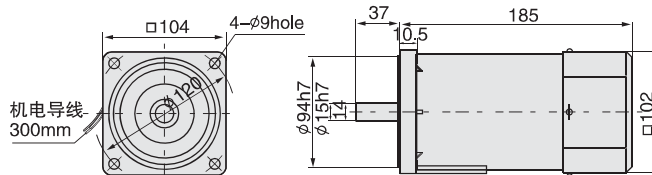


● 圆轴型 Circular shaft type

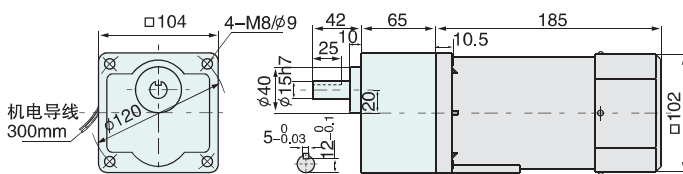
100YYJ120(140)  
100YSCJ120(140)



结构：电动机  
重量：4.8 kg

● 定速型 Optical axis type

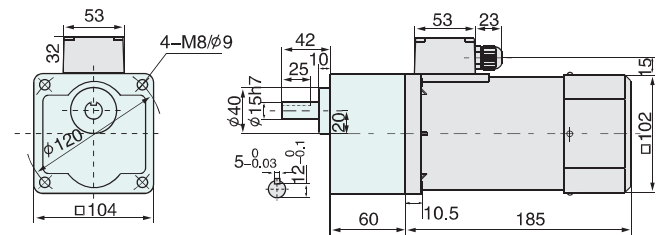
100YYJ120(140) /100GK□  
100YSCJ120(140)



结构：减速器+电动机  
重量：6.4 kg

● 带端子箱型 With terminal box type

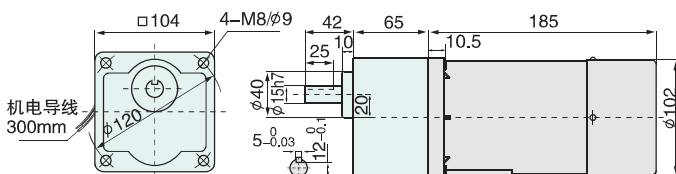
100YYJT120 ( 140 ) /100GK



结构：减速器+电动机+端子箱  
重量：6.5 kg

● 刹车定速型 Brake Optical axis type

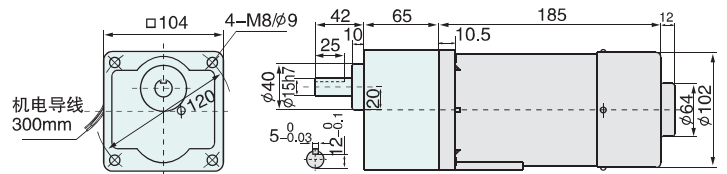
100YYJ120(140) /100GK□  
100YSCJ120(140)



结构：减速器+电动机+刹车器  
重量：6.9 kg

● 刹车调速型 Brake Speed regulation type

100YYJT120 ( 140 ) /100GK



结构：减速器+电动机+刹车器+调速器  
重量：6.9 kg

## 160/180W

□100mm



## ● 电机特性

List of motor characteristics

电机型号 Motor model		规格 Specs	输出功率 Output Power W	电源电压 Voltage V	频率 Frequency Hz	电流 Current A	起动扭矩 Starting Torque mN.m gf.cm		额定扭矩 Rated Torque mN.m gf.cm		额定转速 Rated Revolution r/min	电容量/耐压 Capacity/Ve μ F/VAC
公司型号 JWD types	对应其它厂家 型号Other types											
100YYJT160-3	6IK160GK 6IK160A	感应 Induction	160	单相 1-phase 220	50	1.25	775	7750	1260	12600	1300	8/450
					60	1.24	620	6200	980	9800	1550	8/450
	6RK160GK 6RK160A	可逆Reversible 30min			50	1.4	1000	10000	1260	12600	1300	10/450
					60	1.46	780	7800	980	9800	1550	10/450
100YYJT160-1	6IK160GK 6IK160A	感应 Induction	160	单相 1-phase 110	50	2.4	775	7750	1260	12600	1300	32/250
					60	2.2	620	6200	980	9800	1550	30/250
	6RK160GK 6RK160A	可逆Reversible 30min			50	2.6	1000	10000	1260	12600	1300	40/250
					60	2.8	780	7800	980	9800	1550	36/250
100YSCJ160-4	6IK160GK 6IK160A	—	160	三相 3-phase 380	50	0.55	2700	27000	1175	11750	1300	—
100YSCJ160-3	6RK160GK 6RK160A	—	160	三相 3-phase 220	50	0.95	3504	35040	1175	11750	1300	—
					60	0.86	2832	28320	986	9860	1550	—
100YYJT180-3	6IK180GK 6IK200A	感应 Induction	180	单相 1-phase 220	50	1.56	990	9900	1470	14700	1300	10/450
					60	1.5	830	8300	1232	12320	1550	10/450
	6RK180GK 6RK180A	可逆Reversible 30min			50	1.58	1300	13000	1470	14700	1300	12/450
					60	1.6	1090	10900	1232	12320	1550	12/450
100YYJT180-1	6IK180GK 6IK200A	感应 Induction	180	单相 1-phase 110	50	3.2	990	9900	1470	14700	1300	40/250
					60	3.0	830	8300	1232	12320	1550	40/250
	6RK180GK 6RK180A	可逆Reversible 30min			50	3.3	1300	13000	1470	14700	1300	48/250
					60	3.4	1090	10900	1232	12320	1550	48/250
100YSCJ180-4	6IK180GK 6IK200A	—	180	三相 3-phase 380	50	0.75	3504	35040	1460	14600	1350	—
100YSCJ180-3	6RK180GK 6RK180A	—	180	三相 3-phase 220	50	1.2	3504	35040	1460	14600	1350	—
					60	1.21	2832	28320	1180	11800	1620	—

- 上表参数是指电机单体，不附加任何负荷装置。
- 电机额定转速、额定电流允许在 $\pm 5\%$ 范围内变动。

- Parameters in above table refer to motor alone, without any load device.
- Permissible change in rated speed and rated current of the motor is within the range of  $\pm 5\%$ .

