

Connector Model: KW30-10P-1C(800)

Wire Sequence (Pins 1-9):

Pin Number Definition

pin1 HALLA

pin2 HALLB

pin3 HALLZ

pin4 3.3V

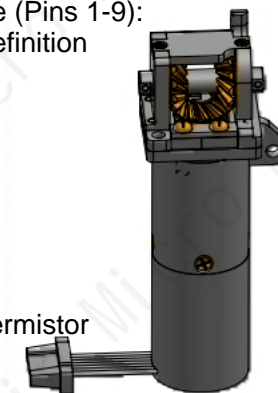
pin5 GND

pin6 Motor U

pin7 Motor V

pin8 Motor W

pin9 Motor Thermistor



Motor Performance Parameters

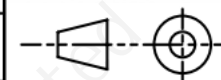
1. Motor Type: Coreless brushless motor
2. Operating Voltage: 12 V
3. No-load Speed: $20000 \pm 10\%$ RPM
4. No-load Current: ≤ 0.15 A
5. Rated Speed: $18000 \pm 10\%$ RPM
6. Rated Torque: ≥ 25 g·cm
7. Rated Current: ≤ 0.5 A
8. Stall Torque: ≥ 260 g·cm
9. Stall Current: ≤ 3 A
10. Pole Pairs: 1 pair
11. Operating Temperature: $-40 - 80$ °C
12. Weight: ≤ 50 g
13. Noise: ≤ 45 dB
14. Maximum Motor Efficiency: 75%

Gear Motor Performance Parameters

1. Operating Voltage: 12 V
2. No-load Speed: $50 \pm 10\%$ RPM
3. No-load Current: ≤ 0.2 A
4. Rated Speed: $45 \pm 10\%$ RPM
5. Rated Torque: ≥ 0.6 N·m
6. Rated Current: ≤ 0.6 A
7. Stall Torque: ≥ 5 N·m
8. Operating Temperature: $-40 - 80$ °C
9. Reduction Ratio: 1:388
10. Noise: ≤ 55 dB
11. Gearbox Backlash: $\leq 1.5^\circ$
12. Gearbox Material: Pure copper (machined)

| 版本 | 变更日期 | 变更内容 |
|-----|------------|---|
| A 1 | 2025.03.22 | Modified upper and lower brackets to enhance rigidity |
| 设计 | | |
| 审核 | | |
| 批准 | | |
| 日期 | 2025.04.30 | |

第一视觉画法



未注线性与角度尺寸公差:

GB\T1804-m eqv
ISO 2768-1:m

16mm Planetary Gearbox + 16mm Coreless Brushless Motor + 0.8 Modulus Bevel Gear
Direction Change Output (Product Type)

PG16K388L-KW1622 + SC08M12Z (Left-hand Wrist Motor Module) (Product Model)

Tsinglin Micro Motors Limited