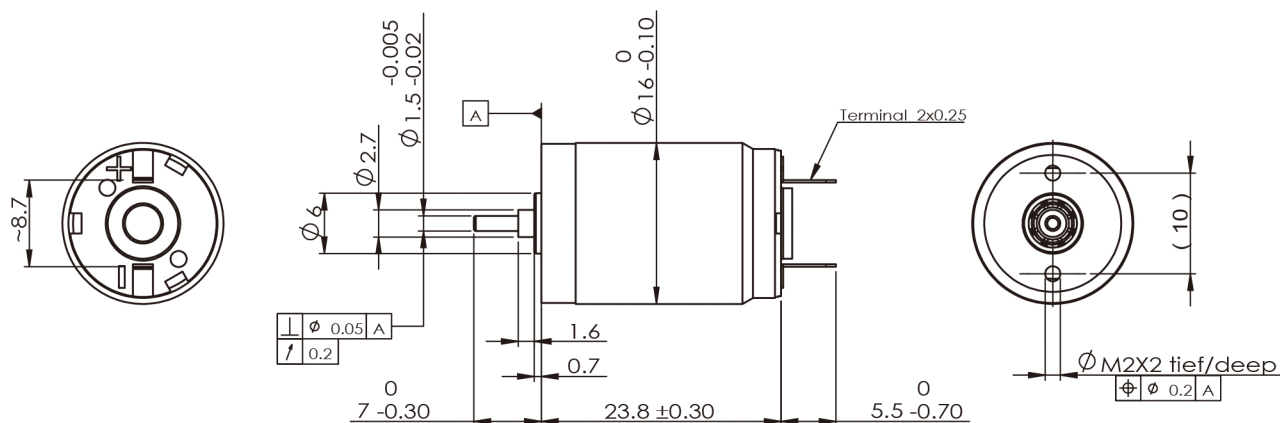




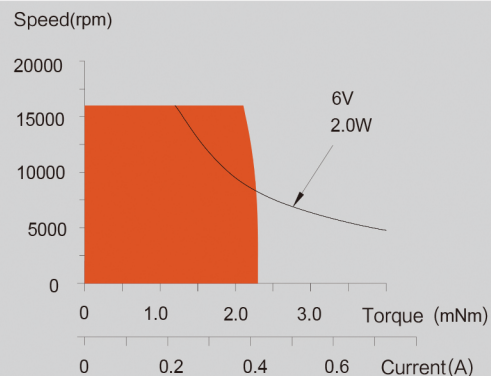
## Motor Data

| 电机型号      | Motor model           |                  |         | DR162406B | DR162409B | DR162412B | DR162415B | DR162418B | DR162424B |
|-----------|-----------------------|------------------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 额定电压    | Nominal voltage       | V                | V       | 6         | 9         | 12        | 15        | 18        | 24        |
| 2 空载转速    | No load speed         | rpm              | WnI     | 11000     | 12300     | 14500     | 12500     | 14100     | 15200     |
| 3 空载电流    | No load current       | mA               | InI     | 41        | 34        | 40        | 30        | 22        | 20        |
| 4 额定转速    | Nominal speed         | rpm              | Wc      | 6700      | 7580      | 10900     | 9000      | 9740      | 13000     |
| 5 额定转矩    | Nominal torque        | mNm              | Tc      | 1.5       | 1.5       | 1.5       | 2.15      | 1.5       | 1.5       |
| 6 额定电流    | Nominal current       | A                | Ic      | 0.31      | 0.23      | 0.2       | 0.2       | 0.13      | 0.1       |
| 7 输出功率    | Output power          | W                | Pc      | 1.06      | 1.19      | 1.73      | 2.05      | 1.53      | 2.05      |
| 8 堵转扭矩    | Stall torque          | mNm              | Tmax    | 3.55      | 4.5       | 5.26      | 7         | 5.1       | 8.9       |
| 9 堵转电流    | Stall current         | A                | Imax    | 0.72      | 0.7       | 0.71      | 0.64      | 0.45      | 0.61      |
| 10 最大效率   | Max. efficiency       | %                | ηmax    | 71        | 75        | 71        | 70        | 77        | 83        |
| 11 线间电阻   | Terminal resistance   | Ω                | Rt      | 8.3       | 12.8      | 17        | 23.4      | 39.6      | 39.3      |
| 12 力矩系数   | Torque constant       | mNm / A          | Kt      | 4.91      | 6.43      | 7.46      | 10.92     | 11.23     | 14.58     |
| 13 速度常数   | Speed constant        | rpm / V          | Kn      | 1943      | 1485      | 1281      | 874       | 851       | 655       |
| 14 速度扭矩比  | Speed torque gradient | rpm / mNm        | Δn / ΔT | 2842      | 2720      | 2340      | 1587      | 2763      | 1421      |
| 15 线间电感   | Terminal inductance   | mH               | L       | 0.17      | 0.23      | 0.28      | 0.75      | 0.898     | 0.9       |
| 16 转子转动惯量 | Rotor inertia         | gcm <sup>2</sup> | J       | 0.65      | 0.64      | 0.62      | 0.62      | 0.61      | 0.6       |

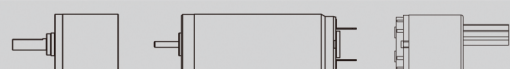
## Specifications

|                                    |          |             |
|------------------------------------|----------|-------------|
| 1 ambient temperature              | Ta       | -20~+65°C   |
| 2 Max.winding temperature          | Tcoilmax | +85°C       |
| 3 Max.speed                        | Nmax     | 16000rpm    |
| 4 axial play                       | Δt       | 0.05~0.15mm |
| 5 number of pole pairs             | p        | 1           |
| 6 number of commutator segments    |          | 5           |
| 7 weight of motor                  | Wt       | 21g         |
| 8 Max.axial load(dynamic)          |          | 0.8N        |
| 9 Max.force for press fits(static) |          | 15N         |
| 10 Max.radial load,4mm from flange |          | 1.5N        |

## Operating Range



## SMJ Modular System



Planetary Gearhead  
Type P16H  
Diameter φ16  
Torque 0.006~0.4N·m  
See page 36

Magnet Encoder  
1000 CPT  
3 channels  
see page 32