## ● 减速电机允许负载

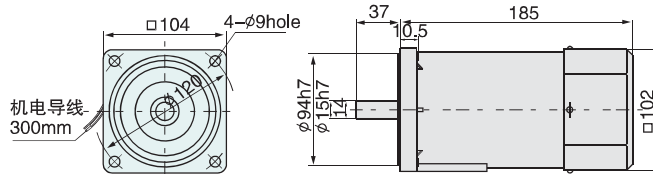
Allowable load for the gear motor

减速参数 Geared-down parameter	同步转速r/min Synchronous speed		500	300	200	120	100	60	50	30	20	15	10	6	5	3	2	1.5	1	
	减速比i ratio		3	5	7.5	12.5	15	25	30	50	75	100	150	250	300	500	750	1000	1500	
最大允许负载 Max allowable load	160W	Kg.cm	28.7	48	72	113.3	137.3	229.3												255
		N.m	2.81	4.69	7.04	11.27	13.53	22.55												25
	180W	Kg.cm	32.3	54	81	127.5	154.5												255	
		N.m	3.17	5.28	7.92	12.68	15.23												25	

- 转速是以电动机的同步转速为基准除以减速比而算出的数值。实际转速将随负载大小变化而比所示数值减少2~20%左右。
- 希望以大于上表的减速比进一步减速时，可在电动机与减速机之间安装减速比为10的中间减速机。
- 当负载扭矩超过减速电机最大允许负载扭矩，并有堵转情况存在时，请在减速箱输出轴和负载连接处加装扭矩限制装置，确保齿轮减速箱正常运行。
- The speed is based on the synchronous motor speed reduction ratio as a benchmark calculated by dividing the value of. Actual speed will vary the size of the load changes in less than the values shown in 2 ~ 20%.
- Hope to the table of the reduction ratio is greater than the further reduction, it would be installed between the motor and the reducer reduction ratio of 10 the middle of the reducer.
- When the load torque exceeds the maximum allowable load torque gear motor, and a locked rotor situation exists, please slow down box at the junction of the output shaft and load torque limit device installed to ensure the normal operation gearbox.

● 圆轴型 Circular shaft type

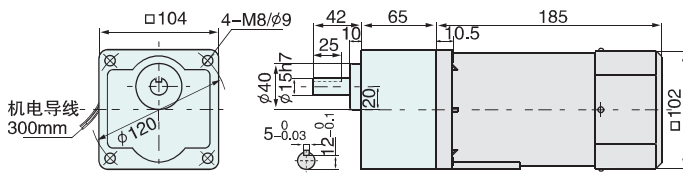
100YYJ160(180)  
100YSCJ160(180)



结构：电动机  
重量：5 kg

● 定速型 Optical axis type

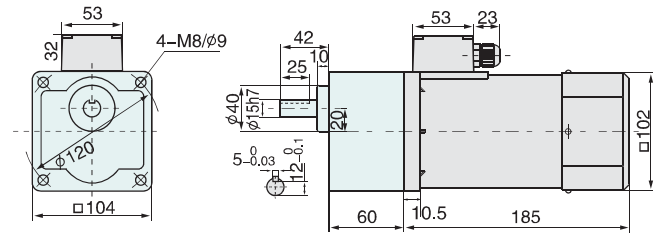
100YYJ160(180) /100GK□  
100YSCJ160(180)



结构：减速器+电动机  
重量：6.6 kg

● 带端子箱型 With terminal box type

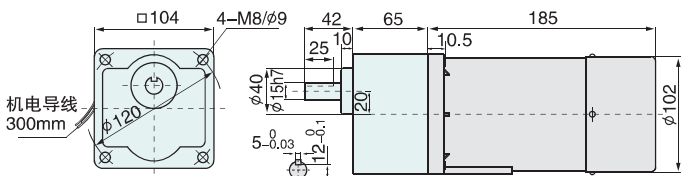
100YYJT160 ( 180 ) /100GK



结构：减速器+电动机+端子箱  
重量：6.7 kg

● 刹车定速型 Brake Optical axis type

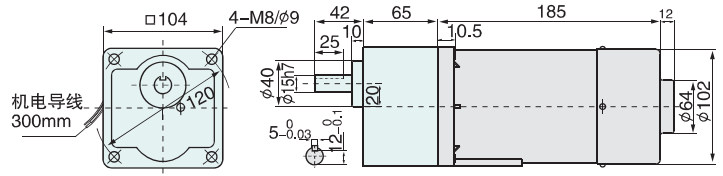
100YYJ160(180) /100GK□  
100YSCJ160(180)



结构：减速器+电动机+刹车器  
重量：7 kg

● 刹车调速型 Brake Speed regulation type

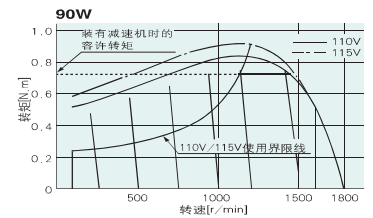
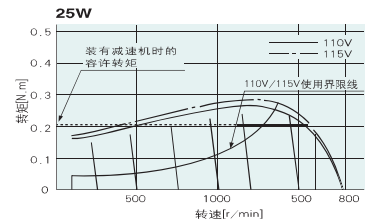
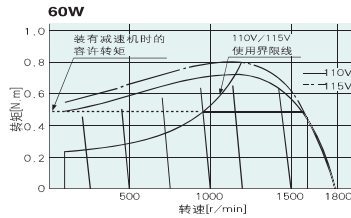
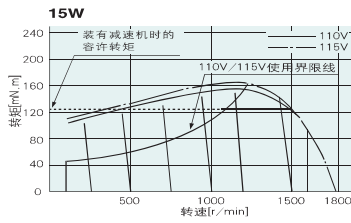
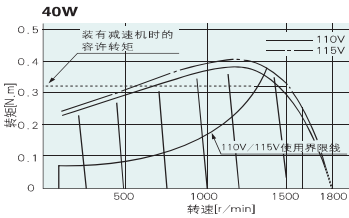
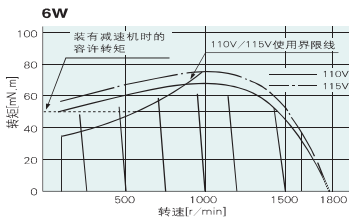
100YYJT160 ( 180 ) /100GK



