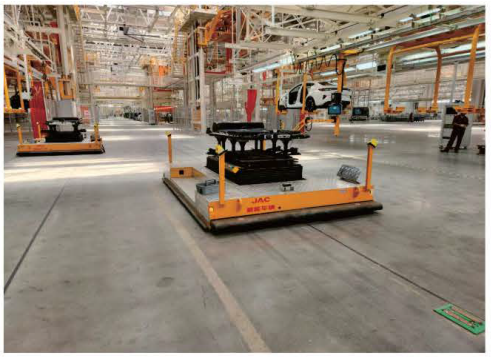
ГИРТАБ
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Решение системы рулевого привода для промышленного транспортного средства





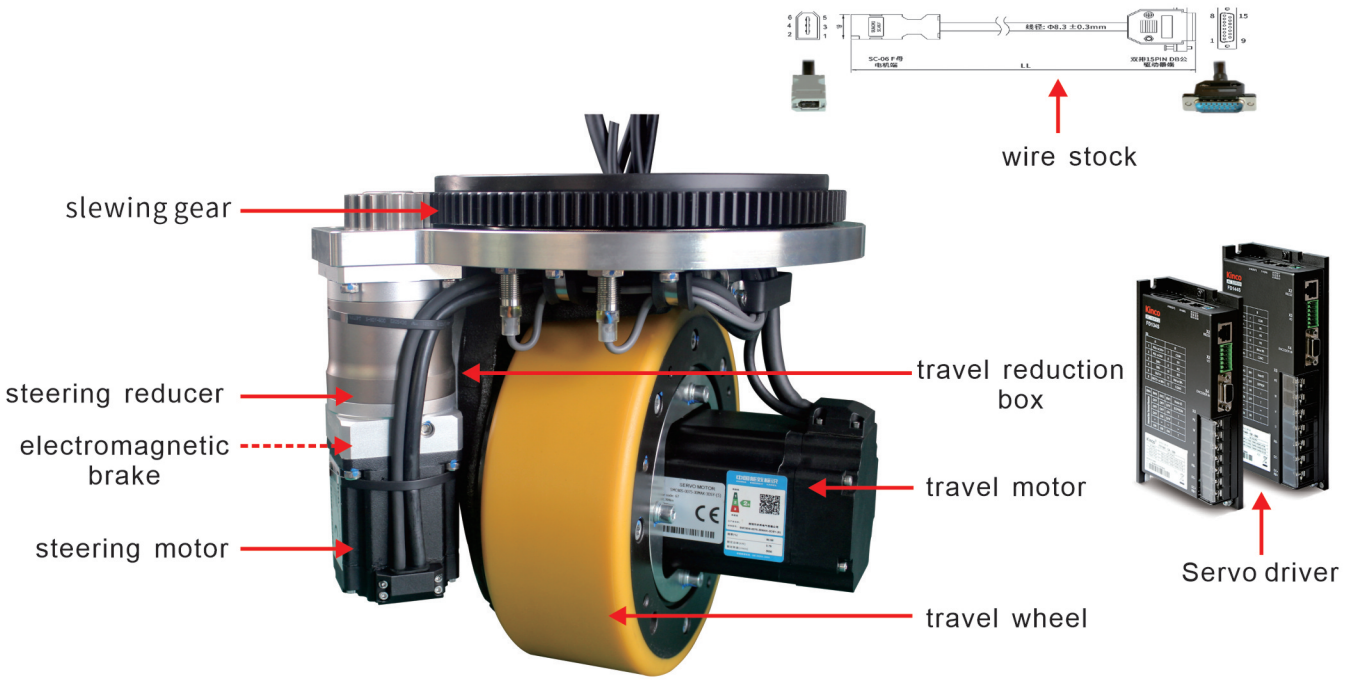








Product Characteristics



1. Overall high strength and long life design.
Meet the stringent requirements of vehicles for steering wheel system

2. Low-voltage servo system is usually adopted, which supports Canopen, EtherCAT, 485 and other communication modes, especially applicable to industries with high control accuracy requirements

