

WGV輪轂專用行星減速機

WGV planetary reducer for wheel hub



WANSHSIN SEIKOU (HUNAN) CO., LTD

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万鑫精工, 是集研发、生产、销售、服务于一体的专业化减速机、减速电机、变频器制造商及智能化全套方案提供商, 产品覆盖轻工、重工, 已广泛应用于新能源、机器人、自动化、智能仓储、物流、食品等行业领域。万鑫精工已逐步成为行业内各大龙头企业的长期合作伙伴。

WANSHSIN SEIKOU (HUNAN) CO., LTD. (hereafter referred to as "WANSHSIN") is a professional manufacturer integrating R&D, production, sales, and services, WANSHSIN specializes in gear reducers, geared motors, inverters, and provides comprehensive intelligent automation solutions. Its products cover light and heavy industries and are widely applied in sectors such as new energy, robotics, automation, intelligent warehousing, logistics, and food processing. WANSHSIN has gradually become a long-term partner of leading enterprises in the industry

面积/Area	雇员/Employees	研发基地/R&D Offices	设备/Equipment	认证/Certificates	专利/Patents
120,000m²	800+	日本\深圳\长沙	300+	CE\SGS\ISO9001	120+

WGV轮毂专用行星减速机产品优势

Product advantages of WGV planetary reducer for wheel hub

直接安装

使用安装接口, 可以把减速机直接安装在车辆上, 不需要另外的适配器

Direct Installation

With the installation interface, the reducer can be installed directly on the vehicle without requiring an additional adapters.

减少安装空间

减速机几乎完全被配轮包围住, 因此, 车辆内部所需的安装空间更小

Save installation space

The reducer is almost entirely enclosed by the wheel hub. Thus, it requires less installation space inside the vehicle

承载能力高

两个大尺寸的深沟球轴承可以承受较高的径向力, 同时确保较低的运行阻力, 效率更高

High load-bearing capacity

Two large-sized deep groove ball bearings can withstand high radial forces while ensuring low operating resistance and higher efficiency.

定位精度高

采用高精度斜齿设计, 背隙、噪音更小, 齿轮过载能力更强, 确保AGV工作定位更精准, 可靠性、适应性更好

High positioning accuracy

The product features a high-precision helical gear design, which reduces backlash and noise, enhances gear overload capacity, enabling more accurate positioning of the AGV operations, along with improves reliability and adaptability

不受电机限制

搭配各种不同的电机适配器, 几乎可以组装在任何型号的电机上, 甚至可以直接安装在电机上

Adapted to Various Motors

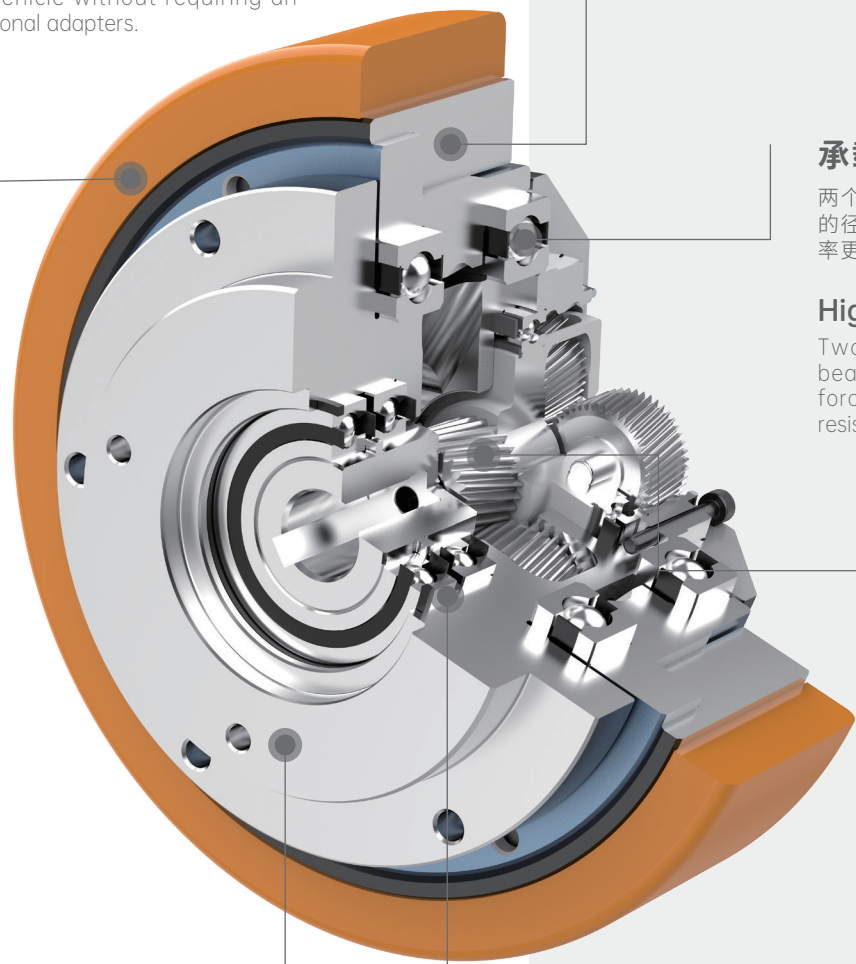
With various motor adapters, it can be assembled with almost any type of motor and even directly installed onto the motor.

