Shenzhen Wan Yuan Transmission Co., LTD

Contact Information

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01 Company Section

Product Usage

Company Profile

PRODUCT USAGE

Automotive
Tailgate motors, auto-locking mechanisms, automotive automation devices, intelligent systems, automatic card dispensers, and various actuator systems.

Industrial / Production Automation
Vending machines, electric switches, electric safes, garbage and wastewater disposers, cleaning machines, automatic welding tools, automatic feed machines, automation control systems, and other industrial drive equipment.

Gaming Machines
Coin acceptors, coin dispensers, and bill validators.

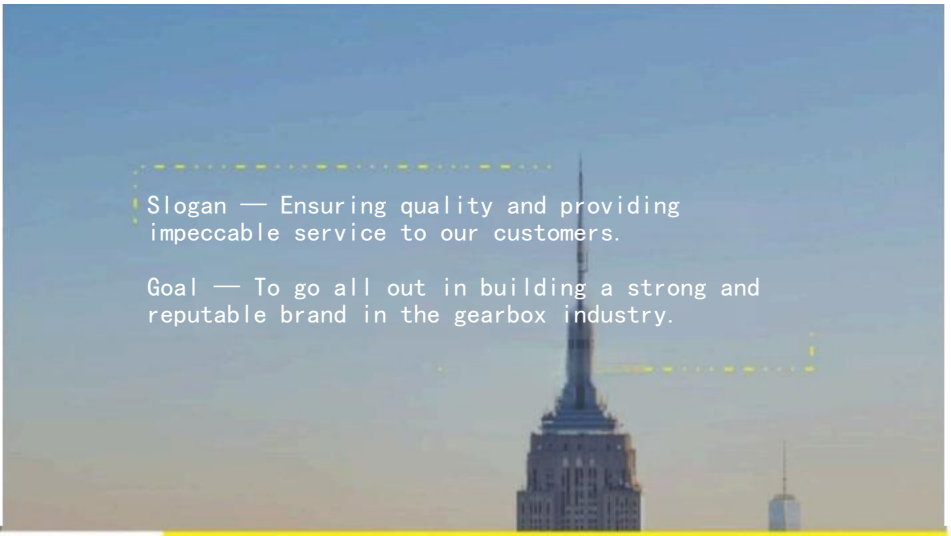
Shading Industry
Automatic awnings and sunshade systems.

Financial Equipment
Bill counters and coin sorting machines.

Medical Devices
Automated medical equipment and integrated medical systems.

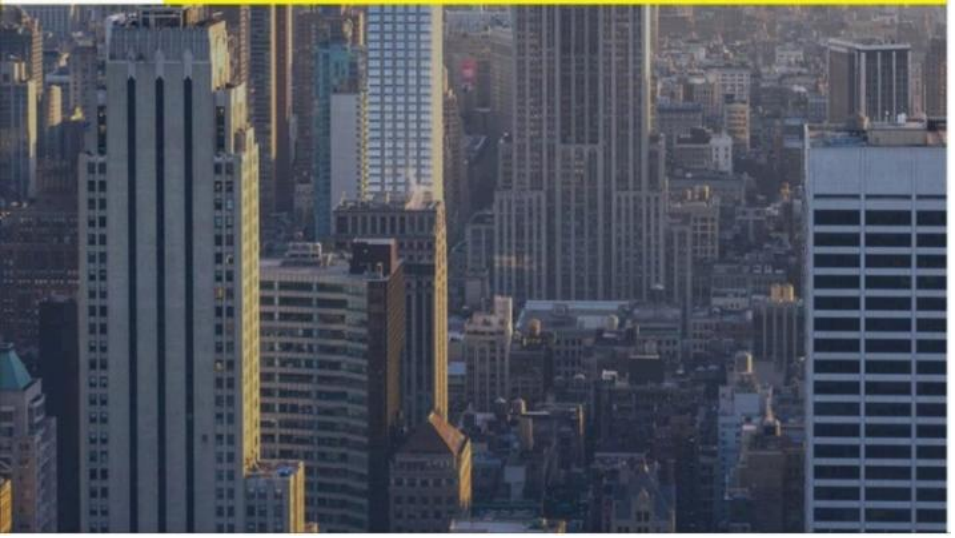
Advertising Light Boxes / Office Automation
Rotating light boxes, lifting light boxes, office equipment, fully automated office machines, and shredders.

