# 20mm 1.8°步进行星减速电机

## NEMA 8 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR



### 常规参数
GENERAL PARAMETERS

| | |
|---|---|
| ● 齿轮材料 Gear Material | 金属 Metal/粉末冶金 Power metal |
| ● 输出轴轴承形式 Bearing at output | 滚珠轴承Ball Bearings |
| ● 径向间隙 Radial play of shaft | ≤ 0.05mm |
| ● 轴向间隙 Thrust play of shaft | ≤ 0.2mm |
| ● 径向负荷 Radial load | ≤ 1.2kgf |
| ● 轴向负荷 Shaft axial load | ≤ 0.7kgf |
| ● 背隙（无负载时）Backlash,at no-load | ≤ 2.5° |

### 常规指标及参数
COMMON RATINGS & SPECIFICATIONS

| 电机型号 Model | 机身长 Length L mm | 相电流 Phase Current A | 相电阻 Phase Resistance Ω | 相电感 Phase Inductance mH | 静转矩 Holding Torque N.m | 转子惯量 Rotor Inertia $g.cm^2$ | 引线数 Lead Wire NO. | 重量 Weight Kg |
|---|---|---|---|---|---|---|---|---|
| 20HS30-0504A | 30 | 0.5 | 4.8 | 1.3 | 0.011 | 2.1 | 4 | 0.05 |
| 20HS38-0604A | 38 | 0.6 | 6.5 | 1.7 | 0.018 | 3.0 | 4 | 0.06 |
| 20HS42-0504A | 42 | 0.5 | 5.2 | 1.8 | 0.020 | 3.8 | 4 | 0.09 |

### M22GXR 行星减速机技术参数
PLANETARY GEAR ELECTRICAL SPECIFICATIONS

| 减速级数 Number of gear trains | | 1级 | 2级 | 3级 | 4级 |
|---|---|---|---|---|---|
| 减速比 Reduction ratio | | 3.7,5.2 | 14,19,27 | 51,71,100,139 | 189,264,369,516,720 |
| 减速机长度（L1）Reducer length（L1） | mm | 24.4 | 33 | 41.5 | 49.8 |
| 额定输出扭矩 Rated output torque | N.m | 0.1 | 0.3 | 0.4 | 0.5 |
| 瞬时转矩 Torque moment | N.m | 三倍于额定允许负载 | | | |
| 传动效率 Transmission efficiency | % | 80 | 70 | 60 | 50 |
| 重量 Weight | g | 46 | 51 | 58 | 65 |

