

## 2914ZWW

### Outer Rotor Without Sensor

Applications: UAV gimbals and handheld gimbals

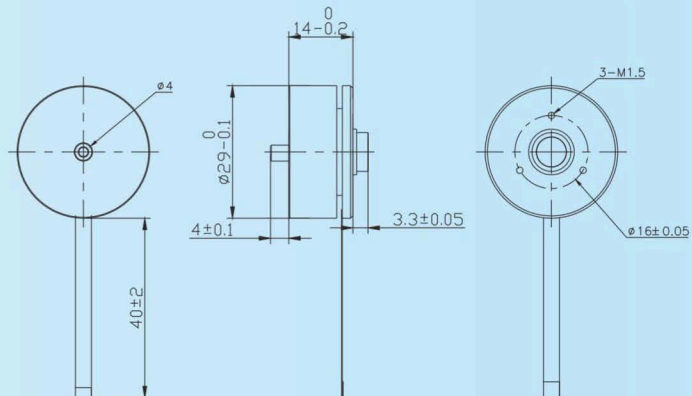
#### Characteristics

|    |  |                    |                 |  |
|----|--|--------------------|-----------------|--|
|    |  |                    | -1-24.0         |  |
| 1  | Voltage                                | V                  | 24              |  |
| 2  | Terminal resistance                    | $\Omega$           | 12              |  |
| 3  | Terminal inductance                    | mH                 | 0.45            |  |
| 4  | No-load speed                          | rpm                | 5500            |  |
| 5  | No-load current                        | A                  | 0.1             |  |
| 6  | Nominal torque                         | mNm                | 27.5            |  |
| 7  | Nominal speed                          | rpm                | 3500            |  |
| 8  | Nominal current                        | A                  | 0.8             |  |
| 9  | Max. output power                      | W                  | 10              |  |
| 10 | Max. efficiency                        | %                  | 60              |  |
| 11 | Back-EMF constant                      | mV/rpm             | 4.1             |  |
| 12 | Torque constant                        | mNm/A              | 40              |  |
| 13 | Speed/torque gradient                  | rpm/mNm            | 73              |  |
| 14 | Rotor inertia                          | gcm <sup>2</sup>   | 23              |  |
| 15 | Weight                                 | g                  | 51              |  |
| 16 | Thermal resistance housing-ambient     | K/W                | 6               |  |
| 17 | Thermal resistance winding-housing     | K/W                | 11              |  |
| 18 | Thermal time constant motor            | s                  | 160             |  |
| 19 | Thermal time constant winding          | s                  | 15              |  |
| 20 | Operating temperature range            | $^{\circ}\text{C}$ | -40~+100        |  |
| 21 | Max. winding temperature               | $^{\circ}\text{C}$ | 155             |  |
| 22 | Axial play                             | mm                 | 0.012           |  |
| 23 | Radial play                            | mm                 | 0.02            |  |
| 24 | Axial load dynamic                     | N                  | 1.5             |  |
| 25 | Axial load static                      | N                  | 37              |  |
| 26 | Radial load at 3 mm from mounting face | N                  | 12              |  |
| 27 | No. of pole pairs                      |                    | 6               |  |
| 28 | Bearings                               |                    | 2 ball bearings |  |
| 29 | Commutation                            |                    | Sensorless      |  |
| 30 | Protection class                       |                    | IP 20           |  |

#### Options

- Lead wires length
- Shaft length
- Special coils
- Gearheads
- Bearing type
- Hall sensor
- Encoder
- Driver

#### Outline Drawing



UNIT:mm