高效率, 可信赖

效率高, 永久润滑, 因此不需要维护, 在连续运行的情况下也极其可靠

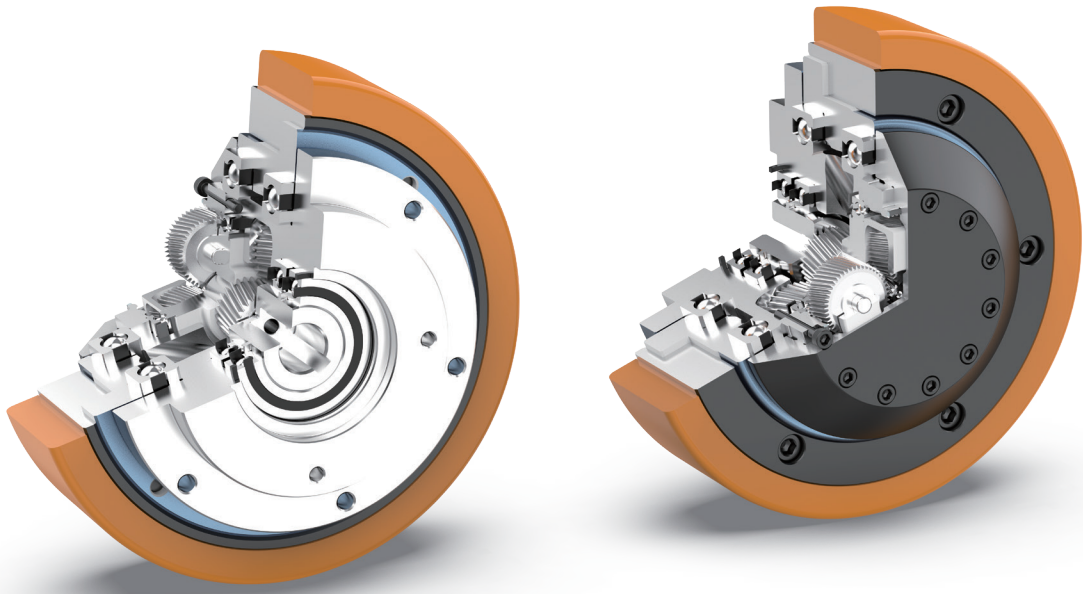
Highly Efficient & Reliable

With highly efficient and permanent lubrication, thus it requires no maintenance and remains extremely reliable even during continuous operation.



WGV轮毂专用行星减速机技术参数

Technical parameters of WGV planetary reducer for wheel hub



规格 Specification	单位 Unit	级数 Stage	减速比 Ratio	WGV100	WGV115	WGV135	WGV160
转动惯量 Rotational inertia J1	kg.cm ²	1	2	0.16	0.61	3.25	12.3
			3	0.14	0.48	2.74	7.5
			4	0.13	0.47	2.71	7.4
			5	0.13	0.45	2.62	7.2
			6	0.13	0.45	2.62	7.2
			7	0.13	0.4	2.5	6.8
			9	0.13	0.4	2.5	6.8
		2	14	0.1	0.2	1.6	2
			16	0.08	0.18	1.3	1.7
			18*	0.09	0.19	1.4	1.8
			20	0.08	0.18	1.3	1.7
			21	0.09	0.19	1.4	1.8
			24	0.08	0.18	1.3	1.7
			28	0.09	0.19	1.4	1.8
			30	0.08	0.18	1.3	1.7
			32	0.08	0.18	1.3	1.7
			40	0.08	0.18	1.3	1.7

规格 Specification	单位 Unit	级数 Stage	减速比 Ratio	WGV100	WGV115	WGV135	WGV160
额定输出扭矩 ^(b) Rated Output Torque T2N ^(b)	Nm	1	2	75	90	135	250
			3	90	115	200	400
			4	95	115	200	520
			5	90	110	200	480
			6	90	110	200	430
			7	75	85	150	400
			9	75	85	150	340
		2	14	75	100	150	250
			16	75	100	150	220
			18*	90	115	240	450
			20	70	70	150	180
			21	90	115	240	420
			24	90	115	240	330
			28	95	125	260	520
			30	90	105	240	270
32	95		125	260	440		
40	95	125	260	360			
额定输入转速 ^(a) Rated Input Speed n1N ^(a)	rpm	1	2 ~ 9	3000	3000	3000	3000
2		14 ~ 40	4000	4000	4000	4000	
最大输入转速 ^(a) Max Input Speed n1B ^(a)	rpm	1	2 ~ 9	5000	5000	5000	5000
2		14 ~ 40	6000	6000	6000	6000	
标准背隙 Standard Backlash P2	arcmin	1	2 ~ 9	≤5	≤5	≤5	≤5
2		14 ~ 40	≤8	≤8	≤8	≤8	
重量 Weight	kg	1	2 ~ 9	4.5	7.5	11	15
2		14 ~ 40	5.5	9	13.5	18	
效率 Efficiency	%	1	2 ~ 9	≥95			
2		14 ~ 40	≥93				
容许径向力 ^(b) Allowable Radial Force F2R ^(b)	N	1-2	2 ~ 40	4000	8000	10000	13000
急停扭矩 Emergency stop Torque T2NOT	Nm	1-2	2 ~ 40	2倍额定输出力矩（允许1000次）2 Times T2N			
使用寿命 Service Life	h	1-2	2 ~ 40	20000			
使用温度 Operating temperature	℃	1-2	2 ~ 40	-20℃ ~ 90℃			
防护等级 Protection class	/	1-2	2 ~ 40	IP64			
润滑 Lubrication	/	/	全合成润滑脂 Synthetic Lubricating Grease				
噪音 Noise ^(c)	dB(A)	/	/	≤58	≤60	≤63	≤65
安装方向 Mounting position	/	/	任意方向 In any direction				

a. 环境温度超过20℃时，建议适当降低转速使用
When the ambient temperature exceeds 20℃, it is recommended to appropriately reduce the speed for use.

b. 输出转速超过100rpm时，建议适当降低载荷和输出扭矩使用
When the output speed exceeds 100 rpm, it is recommended to appropriately reduce the load and output torque for use.

c. 噪音在无负载，输入转速3000rpm时1m处测得
The noise is measured at 1 meter away with no load and an input speed of 3000 rpm.