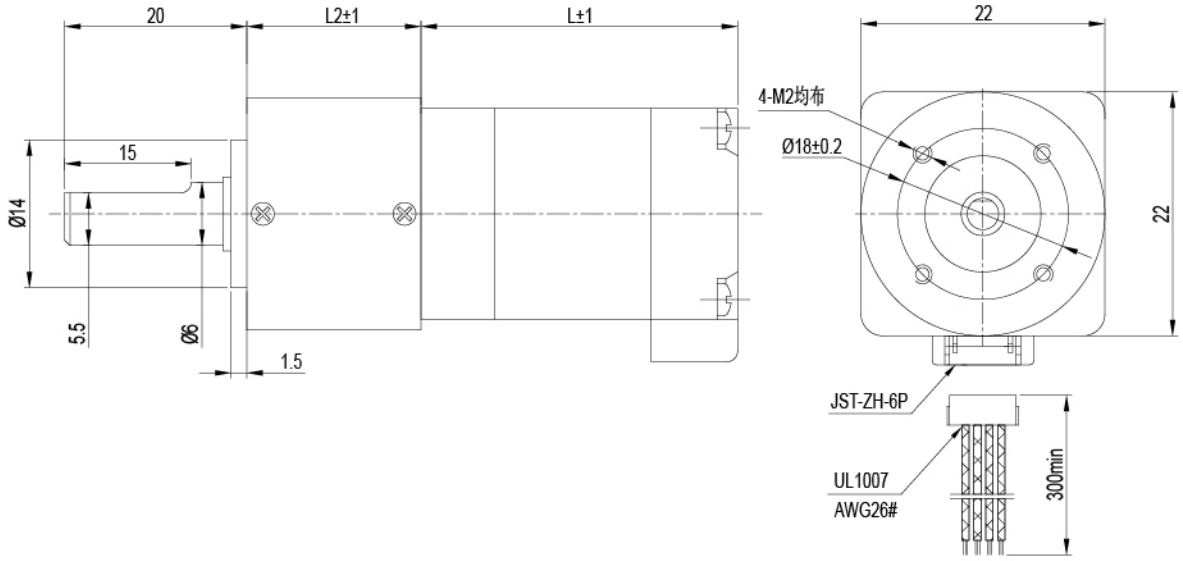
我们可以根据客户要求定制电机的电气参数、电机输出轴尺寸等形状，也可以增配带轮、偏心减速箱和行星减速箱、编码器等，查看更多产品信息请浏览公司网站：www.zz-motor.com
We can customize the motor electrical parameters, output shaft size and other shapes according to customer requirements. We can also add planetary reducers, encoders, etc. For more product information, please visit our company website: en.zz-motor.com
注意事项：电机安装时务必使用安装止口定位，严格保证电机输出轴与负载的同心度，电机正常工作时表面温度不允许超过85°C
Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

# 20mm 1.8°步进行星减速电机

NEMA 8 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR

## 电机机械尺寸
DIMENSIONS UNIT=MM




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Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

# 28mm 1.8°步进行星减速电机

## NEMA 11 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR



### 常规参数
GENERAL PARAMETERS

| | |
|---|---|
| ● 齿轮材料 Gear Material | 金属 Metal/粉末冶金 Power metal |
| ● 输出轴轴承形式 Bearing at output | 滚珠轴承Ball Bearings |
| ● 径向间隙 Radial play of shaft | ≤ 0.05mm |
| ● 轴向间隙 Thrust play of shaft | ≤ 0.3mm |
| ● 径向负荷 Radial load | ≤ 3.5kgf |
| ● 轴向负荷 Shaft axial load | ≤ 2.5kgf |
| ● 背隙（无负载时）Backlash,at no-load | ≤ 3° |

### 常规指标及参数
COMMON RATINGS & SPECIFICATIONS

| 电机型号 Model | 机身长 Length L mm | 相电流 Phase Current A | 相电阻 Phase Resistance Ω | 相电感 Phase Inductance mH | 静转矩 Holding Torque N.m | 转子惯量 Rotor Inertia g.cm² | 引线数 Lead Wire NO. | 重量 Weight Kg |
|---|---|---|---|---|---|---|---|---|
| 28HS30-1004A | 30 | 1.0 | 2.9 | 1.9 | 0.07 | 8.5 | 4 | 0.09 |
| 28HSA33-0804A | 33 | 0.8 | 5.3 | 3.3 | 0.08 | 9.3 | 4 | 0.1 |
| 28HS40-0704A | 40 | 0.7 | 6.5 | 6.0 | 0.12 | 13.5 | 4 | 0.12 |
| 28HSA45-0804A | 45 | 0.8 | 7.8 | 5.4 | 0.13 | 15 | 4 | 0.15 |
| 28HSA48-0804A | 48 | 0.8 | 8.6 | 6.7 | 0.13 | 17.2 | 4 | 0.20 |
| 28HS50-0674A | 50 | 0.67 | 8.4 | 5.6 | 0.12 | 18.9 | 4 | 0.21 |