Smart Home & Daily Life
Electric curtains, doors and windows, tools, valves, household appliances, smart locks, smart toilets, lifting systems, sensor bins, electronic toys, and other smart home devices.



公司篇

COMPANY ARTICLES



COMPANY PROFILE

Shenzhen Wan Yuan Transmission Co., Ltd. is a technology company integrating product R&D, manufacturing, and sales, specializing in various transmission mechanisms and control systems.

The company focuses on the development and production of planetary gearboxes, worm gear reducers, screw transmission boxes, spur gear reducers, helical gear reducers, hybrid transmission boxes, and other transmission mechanisms, as well as DC gear motor control systems and brushless gear motor control systems.

We have a professional R&D team, including gear engineers, mechanical engineers, structural engineers, electronic engineers, and software engineers, capable of customizing various transmission mechanisms and control systems according to customer requirements.

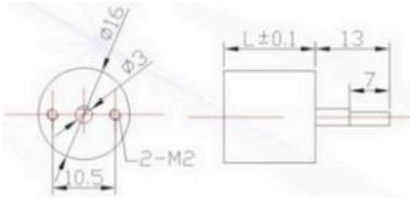
Our development philosophy is: advocating responsibility, embracing competition, pursuing quality, and striving for efficiency. Unity, innovation, pragmatism, and progress are our unwavering pursuits. The company cherishes every honor and adheres to the business principle of leading with advanced technology, setting industry standards, ensuring top-quality products, and driving industry innovation. We continuously contribute excellent products to society and work with partners from all sectors to achieve mutual benefits and shared success.

02 Products Section

Planetary Gearbox

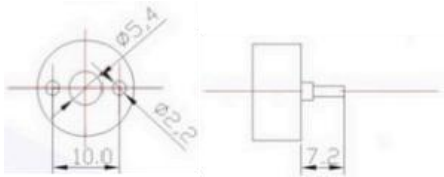
Model: GS1601

Outline Drawing



Mounting Holes

Motor Inner Diameter Ø1.5 and Ø2, Ø2 with Step

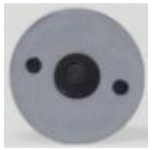


Motor Mounting Hole

Motor Shaft Height 7.2 ± 0.1 mm

16 mm Gearbox (Module 0.3)
Reduction Ratio

Gearbox Body Height	Single-stage (Height 12.5 mm)	Two-stage (Height 15.9 mm)	Three-stage (Height 19.5 mm)	Four-stage (Height 23.1 mm)
Reduction Ratio 1	3.5	12	43	150
Reduction Ratio 2	4.0	16	64	256
Reduction Ratio 3	4.75	19	76	304
Reduction Ratio 4		23	90	361
Reduction Ratio 5			107	428
Reduction Ratio 6				509

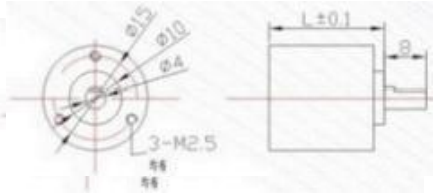


02 Products Section

Planetary Gearbox

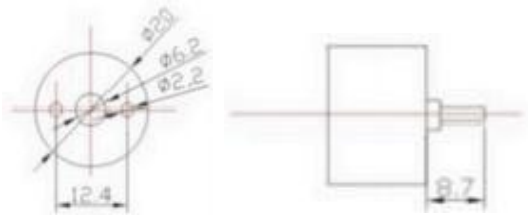
Model:GS2001

Outline Drawing



Mounting Holes

Motor Gear Inner Diameter Ø2, with Step



Motor Mounting Hole

Motor Shaft Height 8.7 ± 0.1 mm

20 mm Gearbox (Module 0.35) Reduction Ratio

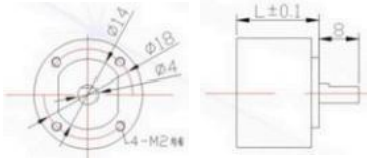
Gearbox Body Height	Single-stage (Height 17.5 mm)	Two-stage (Height 21.5 mm)	Three-stage (Height 24.7 mm)	Four-stage (Height 29.8 mm)
Reduction Ratio 1	4.38	19	84	370
Reduction Ratio 2	5.4	24	104	455
Reduction Ratio 3		29	128	560
Reduction Ratio 4			157	690
Reduction Ratio 5				850
Reduction Ratio 6				