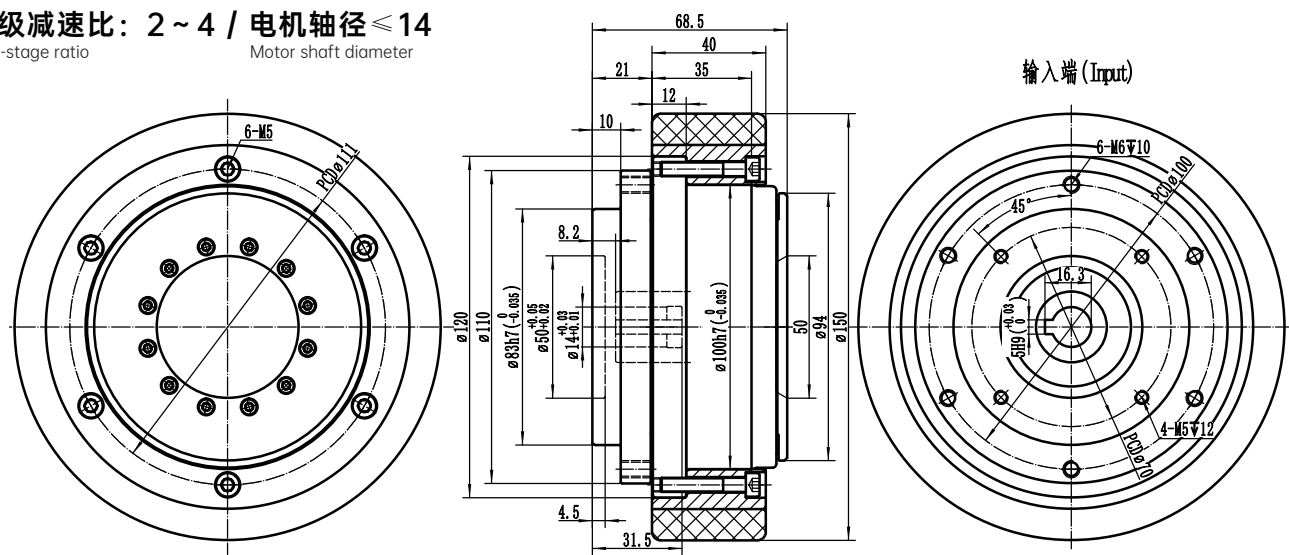
◆ *18比不推荐选用
18 ratio is not recommended for selection.

◆ 驱动轮输入转向，与输出转向相反
The input rotation direction of the drive wheel is opposite to the output rotation direction.

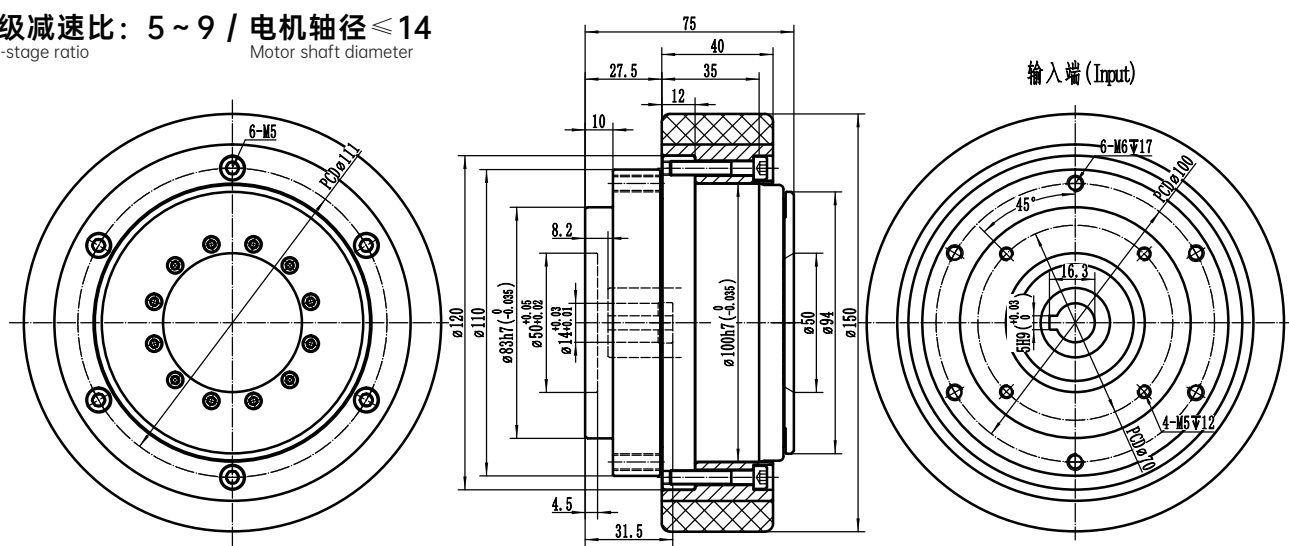
◆ 轮子材料:黄橙色聚氨酯,硬度A90±2，有其他要求，请联系工厂
Wheel material: yellow-orange polyurethane, hardness A90±2. For other requirements, please contact the factory.