### M28GXR 行星减速机技术参数
PLANETARY GEAR ELECTRICAL SPECIFICATIONS

| 减速级数 Number of gear trains | | 1级 | 2级 | 3级 | 4级 |
|---|---|---|---|---|---|
| 减速比 Reduction ratio | | 3.7,5.2 | 14,19, 27 | 51,71,100,139 | 189,264,369,516,720 |
| 减速机长度（L1）Reducer length（L1） | mm | 32 | 41 | 50 | 59 |
| 额定输出扭矩 Rated output torque | N.m | 0.3 | 1.0 | 2.0 | 2.5 |
| 瞬时转矩 Torque moment | N.m | 三倍于额定允许负载 | | | |
| 传动效率 Transmission efficiency | % | 80 | 70 | 60 | 50 |
| 重量 Weight | g | 93 | 120 | 150 | 185 |

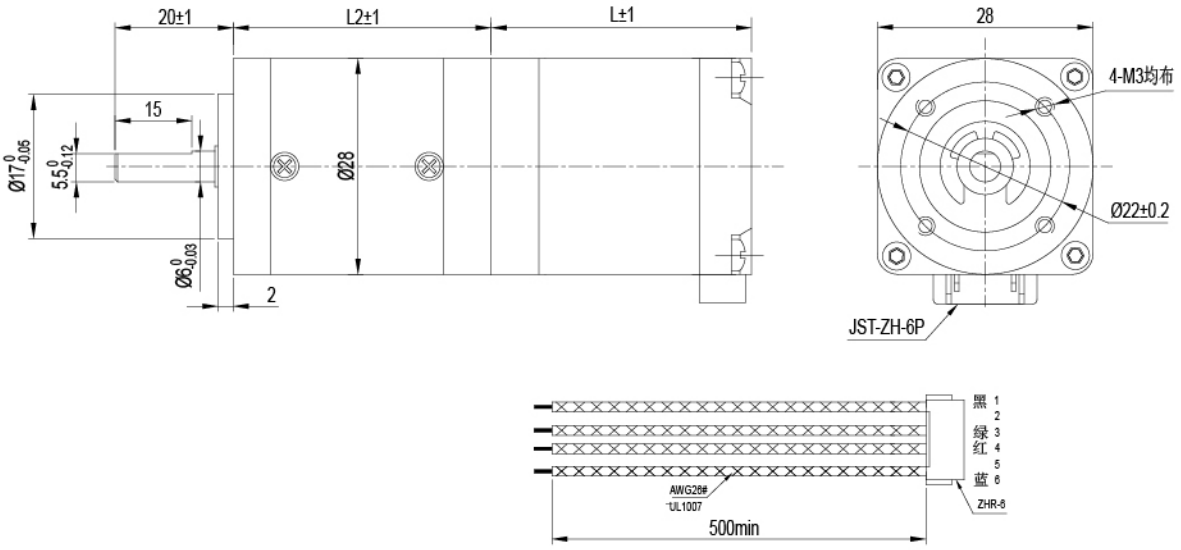
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注意事项：电机安装时务必使用安装止口定位，严格保证电机输出轴与负载的同心度，电机正常工作时表面温度不允许超过85°C
Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

# 28mm 1.8°步进行星减速电机

NEMA 11 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR

## 电机机械尺寸
DIMENSIONS UNIT=MM




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Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

# 42mm 1.8°步进行星减速电机

NEMA 17 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR



## 常规参数
GENERAL PARAMETERS

| | |
|---|---|
| ● 齿轮材料 Gear Material | 金属 Metal/粉末冶金 Power metal |
| ● 输出轴轴承形式 Bearing at output | 滚珠轴承Ball Bearings |
| ● 径向间隙 Radial play of shaft | ≤ 0.05mm |
| ● 轴向间隙 Thrust play of shaft | ≤ 0.3mm |
| ● 径向负荷 Radial load | ≤ 8.0kgf |
| ● 轴向负荷 Shaft axial load | ≤ 3.0kgf |
| ● 背隙（无负载时）Backlash,at no-load | ≤ 3° |

