

Worm and Worm Wheel Parameters		
Parameter	Worm	Worm Wheel
Module	0.4	
Starts / Teeth	1	17
Pressure Angle	20°	20°
Tip Diameter	5.0	7.6
Pitch Diameter	4.2	6.8
Lead Angle	Right-Hand 5.44°	
Worm Lead	1.257	—
Worm Pitch	1.257	—
Addendum Coefficient	1	1
Clearance Coefficient	0.25	0.25
Profile Shift Coefficient	—	—
Center Distance	5.55	
Material	20CrMnTi	
Accuracy Grade	GB/T 10095-2001 Grade 8	

Motor Performance Parameters

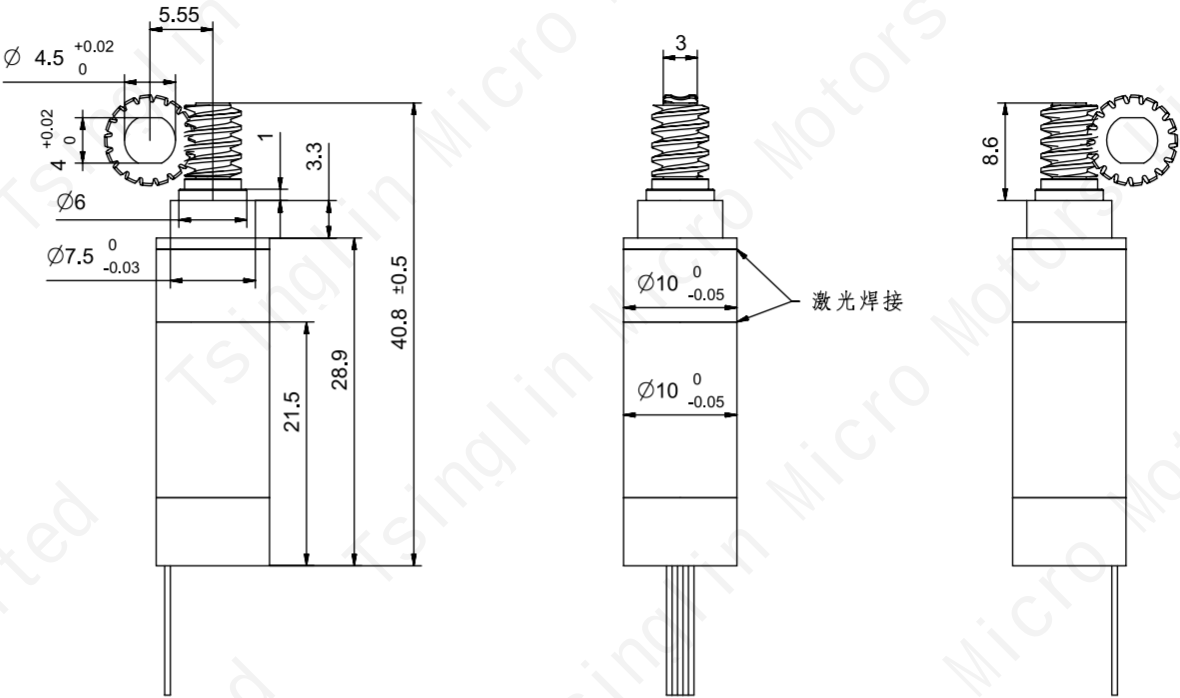
- Motor Type: Coreless Brushless Motor
- Operating Voltage: 12V
- No load Speed: 27000±10%RPM
- No load Current: ≤0.2A
- Rated Speed: 19000±10%RPM
- Rated Torque: ≥14g·cm
- Rated Current: ≤0.5A
- Number of Pole Pairs: 2 Pole pairs
- Operating Temperature: -40 ~ 85°C
- Noise: ≤45?dB
- Maximum Motor Efficiency: 75%

Geared Motor Performance Parameters

- Operating Voltage: 12V
- No load Speed: 55±10%RPM
- No load Current: ≤0.3A
- Rated Speed: 40±10%RPM
- Rated Torque: ≥0.25N·m
- Rated Current: ≤0.6A
- Peak Torque (2s): 0.6N·m
- Peak Current: ≤1A
- Operating Temperature: -40 ~ 80 °C
- Gear Ratio: 1:476
(Planetary 1:28, Worm gear 1:17)
- Worm gear Self locking Torque: ≥2N·m
- Noise: ≤55 dB
- Gearbox Material: Solid Steel (Machined)

Built in Driver: 4-wire (Pin 1-4)

- Pin 1: GND-Black
Pin 2: VDD-Red
Pin 3: RXD-Yellow
Pin 4: TXD-Blue



设计		第一视觉画法 	10mm Planetary Gearbox + 10mm Coreless Brushless Motor + Worm gear Gearbox + Built in Driver (Motor Type)
审核			
批准		未注线性与角度尺寸公差： GB\T1804-m eq v ISO 2768-1:m	PG10K28-KW1016+LG04M17Z+TTL (Motor Model)
日期	2026.08.14		Tsinglin Micro Motors Limited