WGV100外形图/Outline drawing

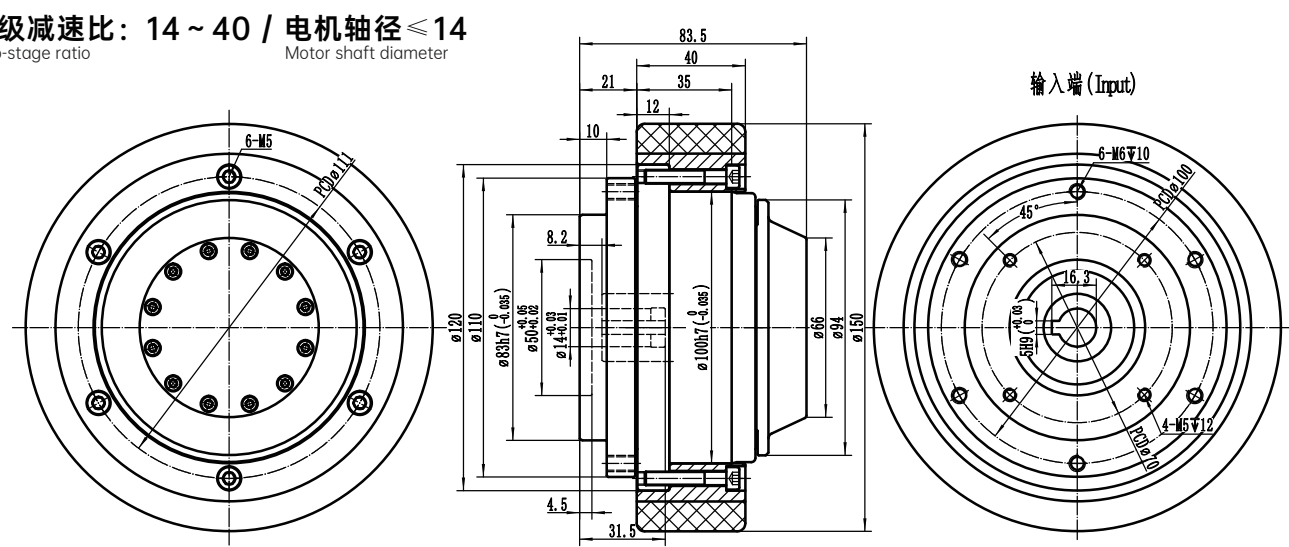
单级减速比: 2~4 / 电机轴径 ≤14
One-stage ratio Motor shaft diameter



