

# TWG1220-N20VA

12x20mm worm gearbox plus N20 permanent magnet DC motor

A detailed view of a mechanical assembly, likely a solenoid or actuator, showing its internal components including a coil, plunger, and various gears and levers. The assembly is made of metal and has a cylindrical body on the right side. The internal mechanism is visible through a transparent or cutaway section, revealing a complex arrangement of gears, levers, and a central plunger. The plunger is a long, thin rod extending from the left side. The gears are of different sizes and are meshed together. The levers are connected to the gears and the plunger. The entire assembly is mounted on a base plate.

Unit(mm)

## 减速电机技术参数Gear Motor Technical Data

|      |                         |      |      |      |      |      |      |     |      |  |  |  |
|------|-------------------------|------|------|------|------|------|------|-----|------|--|--|--|
|      | 减速比 Reduction ratio     | 40   | 80   | 95   | 190  | 219  | 438  | 504 | 1007 |  |  |  |
| 2.4V | 空载转速No-load speed(rpm)  | 370  | 185  | 155  | 78   | 67   | 33   | 29  | 14   |  |  |  |
|      | 负载转速Rated speed(rpm)    | 300  | 150  | 126  | 63   | 54   | 27   | 23  | 12   |  |  |  |
|      | 负载力矩Rated torque(kg.cm) | 0.03 | 0.06 | 0.07 | 0.14 | 0.16 | 0.32 | 0.4 | 0.8  |  |  |  |
| 5.0V | 空载转速No-load speed(rpm)  | 370  | 185  | 155  | 78   | 67   | 33   | 29  | 14   |  |  |  |
|      | 负载转速Rated speed(rpm)    | 300  | 150  | 126  | 63   | 54   | 27   | 23  | 12   |  |  |  |
|      | 负载力矩Rated torque(kg.cm) | 0.03 | 0.06 | 0.07 | 0.14 | 0.16 | 0.32 | 0.4 | 0.8  |  |  |  |

## 单电机技术参数 Motor Technical Data

| 电机型号<br>Motor model | 额定电压<br>Rated voltage | 无负荷No-load  |               | 额定Rated     |              |               |             | 堵转Stall      |               |
|---------------------|-----------------------|-------------|---------------|-------------|--------------|---------------|-------------|--------------|---------------|
|                     |                       | 转速<br>Speed | 电流<br>Current | 转速<br>Speed | 力矩<br>Torque | 电流<br>Current | 功率<br>Power | 力矩<br>Torque | 电流<br>Current |
|                     | VDC                   | r/min       | mA            | r/min       | g.cm         | mA            | W           | g.cm         | A             |
| TFF-N20VA-13110     | 2.4                   | 14800       | 60            | 12000       | 2.5          | 260           | 0.31        | 14           | 1.20          |
| TFF-N20VA-09220     | 5.0                   | 14800       | 30            | 12000       | 2.5          | 120           | 0.31        | 13           | 0.52          |

