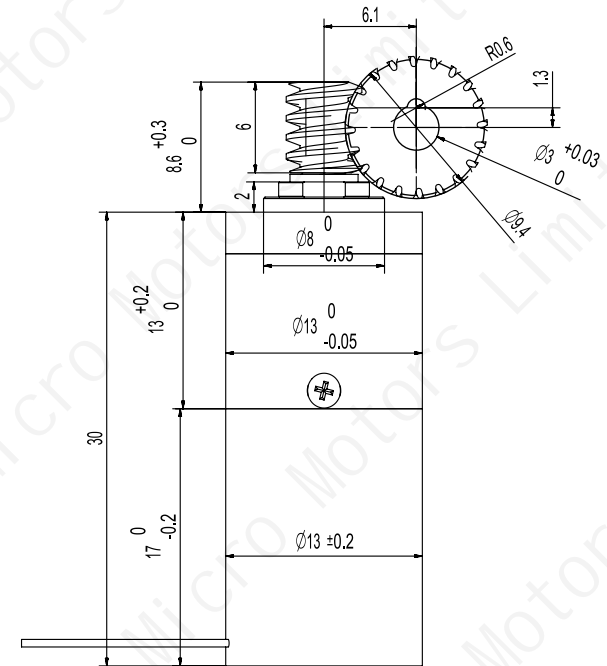
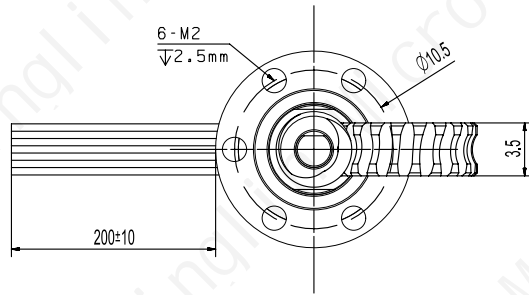


Worm and Worm Gear Parameter Table		
	Worm	Worm Gear
Module	0.4	
Number of Starts / Teeth	1	20
Pressure Angle	20°	20°
Addendum Circle Diameter	5	8.8
Pitch Circle Diameter	4.2	8
Lead Angle	Right-hand 5.44°	
Addendum Coefficient	1	1
Clearance Coefficient	0.25	0.25
Modification Coefficient	-	-
Material	SUS416	
Accuracy Grade	GB/T 10095-2001, Grade 8	



### Coreless Brushless Motor Hall Sensor Pin Assignment: PIN1-8

- pin1 -U (Purple)
- pin2 -V (Brown)
- pin3 -W (White)
- pin4 -+5V (Red)
- pin5 -GND (Black)
- pin6 -HALL\_U (Yellow)
- pin7 -HALL\_V (Green)
- pin8 -HALL\_W (Blue)



#### Motor Performance Specifications:

1. Motor Type: Coreless Brushless Motor
2. Operating Voltage: 12V
3. No-load Speed: 25,000 ± 10% RPM
4. No-load Current: ≤ 0.2 A
5. Load Speed: 18,000 ± 10% RPM
6. Load Torque: ≥ 15 g·cm
7. Load Current: ≤ 0.8 A
8. Stall Torque: ≥ 100 g·cm
9. Number of Pole Pairs: 2 pole pairs
10. Operating Temperature: -40 to 85°C
11. Weight: ≤ 30 g
12. Noise Level: ≤ 45 dB
13. Maximum Motor Efficiency: 75%

#### Reducer Motor Performance Specifications:

1. Operating Voltage: 12V
2. No-load Speed: 50 ± 10% RPM
3. No-load Current: ≤ 0.3 A
4. Load Speed: 35 ± 10% RPM
5. Load Torque: ≥ 0.4 N·m
6. Load Current: ≤ 1 A
7. Stall Torque: ≥ 3 N·m
8. Operating Temperature: -40 to 80°C
9. Gear Reduction Ratio: 1:500 (Planetary: 1:25, Worm Gear: 1:20)
10. Noise Level: ≤ 55 dB
11. Gearbox Material: Pure Copper (Machined)

Design		First-Angle Projection Method	13 mm Planetary Gear Reducer + 13 mm Coreless Brushless Motor (Product Type)
Review			+Worm-Gear Gearbox
Approval		Unspecified Linear and Angular Dimension Tolerances: GB/T 1804-m eqv ISO 2768-1:m	<b>TSL-13P1317RB-25+LG04M20Z</b> (Product Model)
Date	2025.03.21		Tsinglin Micro Motors Limited