单级减速比: 5~9 / 电机轴径 ≤14
One-stage ratio Motor shaft diameter

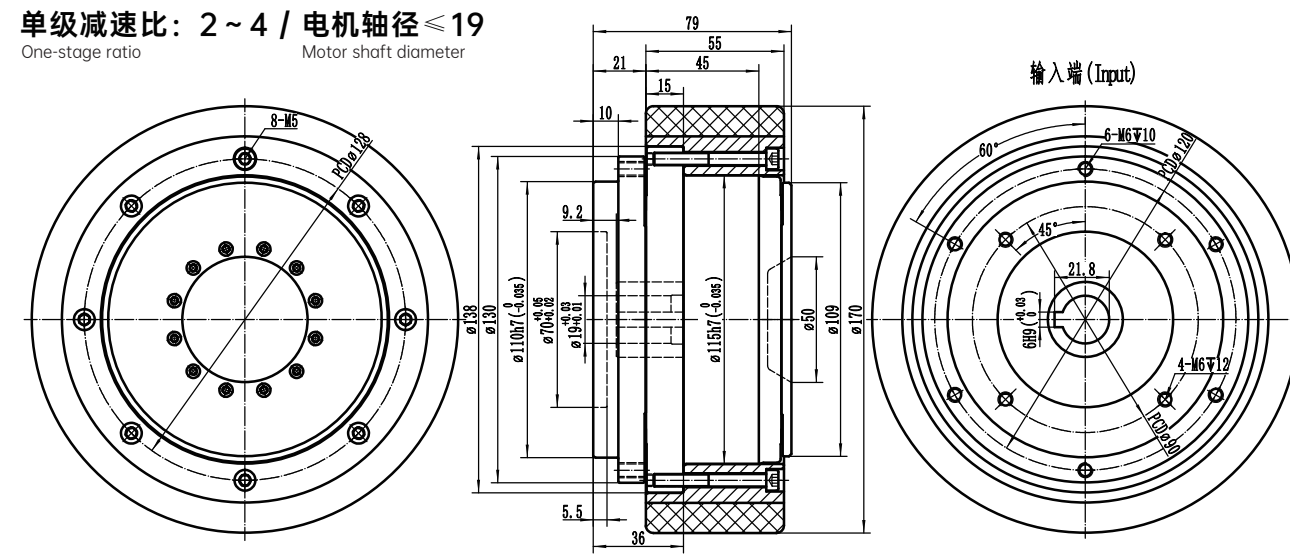


双级减速比: 14~40 / 电机轴径 ≤14
Two-stage ratio Motor shaft diameter

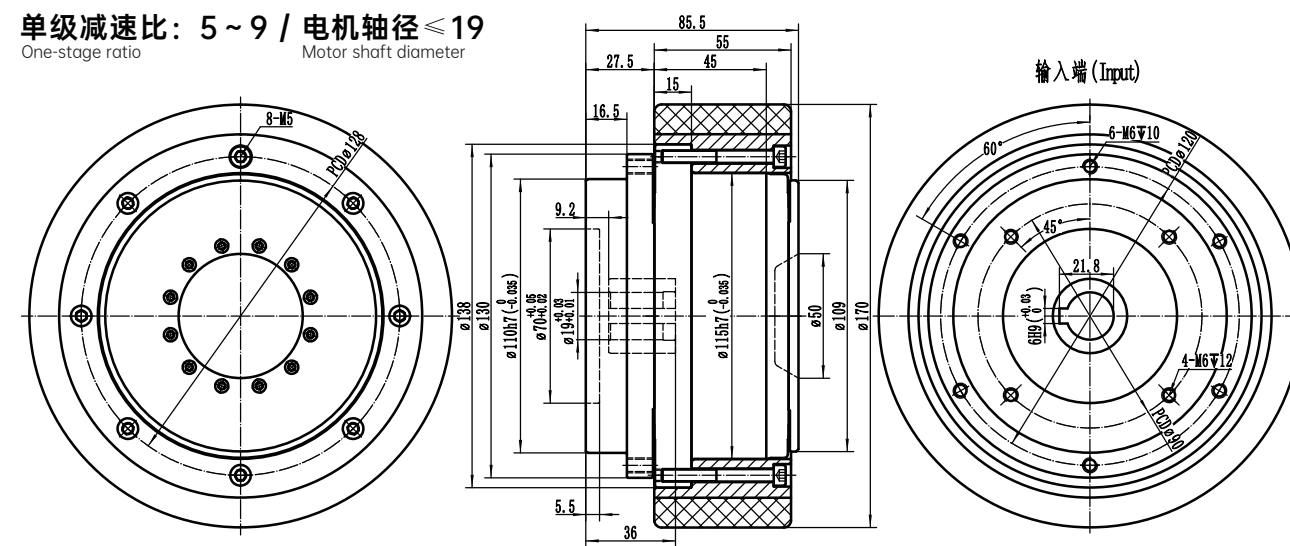


WGV115外形图/Outline drawing

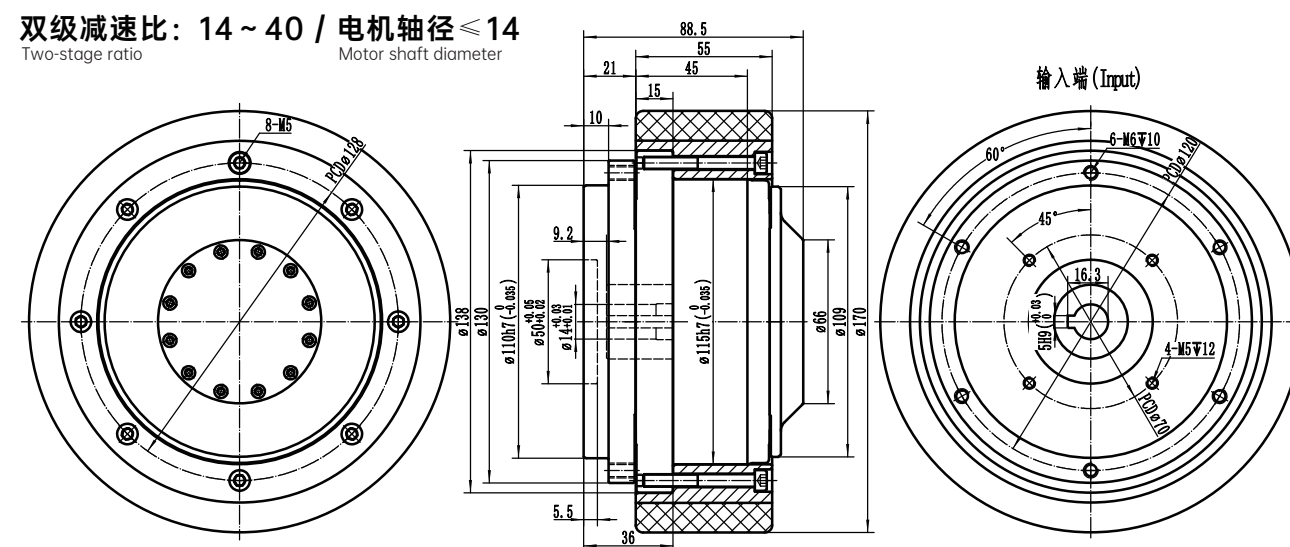
单级减速比: 2~4 / 电机轴径 ≤19
One-stage ratio Motor shaft diameter



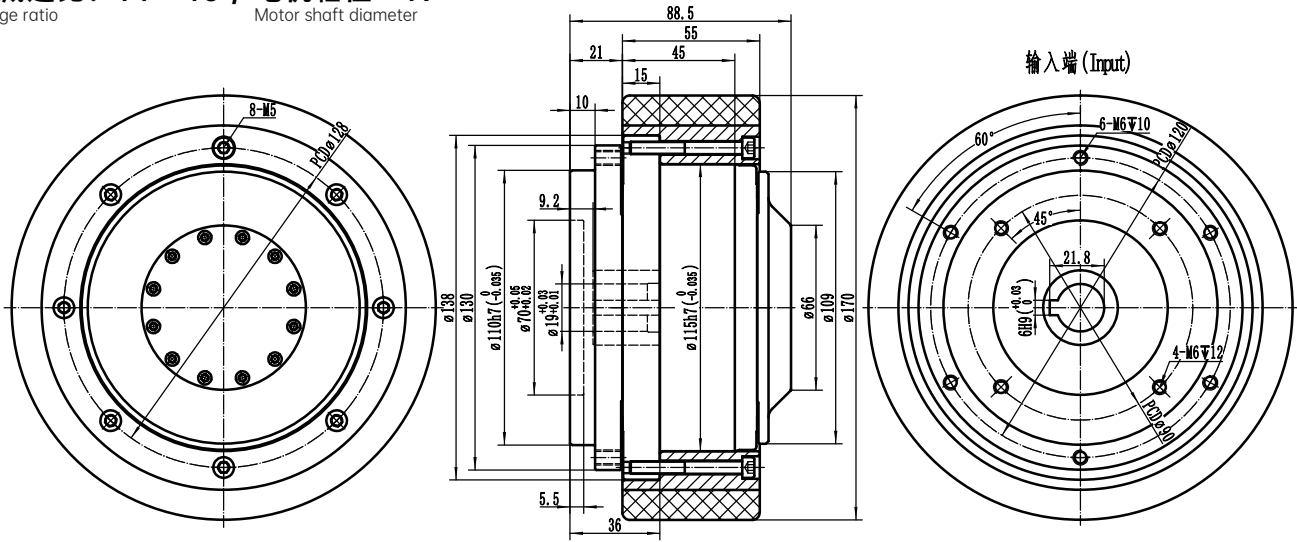
单级减速比: 5~9 / 电机轴径 ≤19
One-stage ratio Motor shaft diameter