## 常规指标及参数
COMMON RATINGS & SPECIFICATIONS

| 电机型号 Model | 机身长 Length L mm | 相电流 Phase Current A | 相电阻 Phase Resistance Ω | 相电感 Phase Inductance mH | 静转矩 Holding Torque N.m | 转子惯量 Rotor Inertia g.cm² | 引线数 Lead Wire NO. | 重量 Weight Kg |
|---|---|---|---|---|---|---|---|---|
| 42HS20-0804A | 20 | 0.8 | 3.8 | 4.5 | 0.1 | 24 | 4 | 0.12 |
| 42HS28-0604A | 28 | 0.6 | 8 | 10 | 0.12 | 30 | 4 | 0.15 |
| 42HS34-1304A | 34 | 1.3 | 2 | 2.8 | 0.28 | 34 | 4 | 0.22 |
| 42HS40-1704A | 40 | 1.7 | 2.2 | 3.8 | 0.35 | 54 | 4 | 0.28 |
| 42HS48-1704A | 48 | 1.7 | 3.1 | 5.0 | 0.52 | 68 | 4 | 0.35 |
| 42HS60-1704A | 60 | 1.7 | 1.25 | 3.3 | 0.80 | 80 | 4 | 0.48 |

## M36GXR 行星减速机技术参数
PLANETARY GEAR ELECTRICAL SPECIFICATIONS

| 减速级数 Number of gear trains | | 1级 | 2级 | 3级 | 4级 |
|---|---|---|---|---|---|
| 减速比 Reduction ratio | | 3.7, 5.2 | 14, 19, 27 | 51, 71, 100, 139 | 189, 264, 369, 516, 720 |
| 减速机长度（L1）Reducer length（L1） | mm | 31 | 40 | 49 | 58 |
| 额定输出扭矩 Rated output torque | N.m | 0.3 | 1.2 | 2.5 | 3 |
| 瞬时转矩 Torque moment | N.m | 三倍于额定允许负载 | | | |
| 传动效率 Transmission efficiency | % | 80 | 70 | 60 | 50 |
| 重量 Weight | g | 195 | 210 | 290 | 330 |

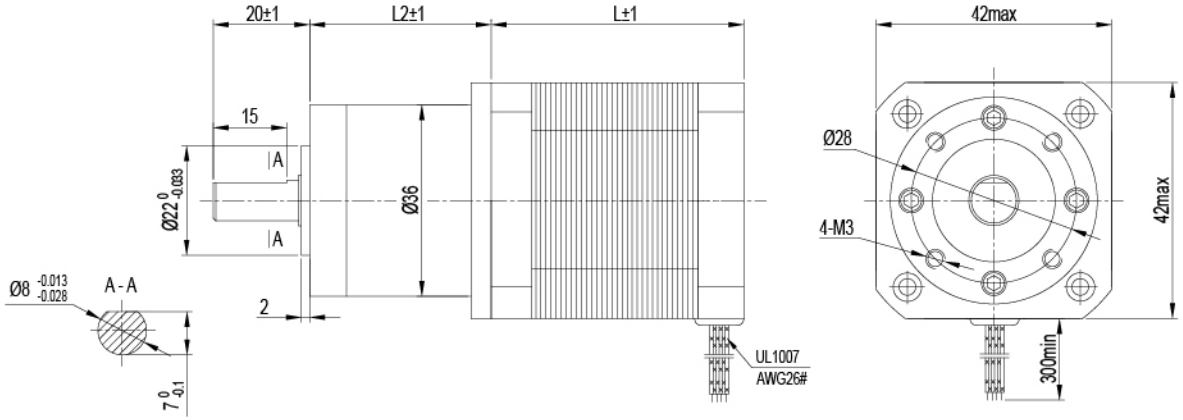
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We can customize the motor electrical parameters, output shaft size and other shapes according to customer requirements. We can also add planetary reducers, encoders, etc. For more product information, please visit our company website: en.zz-motor.com
注意事项：电机安装时务必使用安装止口定位，严格保证电机输出轴与负载的同心度，电机正常工作时表面温度不允许超过85°C
Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

