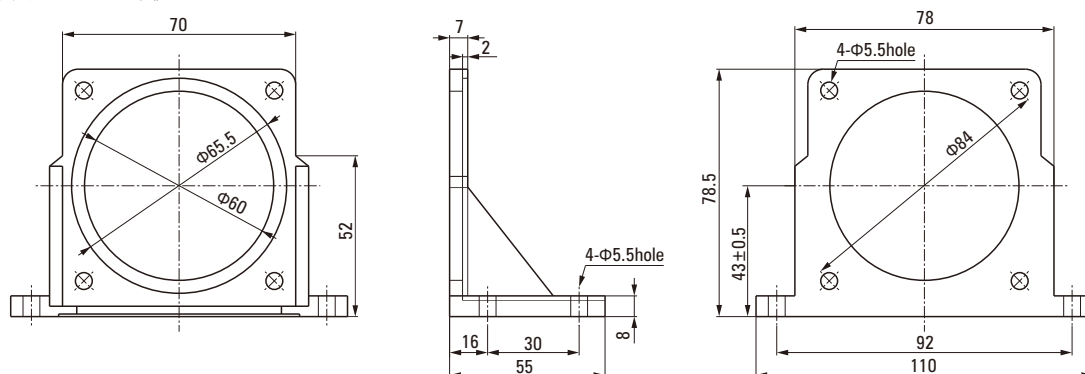


安装尺寸70mm用 Motor Frame Size: 70mm

型号 Model: ZD3M5 重量 Weight: 160g 材质 Material: 铝合金 Aluminum

适用产品 Applicable products: 3GN减速器 3GN Gearhead

安装尺寸 □70mm电动机 Motor with the frame size of □70mm

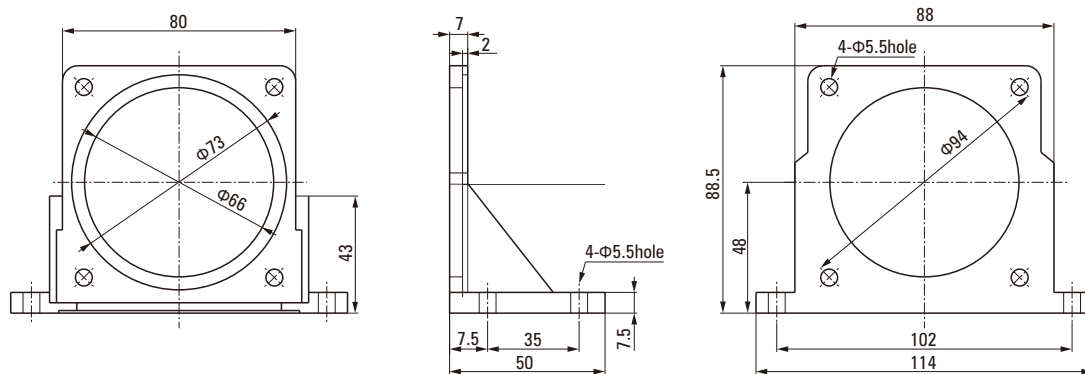


安装尺寸80mm用 Motor Frame Size: 80mm

型号 Model: ZD4M5 重量 Weight: 200g 材质 Material: 铝合金 Aluminum

适用产品 Applicable products: 4GN减速器 4GN Gearhead

安装尺寸 □80mm电动机 Motor with the frame size of □80mm

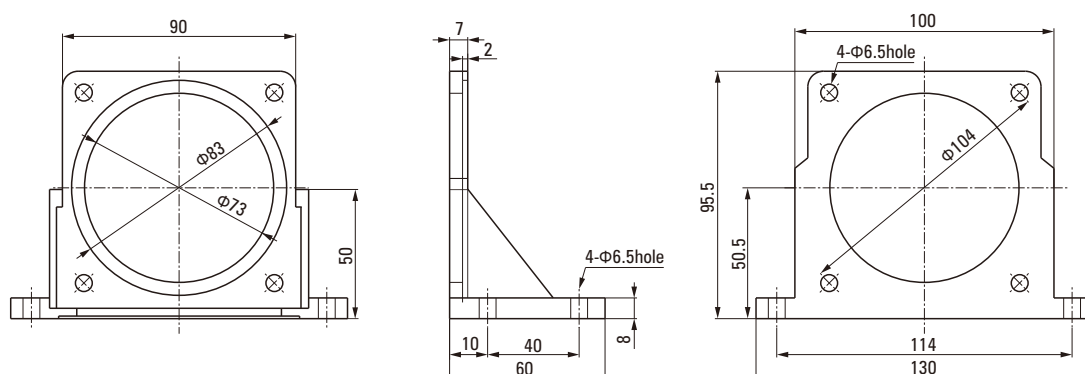


安装尺寸90mm用 Motor Frame Size: 90mm

型号 Model: ZD5M5 重量 Weight: 270g 材质 Material: 铝合金 Aluminum

适用产品 Applicable products: 5GN、5GU减速器 5GN、5GU Gearhead

安装尺寸 □90mm电动机 Motor with the frame size of □90mm

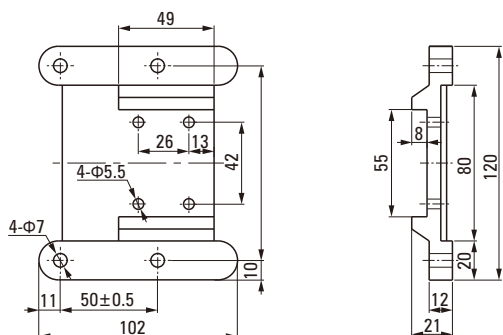


■安装尺寸80、90、104mm用 Motor Frame Size: 80、90、104mm

型号 Model: ZD6M6 重量 Weight: 260g 材质 Material: 铝合金 Aluminum

适用产品 Applicable products: 4GN减速器 4GN Gearhead

安装尺寸□80、90、104mm 电动机 Motor with the frame size of □80、90、104mm



■电动机用端子箱 Terminal Box For Motor

根据客户的需求，可选择以下类型的端子箱。

You can select from following types of terminal boxes according to customer's request.

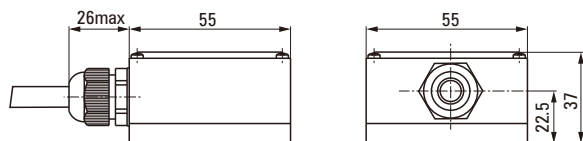
型号 Model: ZDTX

重量 Weight: 90g 材质 Material: 铝合金 Aluminum

适用产品 Applicable products: 4GN减速器 4GN Gearhead

安装尺寸□80、90、104mm 电动机

Motor with the frame size of □80、90、104mm



●适用电缆直径为 Use cable with a diameter of $\Phi 4 \sim \Phi 8$ mm

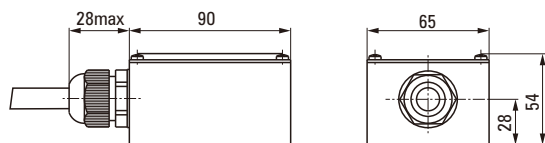
型号 Model: ZDTX

重量 Weight: 290g 材质 Material: 铝合金 Aluminum

适用产品 Applicable products: 4GN减速器 4GN Gearhead

安装尺寸□80、90、104mm 电动机

Motor with the frame size of □80、90、104mm



●适用电缆直径为 Use cable with a diameter of $\Phi 6 \sim \Phi 12$ mm

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