双级减速比: 14~40 / 电机轴径 ≤14
Two-stage ratio Motor shaft diameter

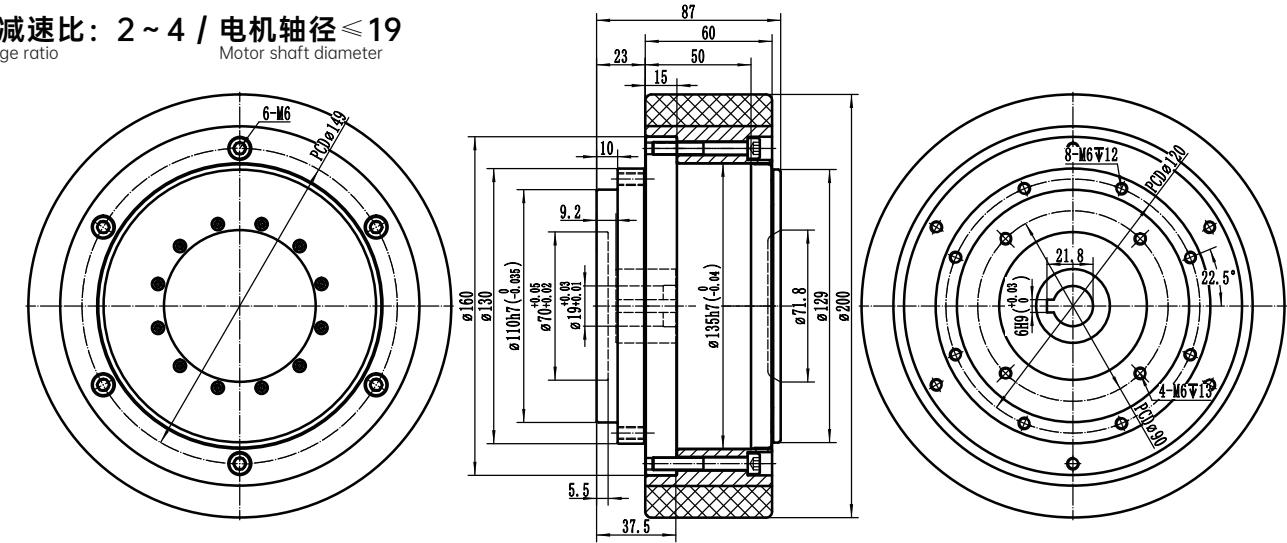


双级减速比: 14 ~ 40 / 电机轴径 ≤ 19
Two-stage ratio Motor shaft diameter

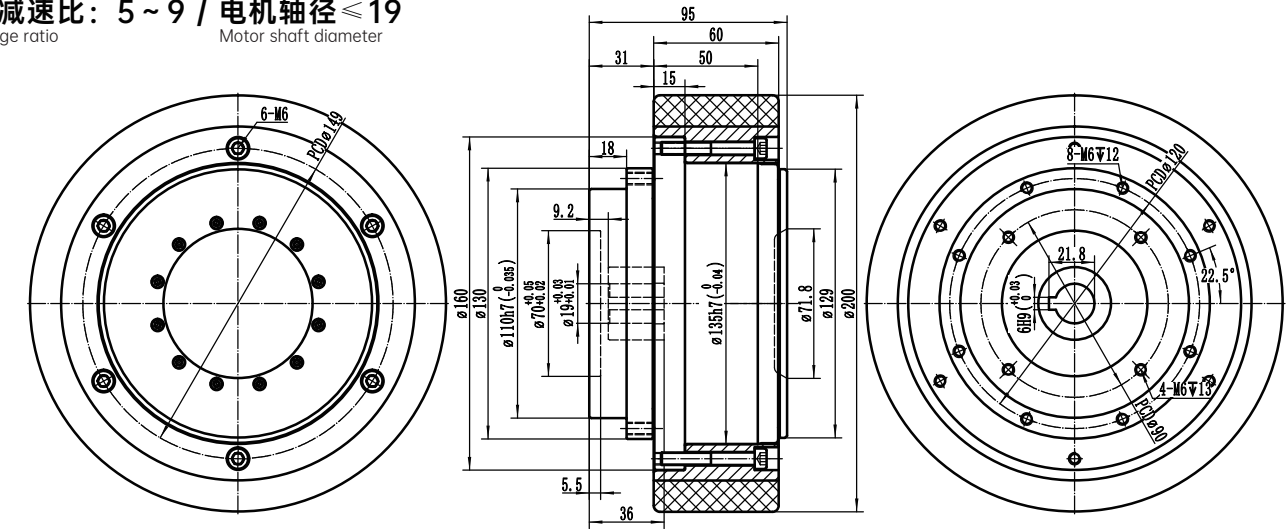


WGV135外形图/Outline drawing

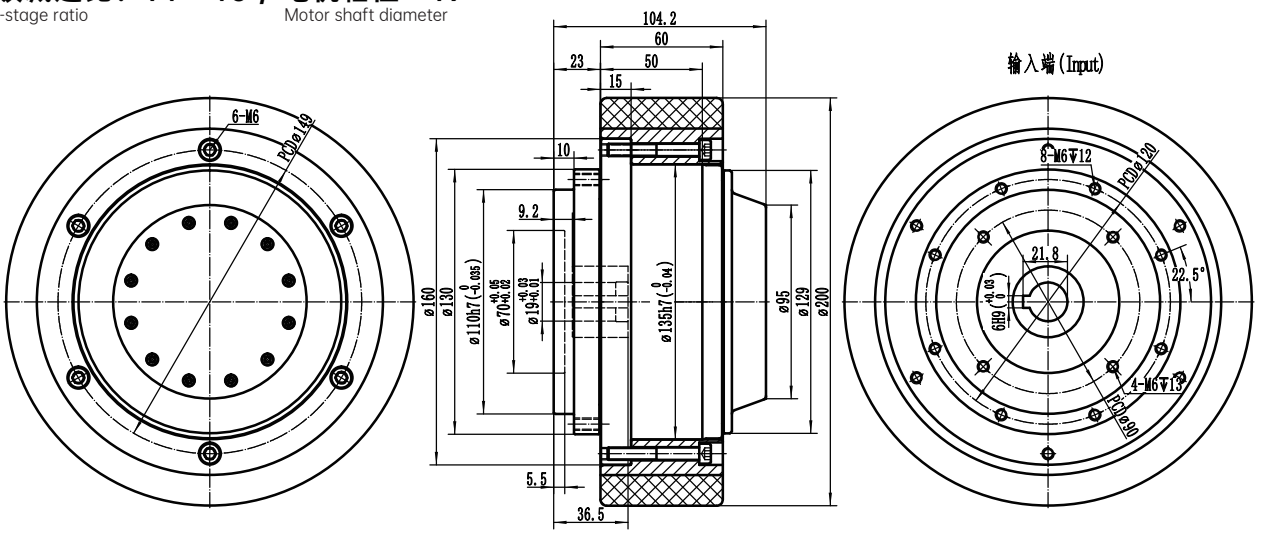
单级减速比: 2 ~ 4 / 电机轴径 ≤ 19
One-stage ratio Motor shaft diameter