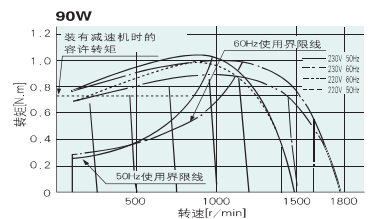
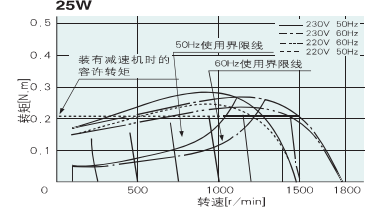
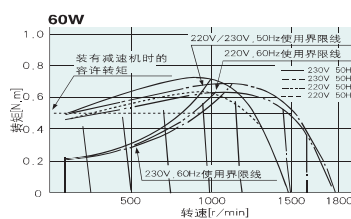
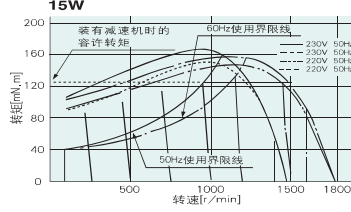
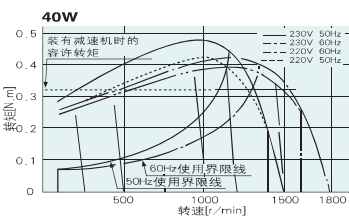
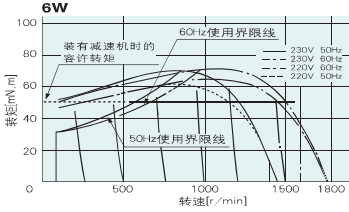
结构：减速器+电动机+刹车器+调速器  
重量：7.1 kg

## ● 转速—转矩特性 Speed-torque characteristics

单相 Single-phase 110V



单相 Single-phase 220V



## ● 转矩电动机参数-100/-200系列

Torque motor parameter-100/-200V series

( )内为-200系列特有参数

( ) is Peculiar to 200 series

参数 Parameter	项目 Item	定档时间 Rated time	定档电压 Rated voltage	频率 Frequency	起动转矩 Starting torque	最大输出功率 Maximum output power	最大输出扭矩 Maximum output torque	最大输出时电流 Current at maximum output	最大输出时转速 Speed at maximum output	电容量 Capacitor capacity	与减速箱组合尺寸对应页码 With gearbox page No.
电机 Motor				Hz	N.m	W	N.m	A	r/min	μF/VAC	
70T-6W-1 (70T-6W-2)	5min	100V(200V)	50HZ	0.15	6.5	0.09	0.56 (0.3)	750	8 (2)	P11	
	连续	60V (120V)									0.21 (0.12)
80T-10W-1 (80T-10W-2)	5min	100V(200V)	50HZ	0.223	10.5	0.134	0.6 (0.32)	750	10(2.5)	P13	
	连续	60V (120V)									0.49 (0.20)
80T-13W-1 (80T-13W-2)	5min	100V(200V)	50HZ	0.28	13.2	0.168	0.65 (0.35)	750	12 (3)	P13	
	连续	60V (120V)									0.50 (0.26)
90T-20W-1 (90T-20W-2)	5min	100V(200V)	50HZ	0.32	20	0.25	0.85 (0.5)	750	16 (4)	P15	
	连续	60V (120V)									0.09
100T-30W-1 (100T-30W-2)	5min	100V(200V)	50HZ	0.52	33	0.42	1.18 (0.56)	750	20 (5)	P21	
	连续	60V (120V)									0.151
100T-40W-1 (100T-40W-2)	5min	100V(200V)	50HZ	0.74	45	0.6	1.75 (0.74)	750	30 (6)	P21	
	连续	60V (120V)									0.225

注：1、转矩电机有近似线性的转矩、转速运行特性。

2、转矩电机最大转矩在电机堵转点出现，而此时电机堵转电流增加不多。

3、若电机长期工作在堵转状态下，需加装强制冷却风机。

4、转矩电机具有良好的开环、闭环调速性能。

1.Torque motor has approximate linear torque, speed operating characteristics.

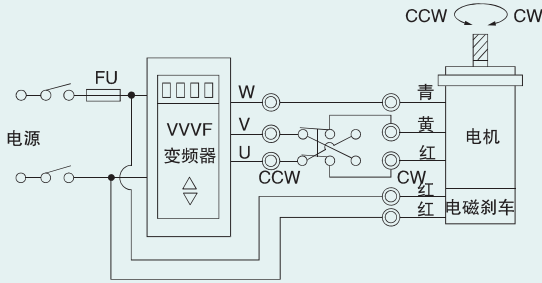
2.Maximum torque of torque motor appears at motor locked rotor point, while here motor locked rotor current does not increase much.

3.If motor works in locked rotor condition for a long time, forced cooling fan should be mounted.