# 42mm 1.8°步进行星减速电机

NEMA 17 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR

## 电机机械尺寸
DIMENSIONS UNIT=MM




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Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

# 57mm 1.8°步进行星减速电机

NEMA 23 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR



## 常规参数
GENERAL PARAMETERS

| | |
|---|---|
| ● 齿轮材料 Gear Material | 金属 Metal/粉末冶金 Power metal |
| ● 输出轴轴承形式 Bearing at output | 滚珠轴承Ball Bearings |
| ● 径向间隙 Radial play of shaft | ≤ 0.05mm |
| ● 轴向间隙 Thrust play of shaft | ≤ 0.3mm |
| ● 径向负荷 Radial load | ≤ 20kgf |
| ● 轴向负荷 Shaft axial load | ≤ 12kgf |
| ● 背隙（无负载时）Backlash,at no-load | ≤ 3° |

## 常规指标及参数
COMMON RATINGS & SPECIFICATIONS

| 电机型号 Model | 机身长 Length L mm | 相电流 Phase Current A | 相电阻 Phase Resistance Ω | 相电感 Phase Inductance mH | 静转矩 Holding Torque N.m | 转子惯量 Rotor Inertia g.cm² | 引线数 Lead Wire NO. | 重量 Weight Kg |
|---|---|---|---|---|---|---|---|---|
| 57HS41-2504A | 41 | 2.5 | 1.1 | 2.4 | 0.55 | 174 | 4 | 0.45 |
| 57HS51-2004A | 51 | 2.0 | 1.3 | 4 | 0.8 | 257 | 4 | 0.64 |
| 57HS56-3004A | 56 | 3.0 | 1.1 | 3.5 | 1.2 | 300 | 4 | 0.7 |
| 57HS64-4004A | 64 | 4.0 | 0.6 | 1.7 | 1.4 | 390 | 4 | 0.85 |
| 57HS76-3004A | 76 | 3.0 | 0.5 | 2.4 | 1.5 | 514 | 4 | 1 |
| 57HS84-3004A | 84 | 3.0 | 0.57 | 2.8 | 1.5 | 578 | 4 | 1.15 |
| 57HS100-4204A | 100 | 4.2 | 0.75 | 3.4 | 2.4 | 758 | 4 | 1.25 |
| 57HS115-4204A | 112 | 4.2 | 0.8 | 3.8 | 2.5 | 856 | 4 | 1.4 |

## M56GXR 行星减速机技术参数
PLANETARY GEAR ELECTRICAL SPECIFICATIONS

| 减速级数 Number of gear trains | | 1级 | 2级 | 3级 | 4级 |
|---|---|---|---|---|---|
| 减速比 Reduction ratio | | 3.6, 4.3 | 13, 15, 18 | 47, 55, 65, 77 | 168, 198, 234, 276, 326 |
| 减速机长度（L1）Reducer length（L1） | mm | 41 | 52 | 63 | 74.5 |
| 额定输出扭矩 Rated output torque | N.m | 2 | 8 | 16 | 20 |
| 瞬时转矩 Torque moment | N.m | 三倍于额定允许负载 | | | |
| 传动效率 Transmission efficiency | % | 80 | 70 | 60 | 50 |
| 重量 Weight | g | 500 | 600 | 700 | 850 |