02 Products Section

Planetary Gearbox

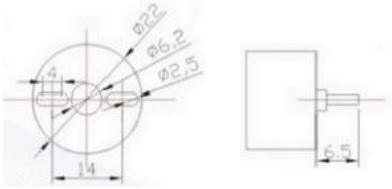
Model:GS2201

Outline Drawing



Mounting Holes

Motor Inner Diameter Ø1.5 and Ø2, Ø2 with Step



Motor Mounting Hole

Motor Shaft Height 6.5 ± 0.1 mm

22 mm Gearbox (Module 0.3)
Reduction Ratio

Gearbox Body Height	Single-stage (Height 15.9 mm)	Two-stage (Height 19.4 mm)	Three-stage (Height 22.9 mm)	Four-stage (Height 26.4 mm)
Reduction Ratio 1	3.5	12	43	150
Reduction Ratio 2	4.0	16	64	256
Reduction Ratio 3	4.75	19	76	304
Reduction Ratio 4		23	90	361
Reduction Ratio 5			107	428
Reduction Ratio 6				509

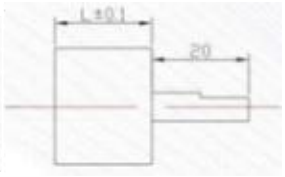
02 Products Section

Planetary Gearbox

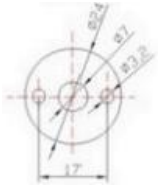
Model: GS2401

Outline Drawing

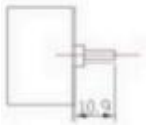
Mounting Holes



Motor Inner Diameter Ø 2.3



Motor Mounting Hole



Motor Shaft Height 10.9 ± 0.1 mm

24 mm Gearbox (Module 0.5)
Reduction Ratio

Gearbox Body Height	Single-stage (Height 20.5mm)	Two-stage (Height 26.2 mm)	Three-stage (Height 32.0 mm)	Four-stage (Height 37.8 mm)
Reduction Ratio 1	4.0	16	64	256
Reduction Ratio 2	5.0	20	80	320
Reduction Ratio 3		25	100	400
Reduction Ratio 4			125	500
Reduction Ratio 5				625
Reduction Ratio 6				

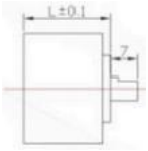
02 Products Section

Planetary Gearbox

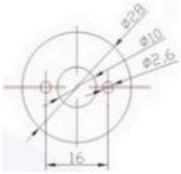
Model: GS2801

Outline Drawing

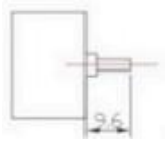
Mounting Holes



Motor Inner Diameter Ø 2.3



Motor Mounting Hole



Motor Shaft Height 9.6 ± 0.1 mm

28mm Gearbox (Module 0.5)
Reduction Ratio

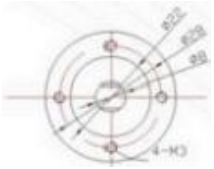
Gearbox Body Height	Single-stage (Height 25.3 mm)	Two-stage (Height 31.0 mm)	Three-stage (Height 36.7 mm)	Four-stage (Height 42.4 mm)
Reduction Ratio 1	4.0	16	64	256
Reduction Ratio 2	5.0	20	80	30
Reduction Ratio 3		25	100	400
Reduction Ratio 4			125	500
Reduction Ratio 5				625