单级减速比: 5 ~ 9 / 电机轴径 ≤ 19
One-stage ratio Motor shaft diameter

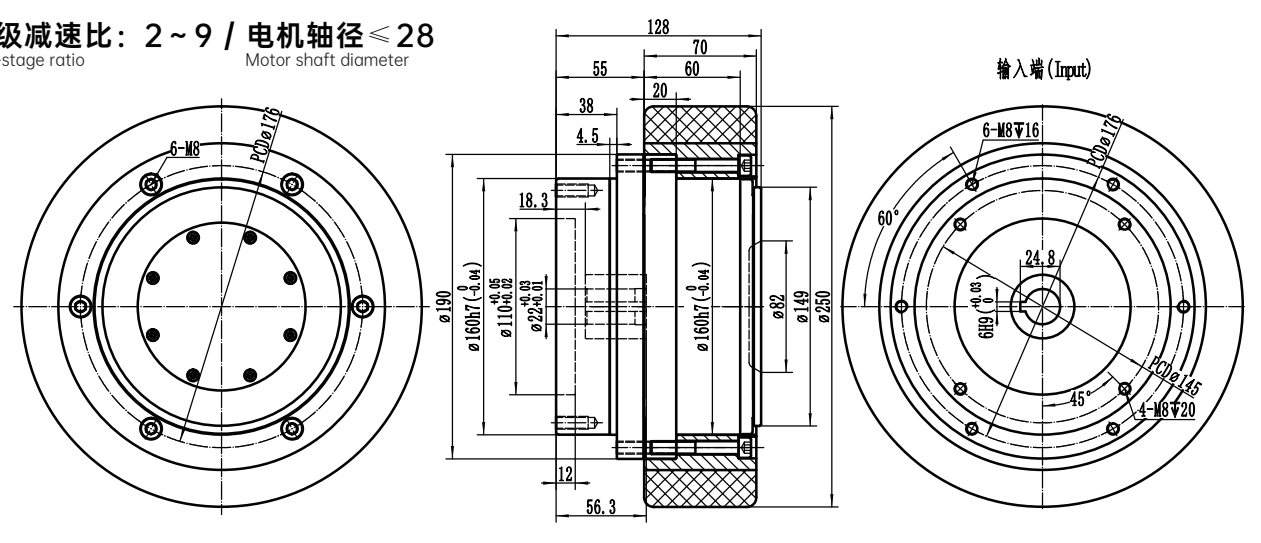


双级减速比: 14 ~ 40 / 电机轴径 ≤ 19
Two-stage ratio Motor shaft diameter

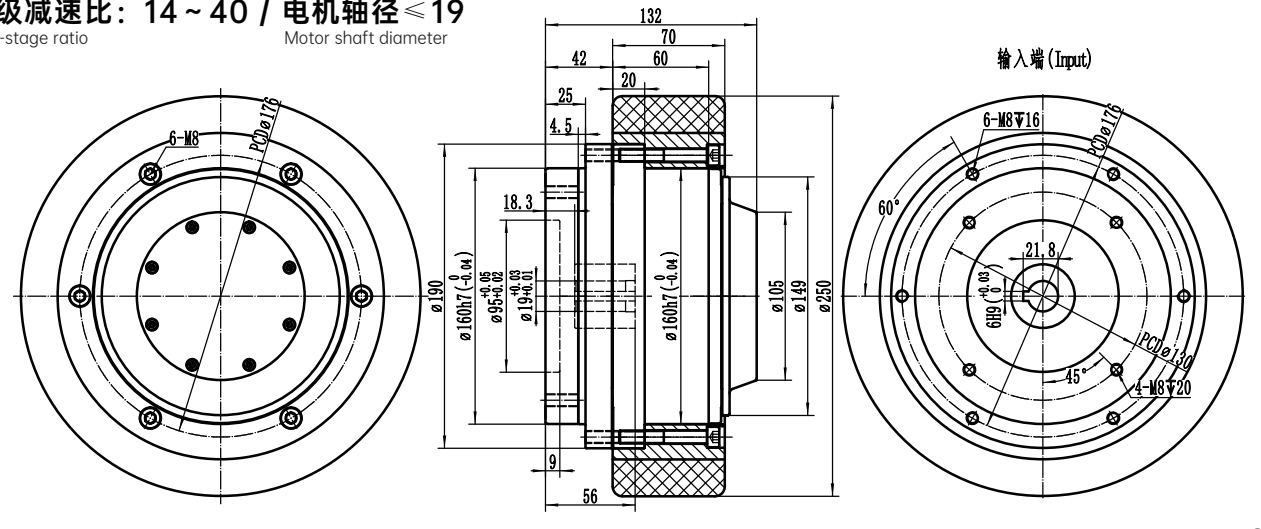


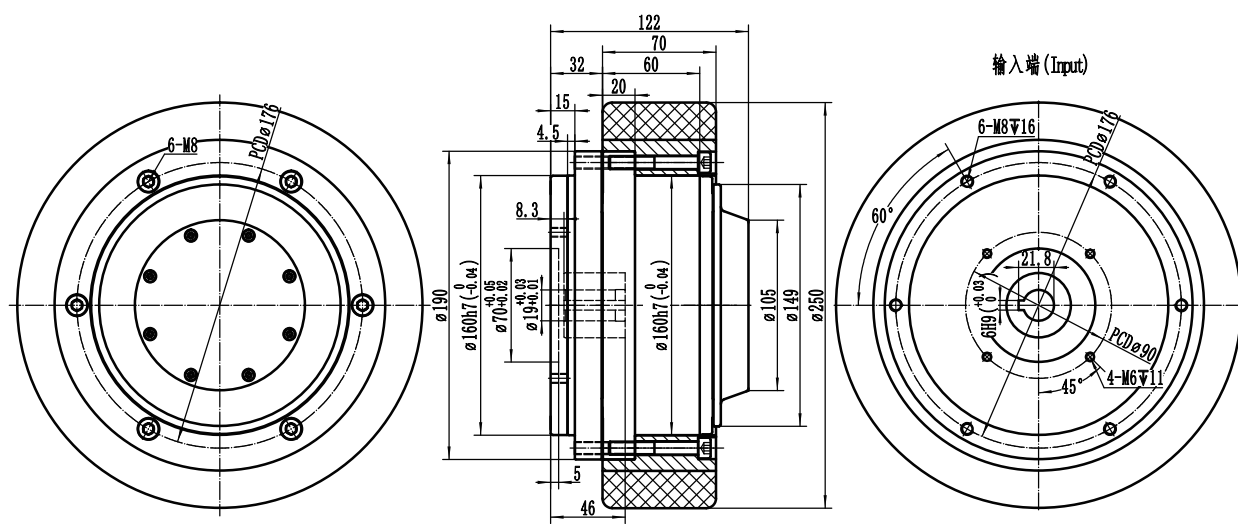
WGV160外形图/Outline drawing

单级减速比: 2 ~ 9 / 电机轴径 ≤ 28
One-stage ratio Motor shaft diameter

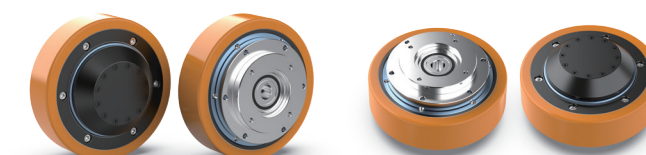