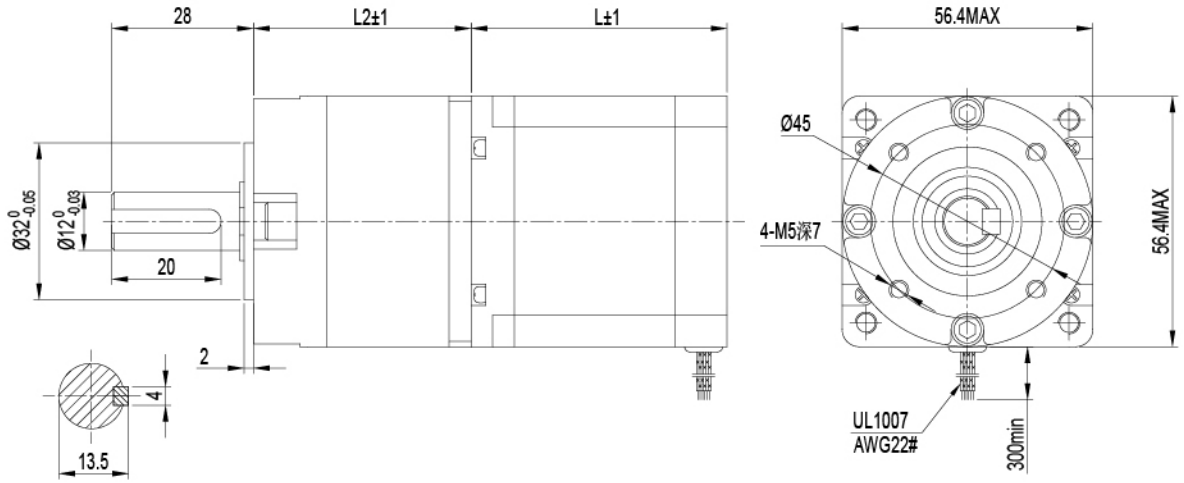
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Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

# 57mm 1.8°步进行星减速电机

NEMA 23 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR

## 电机机械尺寸
DIMENSIONS UNIT=MM

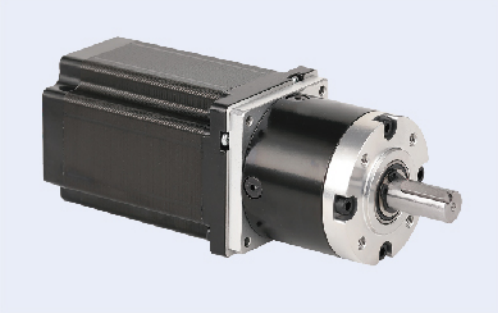



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Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

# 60mm 1.8°步进行星减速电机

## NEMA 24 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR



### 常规参数
GENERAL PARAMETERS

| | |
|---|---|
| ● 齿轮材料 Gear Material | 金属 Metal/粉末冶金 Power metal |
| ● 输出轴轴承形式 Bearing at output | 滚珠轴承Ball Bearings |
| ● 径向间隙 Radial play of shaft | ≤ 0.05mm |
| ● 轴向间隙 Thrust play of shaft | ≤ 0.3mm |
| ● 径向负荷 Radial load | ≤ 20kgf |
| ● 轴向负荷 Shaft axial load | ≤ 12kgf |
| ● 背隙（无负载时）Backlash,at no-load | ≤ 3° |

### 常规指标及参数
COMMON RATINGS & SPECIFICATIONS

| 电机型号 Model | 机身长 Length L mm | 相电流 Phase Current A | 相电阻 Phase Resistance Ω | 相电感 Phase Inductance mH | 静转矩 Holding Torque N.m | 转子惯量 Rotor Inertia g.cm² | 引线数 Lead Wire NO. | 重量 Weight Kg |
|---|---|---|---|---|---|---|---|---|
| 60HS56-4204A | 56 | 4.2 | 0.4 | 1.6 | 1.25 | 478 | 4 | 0.58 |
| 60HS65-2804A | 65 | 2.8 | 0.95 | 2.5 | 1.4 | 590 | 4 | 0.58 |
| 60HS88-4204A | 88 | 4.2 | 0.85 | 2.8 | 2.5 | 987 | 4 | 1.4 |
| 60HS100-4204A | 100 | 4.2 | 0.8 | 3.0 | 2.8 | 1163 | 4 | 1.6 |

