

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 | | |
| | V | W | r/min | A | r/min | mN.m | A | H | kg |
| Z5D60-12□ | 12 | 60 | 3000 | 2.0 Max. | 2600 | 220 | 9.0 | 2000 | 2.2 |
| Z5D60-24□ | 24 | 60 | 3100 | 1.0 Max. | 2800 | 205 | 3.8 | 2000 | 2.2 |
| Z5D60-90□ | 90 | 60 | 3100 | 0.3 Max. | 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下根据客户要求定制。
Motor voltage, power and speed will be customized according to his requestment under the allowed circumstance of adoptable dimension.

种类 Type

● 电动机 Motor

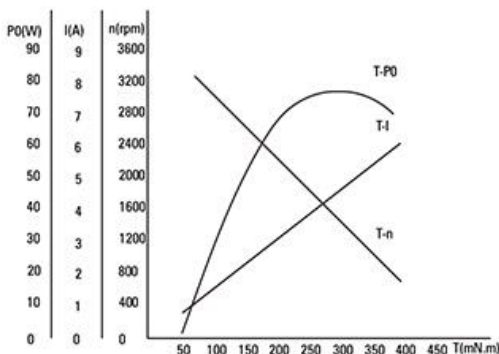
| 机型 Type | 型号Model | | |
|-----------------------|----------------------|--------------------|--------------------|
| | 齿轮轴型 Pinion Shaft | 圆轴型 Round Shaft | 圆轴型 Round Shaft |
| 导线型 Lead Wire Type | Z5D60-12GU | Z5D60-12A | Z5D60-12A1 |
| | Z5D60-24GU | Z5D60-24A | Z5D60-24A1 |
| | Z5D60-90GU | Z5D60-90A | Z5D60-90A1 |

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

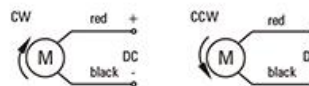
| 减速器种类 Gearhead Type | 减速器型号 Gearhead Model | 减速比 Gear Ratio |
|----------------------------------|----------------------------------|---|
| 长寿命●低噪音 Long Life ● Low Noise | 5GU□KB | 3、3.6、5、6、7.5、9、 12.5、15、18、25、30、 36、50、60、75、90、 100、120、150、180、200 |
| | 5GU10XX (中间减速器 Decimal Gearhead) | |

● 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

● 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。
Stanclard length of lead wire:300mm±10, model: UI1015 type: AWG16; lead wire length, model will be customerised by dient requestmant 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. 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 decimal 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 |
|------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Z5D60-24GU | 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 |
| | 5GU□KB | 0.50 | 0.60 | 0.83 | 0.99 | 1.24 | 1.49 | 1.49 | 1.86 | 2.24 | 2.69 | 2.69 | 3.36 | 4.03 | 4.83 | 5.37 | 6.71 | 8.06 | 10.1 | 10.9 | 12.1 | 14.5 | 18.1 | 20.0 | 20.0 |
| | | 4.87 | 5.85 | 8.12 | 9.75 | 12.2 | 14.6 | 14.6 | 18.3 | 21.9 | 26.3 | 26.3 | 32.9 | 39.5 | 47.4 | 52.6 | 65.8 | 78.9 | 98.7 | 107 | 118 | 142 | 178 | 200 | 200 |

■ 容许悬挂负载·容许轴向负载 To Allow The Hoisting Of The Load Allow Axial Load

电动机 (圆轴型) → P272页 Motor(Round Shaft) → P272
减速机 → P272页 Gearhead → P272

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

→ P272页 → P272

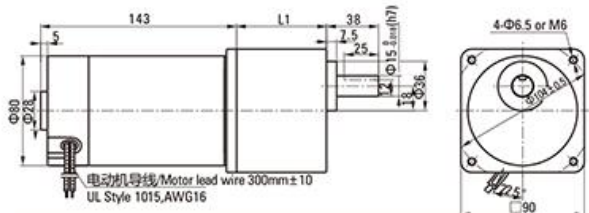
● 圆轴型的转轴部分 Shaft Section Of Round Shaft Type
除重量及轴部外电动机外形与齿轮轴型相同。
Excluding weight and the shaft section motor shape are the same as those of the pinion shaft type.

■ 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 : 2.2kg 减速机 Gearhead : 1.5kg



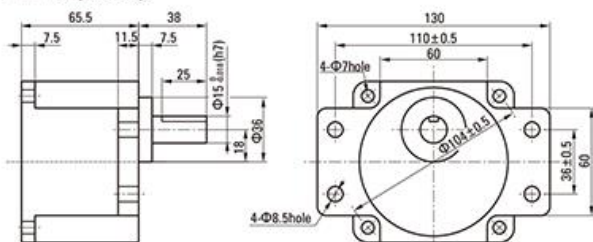
| 电动机型号 Motor Model | 减速机型号 Gearhead Model | 减速比 Gear Ratio | L1 |
|--|----------------------|----------------|------|
| Z5D60-12GU Z5D60-24GU Z5D60-90GU | 5GU□KB | 3~200 | 65.5 |

● 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

● 凸缘安装型减速机 Flange Mounting Reducer

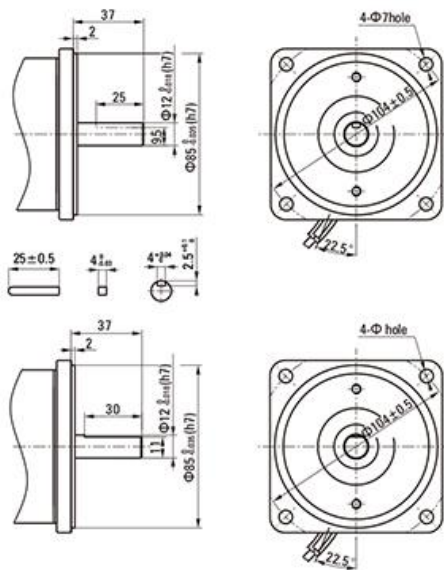
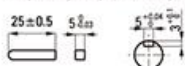
可安装在GU齿轮轴型上 Can be mounted on GU type gear shaft 5GU□K

重量 Weight: 1.5kg



● 键·键槽 (减速机附件)

Key·Keyway (The Key Is Included With The Gearhead)



● 中间减速器 Decimal 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

5GU10X

重量 Weight : 0.651kg