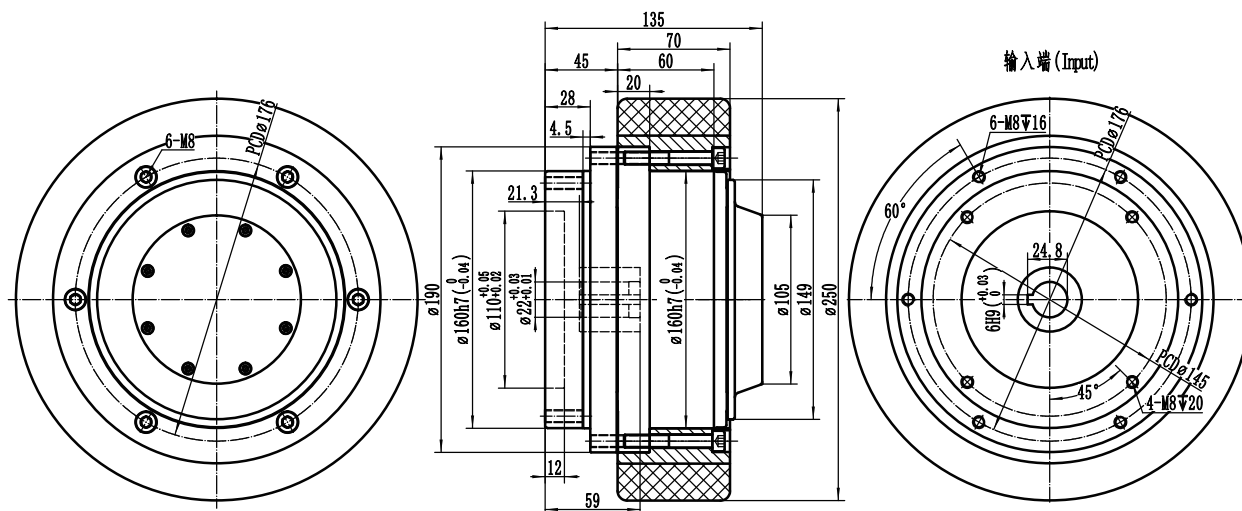


双级减速比: 14 ~ 40 / 电机轴径 ≤ 19
Two-stage ratio Motor shaft diameter





双级减速比: 14 ~ 40 / 电机轴径 ≤ 28
Two-stage ratio Motor shaft diameter



- 广泛应用于AGV、RGV行走系统
- 低噪音大扭矩，径向承载能力强
- 结构紧凑,安装方便
- 可定制化生产

- Widely used in AGV, RGV and AMR driving systems.
- Low noise, high torque, strong radial bearing capacity
- Compact structure, easy to install
- Customizable production