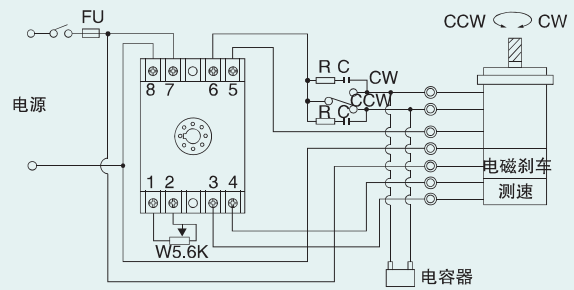
4.Torque motor has good open loop closed loop speed regulation performance

● 连结方式 Connecting type

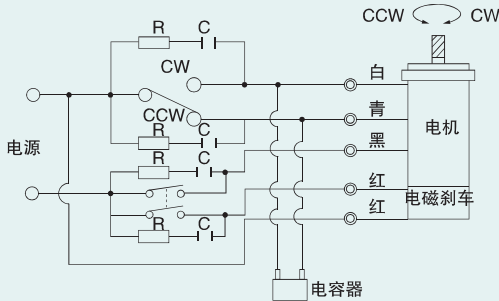
三相刹车电机配变频器  
Three-phase brake motor with frequency converter



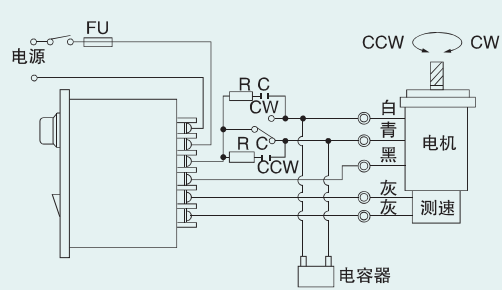
刹车带调速电机配SS速度控制器  
Brake band speed regulating motor with SS speed controller



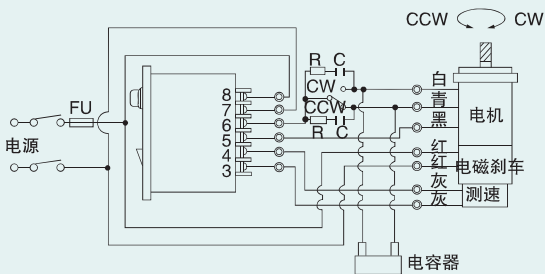
刹车电机接线图  
Wiring diagram of brake motor



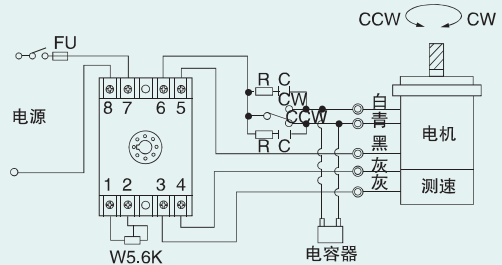
调速电机配US速度控制器  
Speed regulating motor with US speed controller



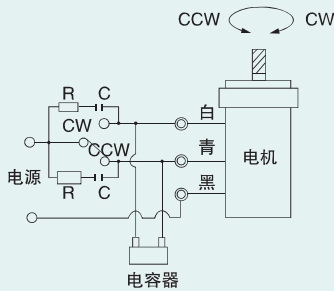
刹车带调速电机配US速度控制器  
Brake band speed regulating motor with US speed controller



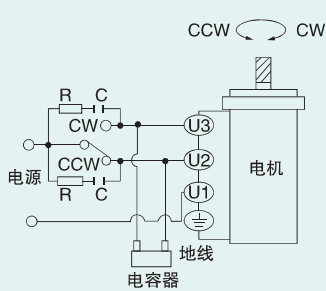
调速电机配SS速度控制器  
Speed regulating motor with SS speed controller



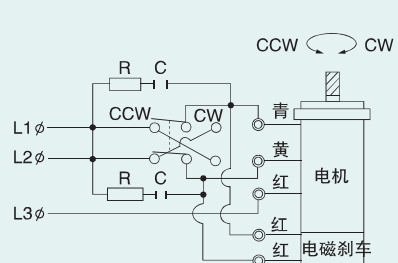
引出线电机  
Outgoing line motor



配端子箱电机  
Motor with terminal box



三相带电磁刹车电机  
Three-phase motor with electromagnet



图中R、C为阻容吸收回路，确保电机及相关控制部件可靠工作

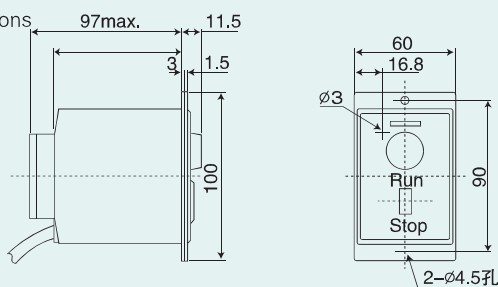
The R and C circuit is resistance-capacitance absorption circuit, which ensures the reliable operation of the motor and relative control components.

(R=5~330Ω C=0.1~0.22μF 250VAC(450VAC))