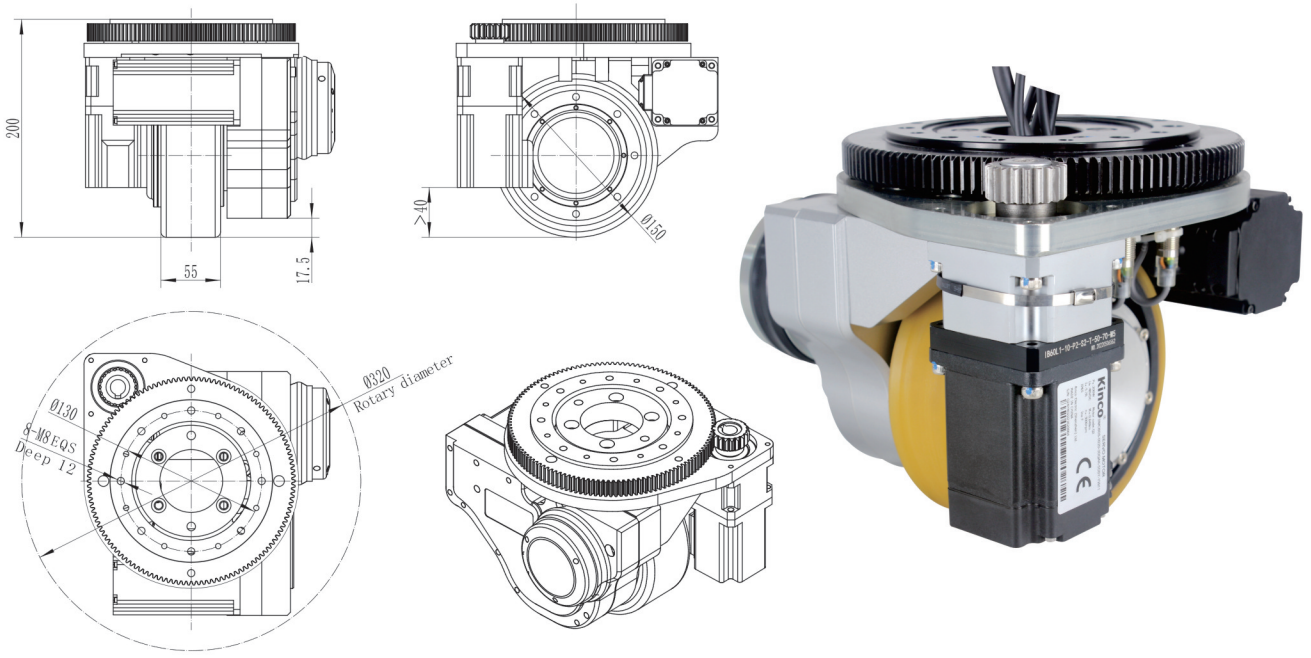
3. Compact structure, integrated with walking, steering, braking, position feedback and other functions

4. The tyres can be made of polyurethane or rubber according to the working conditions

5. High-precision rotary mechanism with hard tooth surface

6. Stable and low noise operation, easy to achieve high control accuracy

HW150 Horizontal Drive Wheel Series



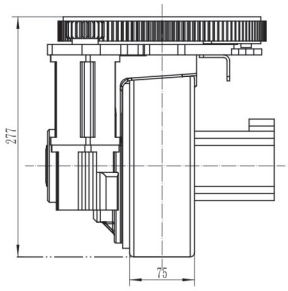
Main performance parameter

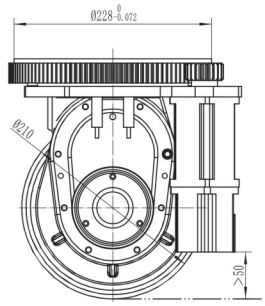
Model		HW150-SM400-48-36-JAZ
	Performance index	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.4
	Voltage V	48
	Rated current A	10.1
	Rated torque Nm	1.27
	Rated speed r/min	3000
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction
	Reduction ratio	35.67：1
Brake	Brake torque Nm	4
	Rated voltage V	Dc24
Tyre	Wheel material	Polyurethane/Rubber
	Wheel size	ϕ150X55
Steering part	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.2
	Voltage V	48
	Rated current A	5.1
	Rated torque Nm	0.64
	Rated speed r/min	3000
	Reducer type	Double planetary gear reduction
	Reduction ratio	63:1
	Encoder Type	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	0-39
	Rated traction N	540
	Carrying capacity Kg	400
	Net weight Kg	22

※ Reduction ratio optional20 32.1

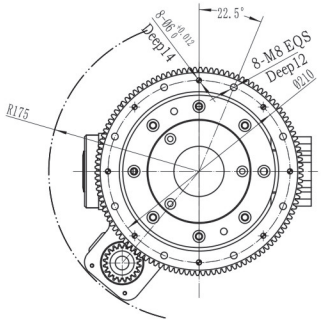
※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