02 Products Section

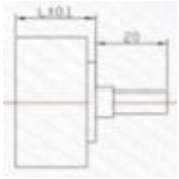
Planetary Gearbox

Model: GS3601

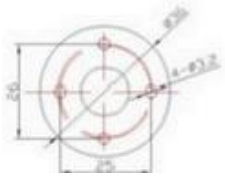
Outline Drawing



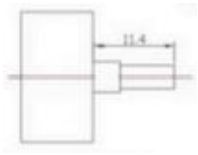
Mounting Holes



Motor Inner Diameter Ø 2.5, Ø3.175



Motor Mounting Hole



Motor Shaft Height 11.4 ± 0.1 mm

36mm Gearbox (Module 0.5) Reduction Ratio

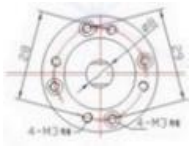
Gearbox Body Height	Single-stage (Height 28.5 mm)	Two-stage (Height 34.7 mm)	Three-stage (Height 40.9 mm)	Four-stage (Height 47.1 mm)
Reduction Ratio 1	3.7	14	50	189
Reduction Ratio 2	5.18	19	71	263
Reduction Ratio 3		27	100	369
Reduction Ratio 4			139	516
Reduction Ratio 5				721

02 Products Section

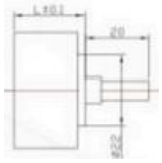
Planetary Gearbox

Model: GS3801

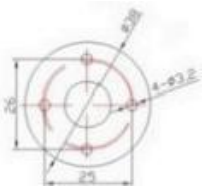
Outline Drawing



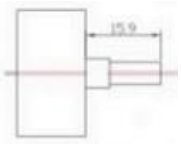
Mounting Holes



Motor Inner Diameter Ø3.175



Motor Mounting Hole



Motor Shaft Height 15.9 ± 0.1 mm

38mm Gearbox (Module 0.7) Reduction Ratio

Gearbox Body Height	Single-stage (Height 32.0 mm)	Two-stage (Height 41.5 mm)	Three-stage (Height 51.2 mm)	Four-stage (Height 60.7 mm)
Reduction Ratio 1	4.0	16	64	256
Reduction Ratio 2	6.0	24	96	384
Reduction Ratio 3		36	144	576
Reduction Ratio 4			216	864
Reduction Ratio 5				1296

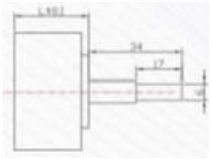
02 Products Section

Planetary Gearbox

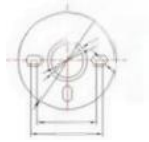
GS4301

Outline Drawing

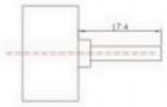
Mounting Holes



Motor Inner Diameter Ø 5



Motor Mounting Hole



Motor Shaft Height 17.4 ± 0.1 mm

43mm Gearbox (Module 0.8) Reduction Ratio

Gearbox Body Height	Single Stage (Height 12.5 mm)	Two Stage (Height 15.9 mm)	Three-stage (Height 19.5 mm)	Four-stage (Height 23.1 mm)
Reduction Ratio 1	3.6	13	46.7	168409
Reduction Ratio 2	4.25	15.3	55	198.5435
Reduction Ratio 3	5.3	19	69	249513
Reduction Ratio 4		22.5	81.5	294545
Reduction Ratio 5		28.5	102	347644
Reduction Ratio 6			.121	368807
Gearbox Body Height			151	

Pursuing Excellence

Stay vigilant, keep improving, build a top team, achieve outstanding results, and showcase excellence!

Products reflect the company's image, and quality represents the company's reputation.

团结奋进

Forge Ahead Bravely
Win-Win Cooperation

How to Choose the Right Model?

First, understand the formulas for calculating output speed and rated torque.

Output speed after motor reduction (no-load speed) = Motor no-load input speed ÷ Gearbox reduction ratio

Motor rated output speed = Motor rated input speed ÷ Gearbox reduction ratio ≈ Motor no-load input speed ÷ Gearbox reduction ratio × 80%

Output torque after motor reduction (rated torque) = Motor load torque × Reduction ratio × Gearbox efficiency

Main Causes of Gear System Noise

Gear design: Improper parameter selection, insufficient contact ratio, incorrect or missing tooth profile modification, unreasonable gearbox structure.

Gear manufacturing: Excessive base pitch error or tooth profile error, oversized tooth side clearance, excessive surface roughness, etc.

Gearbox assembly: Misalignment during assembly, low contact accuracy, poor shaft parallelism, insufficient stiffness of shafts, bearings, or supports, low rotational precision of bearings, improper clearances, etc.

Other factors: Fluctuation of input or load torque, torsional vibration of the shaft system, imbalance of the motor or other transmission components.