● US 速度控制器  
US Speed controller

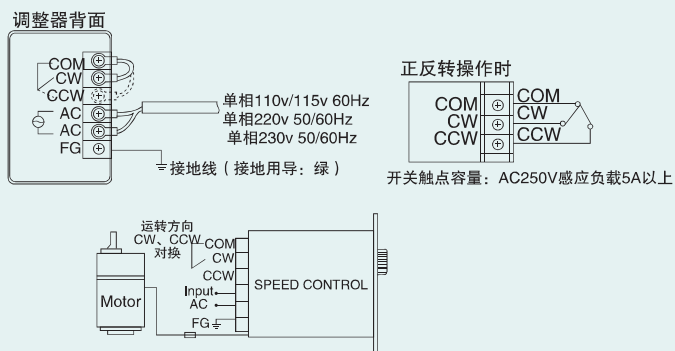


尺寸图 Dimensions



控制器接线图

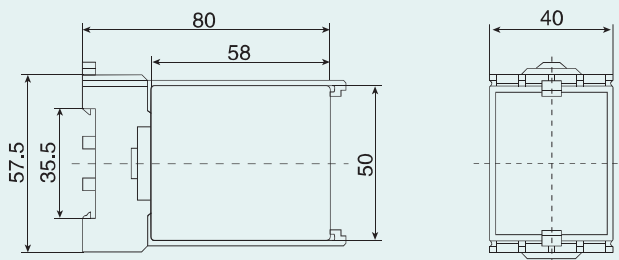
Connection diagrams of the controller



● SS 速度控制器  
SS Speed controller

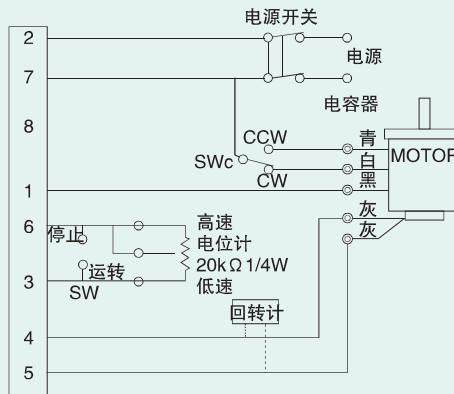


尺寸图 Dimensions



控制器接线图

Connection diagrams of the controllerbb

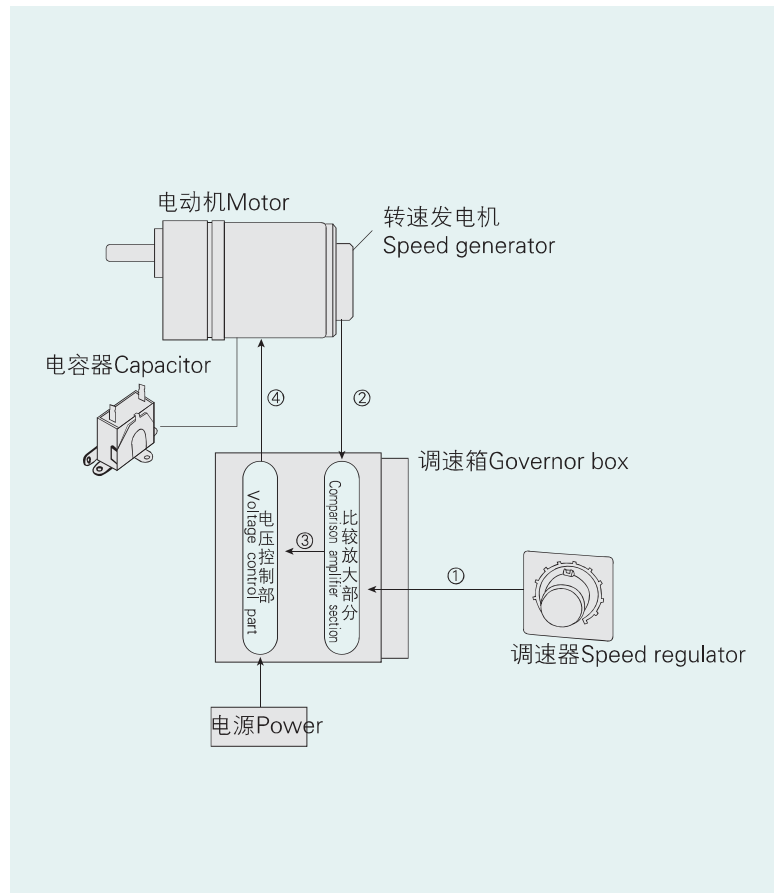


注: 以上“接线图”仅供参考。  
"Connection diagrams" is for reference only.

## ● 调速电机控制系统 Control system

### 控制原理 Control principle

- 由调速器提供速度设定电压。
- 检测出电动机转速并输出速度信号电压。
- 输出速度设定电压与速度信号电压的差。
- 为能达到所设定速度，按比较放大部分的输出提供电压给电动机。
- Speed lator provides speed setting voltage.
- Detects motor speed and outputs speed signal voltage.
- Output diffience between speed setting voltage and speed signal voltage.
- To reach the set speed, supply voltage to motor according to output of comparison amplifier section.



### 使用方法 Method of Use

- 操作步骤：速度控制器和电机接好后，接上AC电源，当控制器按钮调至RUN，从电机轴方向看，电机顺时针方向旋转。
- 不同的速度：基本型的速度控制器速度旋钮顺时针旋转，电机转速增加，反之电机转速减少，调整范围90-1350rpm。
- 关闭：将开关按钮指向STOP，电机运转停止，此按钮不是电源的开关按钮，需要长时间停止运转时，请另外设置电源开关。
- Operation: The speed control unit and the lead wire connector of the motor are connected and then the plug cord is connected to AC power. When the RUN/STOP switch of the control unit is switched to RUN, then it is turned clockwise.
- Variable Speed: If the SPEED VOLUME switch of the control unit is turned clockwise, the number of rotations of the motor increases and if it is turned counter-clockwise, it slows down. It is possible to control and designate the speed of the motor between 90-1350rpm.
- Stop: If the RUN/STOP switch of the control unit is switched to STOP, the motor stops. This switch is not an on-off switch for power. When the motor needs to be stopped for a long time, a separate power source should be installed and turned off.

## 6-25W

□60mm



## ● 电机特性

List of motor characteristics

电机型号 Motor model	输出功率 Output Power W	电压 Voltage VDC	无负载 No load		额定负载 Rated load				启动电流 Starting current A	启动扭矩 Starting torque	
			电流 Current A	转速 Revolution RPM	电流 Current A	转速 Revolution r/min	扭矩 Rated Torque			mN.m	gf.cm
							mN.m	gf.cm			
60D6-12-30S	6	12	1.2	3200	1.3	3000	19.5	195	8.3	220	2200
60D6-24-30S		24	0.35	3100	0.7				4.3	240	2400
60D6-90-30S		90	0.12	3350	0.07				1.2	240	2400
60D15-12-30S	15	12	0.8	3200	2.0	3000	49	490	13.5	370	3700
60D15-24-30S		24	0.4	3300	1.0				7.7	410	4100
60D15-90-30S		90	0.2	3200	0.4				1.9	450	4500
60D25-12-30S	25	12	1.2	3200	2.7	3000	80	800	25.0	750	7500
60D25-24-30S		24	0.35	3100	1.3				22.0	500	5000
60D25-90-30S		90	0.12	3350	0.35				10	2300	2300

