

# 24\*\*...24\*P... | B20\*\*...24\*P... | C24\*\*...24\*P...

## ∅24.4mm, 行星齿轮系列 Planetary Gearbox Series

应用领域：医疗器械、精密仪器、工业设备等领域。

Applications: medical equipment, scientific instruments, industrial equipment, etc.

2433N5M2B01-76-4.5 B2040NH2B21-158-24.0 C2430R43-0010-12.0

### 电机参数 / Motor Data

| 序号 | 中文描述      | 英文描述                        | 单位               | 2433N5M2B01-76-4.5 | B2040NH2B21-158-24.0 | C2430R43-0010-12.0 |
|----|-----------|-----------------------------|------------------|--------------------|----------------------|--------------------|
| 1  | 电压        | Voltage                     | V                | 4.5                | 24.0                 | 12.0               |
| 2  | 端电阻       | Terminal resistance         | Ω                | 0.46               | 15                   | 11                 |
| 3  | 空载转速      | No-load speed               | rpm              | 7600               | 15800                | 6150               |
| 4  | 空载电流      | No-load current             | A                | 0.03               | 0.08                 | 0.035              |
| 5  | 堵转转矩      | Stall torque                | mNm              | 55                 | 21                   | 16.1               |
| 6  | 堵转电流      | Stall current               | A                | 9.78               | 1.6                  | 9.78               |
| 7  | 负载转矩      | Load torque                 | mNm              | 10                 | 4                    | 1.96               |
| 8  | 负载转速      | Load speed                  | rpm              | 6220               | 12800                | 5400               |
| 9  | 负载电流      | Load current                | A                | 1.8                | 0.37                 | 0.15               |
| 10 | 最大输出功率    | Max. output power           | W                | 10.9               | 8.67                 | 2.59               |
| 11 | 最大效率      | Max. efficiency             | %                | 89                 | 60                   | 62.5               |
| 12 | 反电势常数     | Back-EMF constant           | mV/rpm           | 0.6                | 1.44                 | 1.89               |
| 13 | 转矩常数      | Torque constant             | mNm/A            | 5.6                | 13.7                 | 17.07              |
| 14 | 转速 / 转矩斜率 | Speed/torque gradient       | rpm/mNm          | 140                | 754.3                | 382                |
| 15 | 转子惯量      | Rotor inertia               | gcm <sup>2</sup> | 2.2                | 2                    | --                 |
| 16 | 重量        | Weight                      | g                | 66                 | 55                   | 14.5               |
| 17 | 工作温度范围    | Operating temperature range | °C               | -10~+80            | -10~+80              | -10~+80            |

### 齿轮组参数 / Gearbox Data

| 序号 | 中文描述   | 英文描述                       | 1                       | 2    | 3    | 4     | 5  | 6  |
|----|--------|----------------------------|-------------------------|------|------|-------|----|----|
| 18 | 级数     | Number of stages           | 1                       | 2    | 3    | 4     | 5  | 6  |
| 19 | 减速比    | Reduction ratio            | --                      | 36   | 216  | 256   | -- | -- |
| 20 | 最大额定转矩 | Max. rated torque          | mNm                     | 500  | 1000 | 1500  | -- | -- |
| 21 | 瞬间允许转矩 | Max. momentary torque      | mNm                     | 1000 | 2000 | 3000  | -- | -- |
| 22 | 长度 (L) | Length (L)                 | mm                      | 24.5 | 31.5 | 38.65 | -- | -- |
| 23 | 机壳材料   | Shell material             | 金属 /Metal               |      |      |       |    |    |
| 24 | 齿轮工艺   | Gear processing technology | 塑胶注塑 /Plastic injection |      |      |       |    |    |

### 可选配置 / Options

|    |         |                            |  |  |
|----|---------|----------------------------|--|--|
| 25 | 适配电机类型  | Matched motor type         | <input checked="" type="checkbox"/> 空心杯电机 Coreless motor | <input checked="" type="checkbox"/> 无刷电机 BLDC motor        |
|    |         |                            | <input checked="" type="checkbox"/> 铁芯电机 Core motor      |  |
| 27 | 齿轮工艺    | Gear processing technology | <input type="checkbox"/> 金属加工 Metal CNC                  | <input checked="" type="checkbox"/> 金属注塑 Metal injection   |
|    |         |                            | <input type="checkbox"/> 粉末冶金 Powder metallurgy          | <input checked="" type="checkbox"/> 塑胶注塑 Plastic injection |
| 28 | 齿轮组输出轴承 | Gearbox output bearing     | <input checked="" type="checkbox"/> 含油轴承 Slewing bearing | <input type="checkbox"/> 滚珠轴承 Ball bearing                 |

适配仅供参考，详细了解请以产品规格书为准。For reference only, please refer to the product specification.

### 外观图 / Outline Drawing

