

2232N5M2B $\varnothing 22\text{mm} \times 31.6\text{mm}$, 贵金属电刷 Precious Metal Brushes

应用领域: 医疗、保健、汽车、机器人、工业自动化等精密驱动领域。

Applications: precision drives in medical equipment and devices, healthcare products, automotive, robotics, and industrial automation.

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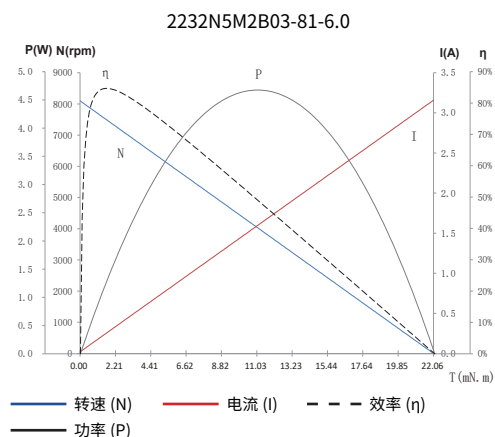
电机参数 / Motor Data

| | | | | | | |
|----|-----------|-----------------------|----------------|------|-------|-------|
| 1 | 电压 | Voltage | V | 6.0 | 9.0 | 12.0 |
| 2 | 端电阻 | Terminal resistance | Ω | 1.9 | 2.9 | 4.3 |
| 3 | 空载转速 | No-load speed | rpm | 8100 | 10000 | 10000 |
| 4 | 空载电流 | No-load current | mA | 20 | 20 | 20 |
| 5 | 堵转转矩 | Stall torque | mNm | 22.1 | 26.3 | 31.5 |
| 6 | 堵转电流 | Stall current | mA | 3160 | 3100 | 2790 |
| 7 | 额定转矩 | Nominal torque | mNm | 4.0 | 5.0 | 7.0 |
| 8 | 额定转速 | Nominal speed | rpm | 6630 | 8100 | 7780 |
| 9 | 额定电流 | Nominal current | mA | 590 | 610 | 640 |
| 10 | 最大输出功率 | Max. output power | W | 4.7 | 6.9 | 8.3 |
| 11 | 最大效率 | Max. efficiency | % | 85 | 85 | 84 |
| 12 | 反电势常数 | Back-EMF constant | mV/rpm | 0.7 | 0.9 | 1.2 |
| 13 | 转矩常数 | Torque constant | mNm/A | 7.0 | 8.5 | 11.4 |
| 14 | 转速 / 转矩斜率 | Speed/torque gradient | rpm/mNm | 400 | 400 | 300 |
| 15 | 转子惯量 | Rotor inertia | gcm^2 | 4.4 | 4.4 | 4.4 |
| 16 | 重量 | Weight | g | 55 | 55 | 55 |

热参数 / Thermal Data

| | | | | |
|----|--------------|------------------------------------|--------------------|---------|
| 17 | 热阻 (机壳 - 环境) | Thermal resistance housing-ambient | K/W | 19.4 |
| 18 | 热阻 (线圈 - 机壳) | Thermal resistance winding-housing | K/W | 21.7 |
| 19 | 热时常数 (电机) | Thermal time constant motor | s | 383 |
| 20 | 热时常数 (线圈) | Thermal time constant winding | s | 329 |
| 21 | 工作温度范围 | Operating temperature range | $^{\circ}\text{C}$ | -20~+85 |
| 22 | 绕组耐温等级 | Thermal class of winding | $^{\circ}\text{C}$ | 130 |

特性曲线 / Characteristics Curve



机械参数 / Mechanical Data

| | | | | |
|----|-----------------|--|----|-----------|
| 23 | 轴向间隙 | Axial play | mm | 0.02-0.15 |
| 24 | 径向间隙 | Radial play | mm | 0.025 |
| 25 | 动态轴向载荷 | Axial load dynamic | N | 3.3 |
| 26 | 静态轴向载荷 | Axial load static | N | 60 |
| 27 | 径向载荷 (距安装面 3mm) | Radial load at 3 mm from mounting face | N | 14 |

其它参数 / Other Specifications

| | | | | |
|----|------|-------------------------------|--|------|
| 28 | 极对数 | No. of pole pairs | | 1 |
| 29 | 滚动轴承 | Ball bearings | | 2 |
| 30 | 换向结构 | Number of commutator segments | | 5 |
| 31 | 防护等级 | Protection class | | IP30 |

可选配置 / Options

齿轮箱: 行星齿轮

Gearbox: planetary gearbox

性能 Special coils: 连续运行范围内可定制 customizable in continuous operation range

法兰 Flange: 标准前后法兰 standard front and rear flanges / 定制法兰 custom flanges

轴 Shaft: 长度 length / 异形 shape

轴承类型 Bearing type: 含油轴承 sleeve bearings / 滚珠轴承 ball bearings

电气连接 Electrical connection: 端子或导线 connector or wire / 导线长度 lead wires length

齿轮组主要技术指标详见第 133 页

the main technical parameters are detailed on page 133

外观图 / Outline Drawing