## ● 减速电机允许负载

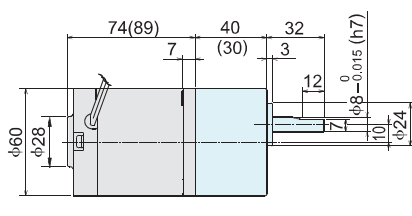
Allowable load for the gear-down motor

减速参数 Geared-down parameter	同步转速 r/min Synchronous speed	减速比 i 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	
最大允许负载 Max allowable load	6W	kg.cm N.m	0.5 0.05	0.6 0.06	0.8 0.08	0.9 0.09	1.2 0.12	1.4 0.14	1.6 0.16	2.0 0.20	2.4 0.24	2.8 0.28	2.8 0.28	3.6 0.36	4.3 0.43	5.1 0.51	5.7 0.57	6.4 0.64	7.7 0.77	9.7 0.97	11.6 1.16	12.9 1.29	15.4 1.54	19.3 1.93	23.2 2.32
	15W	kg.cm N.m	1.2 0.12	1.4 0.14	2.0 0.20	2.4 0.24	3.0 0.30	3.6 0.36	4.0 0.40	5.0 0.50	6.0 0.60	7.1 0.71	7.2 0.72	8.9 0.89	10.7 1.07	12.9 1.29	14.3 1.43	16.2 1.62	19.4 1.94	24.3 2.43	29.1 2.91	30.0 3.0	30.0 3.0	30.0 3.0	30.0 3.0
	25W	kg.cm N.m	2.0 0.2	2.4 0.24	3.3 0.33	3.9 0.39	4.9 0.49	5.9 0.59	6.6 0.66	8.2 0.82	9.9 0.99	11.8 1.18	11.8 1.18	14.8 1.48	17.8 1.78	21.3 2.13	23.7 2.37	29.6 2.96	32.1 3.21	40.1 4.01	48.2 4.82	53.5 5.35	64.2 6.42	80.0 8.0	80.0 8.0

## ● 尺寸图

Dimensions

配减速箱型 With gearbox type 60D/60GK□

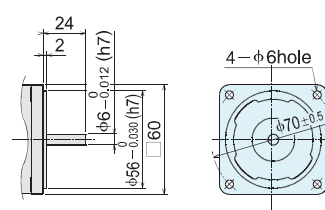


结构: 电动机+减速器

重量: 1.8 kg

减速比: 20-250; 图中()内的数值速比为3-15

电动机圆轴型 Circular shaft type 60D



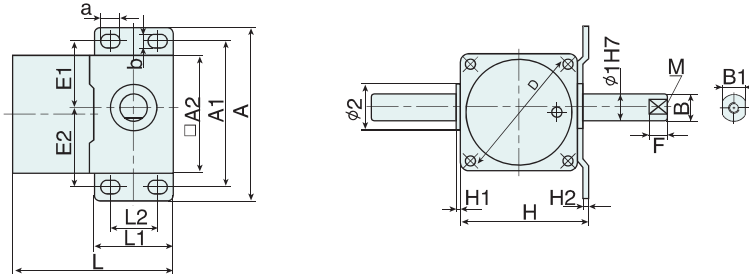
结构: 电动机

重量: 1.5 kg

※ 以上参数仅供参考 It is for reference only.

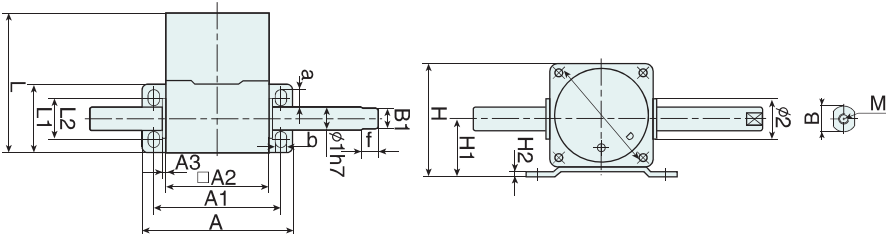


● 垂直直线齿轮箱  
Linear type gear head-Vertical



型号	L	L1	L2	A	A1	A2	E1	E2	a	b	ø1	ø2	D	f	B	B1	H	H1	H2	M
60LF	81.5	40	24	88	74	60	34.5	39.5	9.5	6.5	14	24	70	9	13	12	66	2	3	5
70LF	84	40	24	110	90	70	47	43	9.5	6.5	14	26	82	9	12.5	12	76	3	2.5	5
80LF	96.5	53.5	30	120	100	80	45	55	10	8	20	32	94	10	19.7	17	82	3.2	12	10
90LF	121	55	29	140	116	90	53	63	14	12	25	40	104	12	24.7	21	95	3.2	18	12

● 水平直线齿轮箱  
Linear type gear head-Horizontal



型号	L	L1	L2	A	A1	A2	A3	a	b	ø1	ø2	D	f	B	B1	H	H1	H2	M
60LB	81.5	40	24	88	74	60	2	9.5	6.5	14	24	70	9	13	12	66	33.5	3	5
70LB	84	40	24	110	90	70	3	9.5	6.5	14	26	82	9	12.5	12	76	39	2.5	5
80LB	96.5	53.5	30	120	100	80	3.2	10	8	20	32	94	10	19.7	17	82	37	12	10
90LB	121	55	29	140	116	90	3.2	14	12	25	40	104	12	24.7	21	95	45	18	12

● 直线齿轮箱参数  
Parameter of the Linear type gear head

型号 Type	速度 (mm/s) Speed	最大搬运质量(kg) Max.handling quality	齿条有效行程(mm) Rack effective travel	电机机座号 Frame size	功率(W) Power
60LF(B)	10~100	20	100~500	60	6
70LF(B)	10~100	40	100~500	70	15
80LF(B)	10~100	70	100~700	80	25
90LF(B)	10~100	140	100~1000	90	40~120

# 60-120W

□90mm



● 电机特性

List of motor characteristics

电机型号 Motor model	输出功率 Output Power W	电压 Voltage VDC	无负载 No load		额定负载 Rated load				启动电流 Starting current A	启动扭矩 Starting torque	
			电流 Current A	转速 Revolution RPM	电流 Current A	转速 Revolution r/min	扭矩 Rated Torque			mN.m	gf.cm
							mN.m	gf.cm			
90D60-12-30S	60	12	1.3	3100	7.5	3000	200	2000	40.0	1800	18000
90D60-24-30S		24	0.5	3150	3.5				35.0	2200	22000
90D60-90-30S		90	0.2	3100	0.8				12.0	2400	24000
90D90-12-30S	90	12	2.0	3450	10.0	3000	290	2900	60.0	2000	20000
90D90-24-30S		24	0.9	3050	5.0				40.0	3500	35000
90D90-90-30S		90	0.3	3200	1.4				15.0	3200	32000
90D120-12-30S	120	12	2.3	3450	13	3000	420	4200	104.0	3600	36000
90D120-24-30S		24	1.3	3050	7.2				75.0	2500	25000
90D120-90-30S		90	0.4	3200	2.0				17.0	3700	37000