### M56GXR 行星减速机技术参数
PLANETARY GEAR ELECTRICAL SPECIFICATIONS

| 减速级数 Number of gear trains | | 1级 | 2级 | 3级 | 4级 |
|---|---|---|---|---|---|
| 减速比 Reduction ratio | | 3.6, 4.3 | 13, 15, 18 | 47, 55, 65, 77 | 168, 198, 234, 276, 326 |
| 减速机长度（L1）Reducer length（L1） | mm | 41 | 52 | 63 | 74.5 |
| 额定输出扭矩 Rated output torque | N.m | 2 | 8 | 16 | 20 |
| 瞬时转矩 Torque moment | N.m | 三倍于额定允许负载 | | | |
| 传动效率 Transmission efficiency | % | 80 | 70 | 60 | 50 |
| 重量 Weight | g | 500 | 600 | 700 | 850 |

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注意事项：电机安装时务必使用安装止口定位，严格保证电机输出轴与负载的同心度，电机正常工作时表面温度不允许超过85°C
Notes: When installing the motor, position it via the mounting spigot. Ensure strict concentricity between the motor output shaft and the load. The surface temperature of the motor shall not exceed 85°C during normal operation.

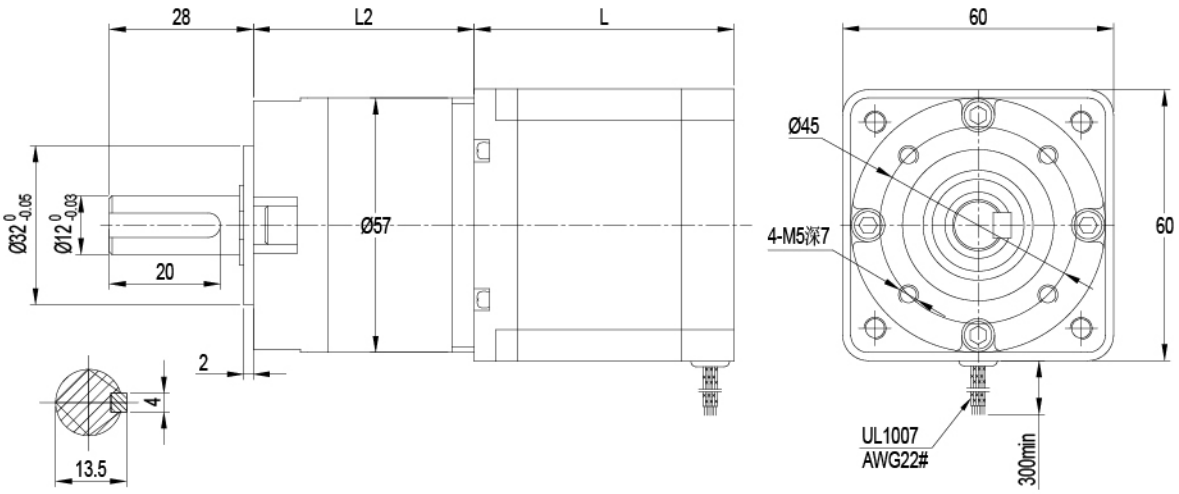
# 60mm 1.8°步进行星减速电机

NEMA 24 1.8°STEPPER MOTOR WITH PLANETARY GEARBOX

ZZMOTOR

## 电机机械尺寸

DIMENSIONS UNIT=MM




我们可以根据客户要求定制电机的电气参数、电机输出轴尺寸等形状，也可以增配带轮、偏心减速箱和行星减速箱、编码器等，查看更多产品信息请浏览公司网站：www.zz-motor.com

We can customize the motor electrical parameters, output shaft size and other shapes according to customer requirements. We can also add planetary reducers, encoders, etc. For more product information, please visit our company website: en.zz-motor.com

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