

Motor Performance Parameters:

1. Motor Type: Coreless Brushless Motor
2. Operating Voltage: 12V
3. No-load Speed: 25000±10%RPM
4. No-load Current: 0.2A
5. Load Speed: 18000±10%RPM
6. Load Torque: 15g.cm
7. Load Current: ≤0.8A
8. Stall Torque: 100g.cm
9. Pole Pairs: 2 Pole Pairs
10. Operating Temperature: -40-85°C
11. Weight: ≤30g
12. Noise: ≤45DB
13. Motor Maximum Efficiency: 75%

Gearmotor Performance Parameters:

1. Operating Voltage: 12V
2. No-load Speed: 250±10%RPM
3. No-load Current: ≤0.3A
4. Rated Speed: 180±10%RPM
5. Rated Torque: ≥0.08NM
6. Rated Current: ≤1A
7. Stall Torque: ≥0.5 Nm
8. Operating Temperature: -40-80°C
9. Reduction Ratio: 1:100
10. Noise: ≤55DB
11. Gearbox Material: Pure Steel (Machined)

Coreless Brushless Motor

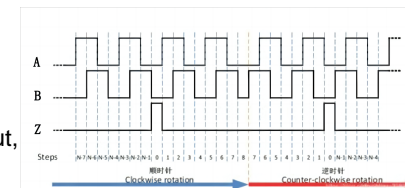
Wiring Sequence: PIN1-3

- pin1 - U (White)
- pin2 - V (Yellow)
- pin3 - W (Blue)

Encoder Wiring Sequence: PIN1-5

- pin1 - GND (Black)
- pin2 - VCC (Red)
- pin3 - A± (Single-ended) (Yellow)
- pin4 - B± (Single-ended) (Green)
- pin5 - Z+ (Single-ended) (Blue)

Note: Magnetic encoder, digital output, 3 channels, 1024 PPR



设计		第一视觉画法
审核		
批准		未注线性与角度尺寸公差： GB/T1804-m eqv ISO 2768-1:m
日期	2025.11.15	

13mm Planetary Gearbox + 13mm Coreless Brushless Motor + Encoder (Product Type)
TSL-PG13K100-KW1317+MA1024 (Inverted Module) (Product Model)
Tsinglin Micromotor Co., Ltd