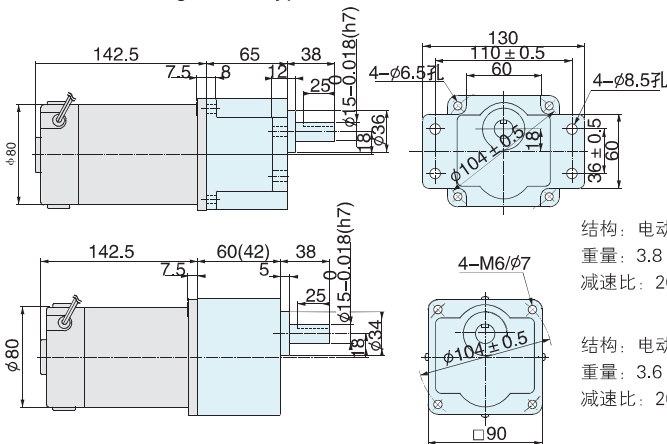
● 减速电机允许负载

Allowable load for the gear motor

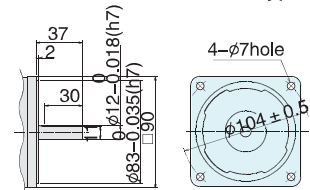
减速参数 Geared-down parameter	同步转速r/min Synchronous speed	1000	833	600	500	400	333	300	240	200	167	150	120	100	83	75	60	50	40	33	30	25	20	17	
	减速比 i ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	
最大允许负载 Max allowable load	60W	kg.cm N.m	4.7 0.47	5.7 0.57	7.9 0.79	9.5 0.95	11.8 1.18	14.2 1.42	15.8 1.58	17.8 1.78	21.4 2.14	25.6 2.56	28.5 2.85	32.2 3.22	38.6 3.86	16.3 1.63	51.5 5.15	64.4 6.44	77.2 7.72	86.3 8.63	103.5 10.35	115.1 11.51	138.1 13.81	172.6 17.26	200 20
	90W	kg.cm N.m	7.1 0.71	8.5 0.85	11.8 1.18	14.2 1.42	17.7 1.77	21.3 2.13	23.7 2.37	26.6 2.66	32 3.2	38.4 3.84	42.6 4.26	48.2 4.82	57.8 5.78	69.4 6.94	77.1 7.71	96.4 9.64	115.6 11.56	129.2 12.92	155.1 15.51	172.3 17.23	200 20	200 20	200 20
	120W	kg.cm N.m	9.5 0.95	11.4 1.14	15.8 1.58	19.0 1.90	23.7 2.37	28.4 2.84	31.6 3.16	35.6 3.56	42.7 4.27	51.2 5.12	56.9 5.69	64.4 6.44	77.2 7.72	92.7 9.27	103 10.3	128.7 12.87	154.41 15.441	172.6 17.26	200 20	200 20	200 20	200 20	200 20

● 尺寸图 Dimensions

配减速箱型 With gearbox type 60D/60GS ( GK ) □



电动机圆轴型 Circular shaft type 90D



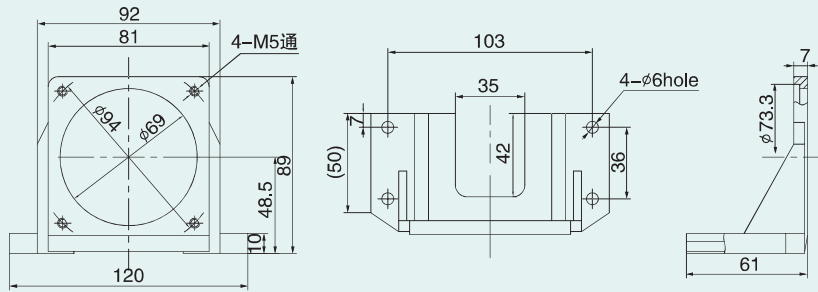
结构：电动机  
重量：2.5 kg

※ 以上参数仅供参考 It is for reference only.

● 电机安装底座  
Install base of the gear motor

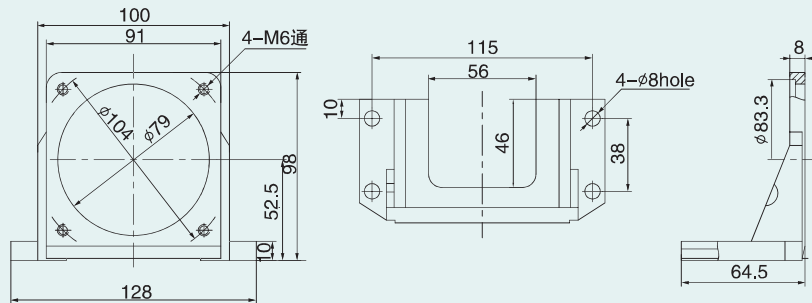


□ 80mm



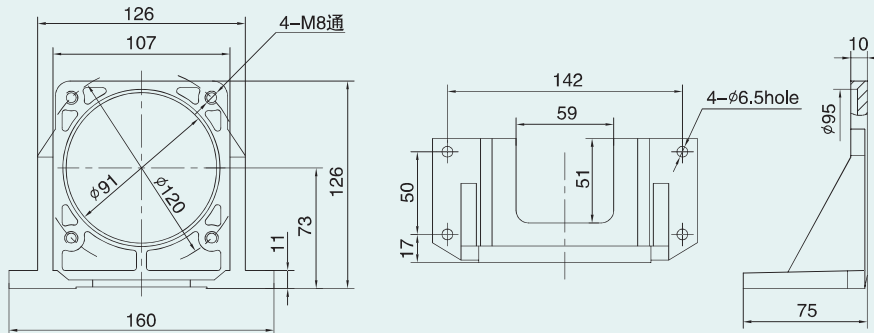
材质：铝合金压铸  
重量：0.2 kg

□ 90mm



材质：铝合金压铸  
重量：0.2 kg

□ 100mm

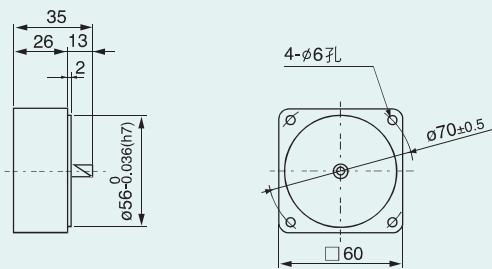


材质：铝合金压铸  
重量：0.4 kg

● 中间减速箱  
Middle speed reducer

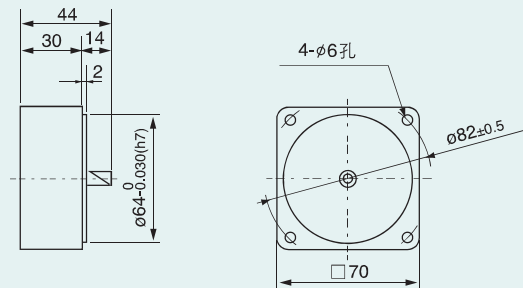


60GK10X



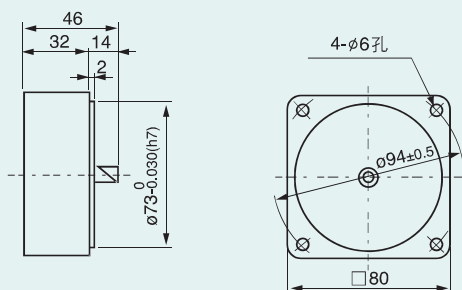
结构：中间减速器  
重量：0.2 kg  
减速比：10

70GK10X



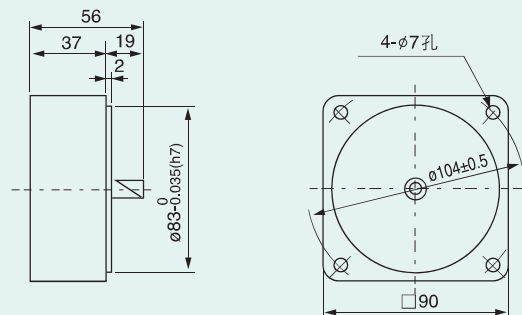
结构：中间减速器  
重量：0.3 kg  
减速比：10

80GK 10X



结构：中间减速器  
重量：0.5 kg  
减速比：10

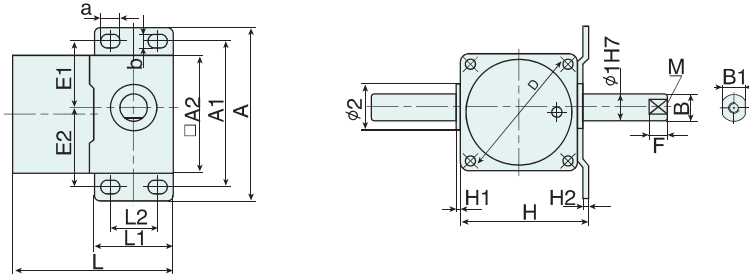
90GK10X



结构：中间减速器  
重量：1 kg  
减速比：10

● 垂直直线齿轮箱

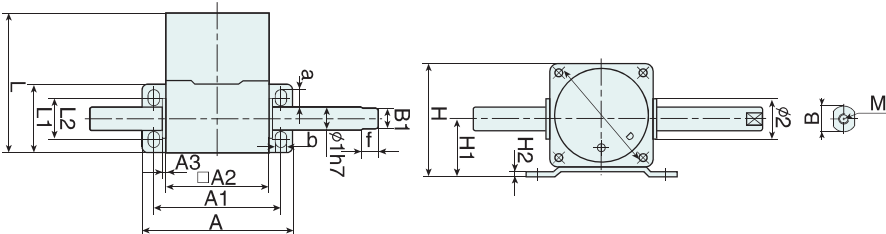
Linear type gear head-Vertical



型号	L	L1	L2	A	A1	A2	E1	E2	a	b	ø1	ø2	D	f	B	B1	H	H1	H2	M
60LF	81.5	40	24	88	74	60	34.5	39.5	9.5	6.5	14	24	70	9	13	12	66	2	3	5
70LF	84	40	24	110	90	70	47	43	9.5	6.5	14	26	82	9	12.5	12	76	3	2.5	5
80LF	96.5	53.5	30	120	100	80	45	55	10	8	20	32	94	10	19.7	17	82	3.2	12	10
90LF	121	55	29	140	116	90	53	63	14	12	25	40	104	12	24.7	21	95	3.2	18	12

● 水平直线齿轮箱

Linear type gear head-Horizontal



型号	L	L1	L2	A	A1	A2	A3	a	b	ø1	ø2	D	f	B	B1	H	H1	H2	M
60LB	81.5	40	24	88	74	60	2	9.5	6.5	14	24	70	9	13	12	66	33.5	3	5
70LB	84	40	24	110	90	70	3	9.5	6.5	14	26	82	9	12.5	12	76	39	2.5	5
80LB	96.5	53.5	30	120	100	80	3.2	10	8	20	32	94	10	19.7	17	82	37	12	10
90LB	121	55	29	140	116	90	3.2	14	12	25	40	104	12	24.7	21	95	45	18	12

● 直线齿轮箱参数

Parameter of the Linear type gear head

型号 Type	速度 (mm/s) Speed	最大搬运质量(kg) Max.handling quality	齿条有效行程(mm) Rack effective travel	电机机座号 Frame size	功率(W) Power
60LF(B)	10~100	20	100~500	60	6
70LF(B)	10~100	40	100~500	70	15
80LF(B)	10~100	70	100~700	80	25
90LF(B)	10~100	140	100~1000	90	40~120