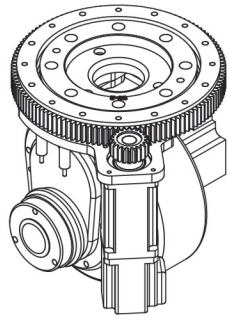
HW210 Horizontal Drive Wheel Series











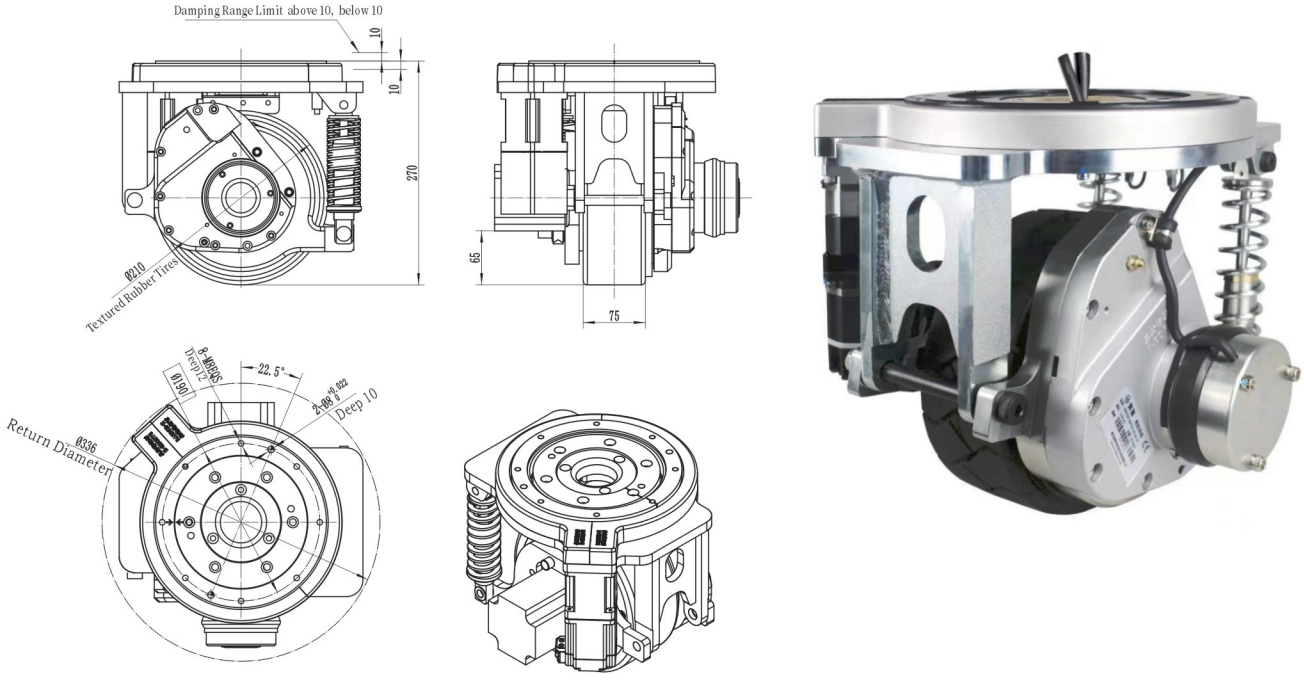
Main performance parameter

Model		HW210-SM750-48-B	HW210-SM1000-48-B
	Performance index	Parameter	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	0.75	1
	Voltage V	48	48
	Rated current A	19	26.4
	Rated torque Nm	2.39	3.18
	Rated speed r/min	3000	3000
	Speed fbk sel	Incremental encoder	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction	Secondary gear reduction
	Reduction ratio	27.43：1	27.43
Brake	Brake torque Nm	6	6
	Rated voltage V	DC24	DC24
Tyre	Wheel material	Polyurethane/Rubber	Polyurethane/Rubber
	Wheel size	ϕ210X75	ϕ210X75
Steering part	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	0.2	0.2
	Voltage V	48	48
	Rated current A	5.1	5.7
	Rated torque Nm	0.64	0.64
	Rated speed r/min	3000	3000
	Reducer type	Secondary planetary gear reduction	Secondary planetary gear reduction
	Reduction ratio	295:1	295:1
	Encoder type	Incremental encoder/Absolute encoder	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°	±110°
	Travel speed m/min	0-72	0-72
	Rated traction N	570	748
	Carrying capacity Kg	700	700
	Net weight Kg	36	34

※ Reduction ratio optional 24.685 27.43 48.9

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HW210 Horizontal Damping Drive Wheel Series



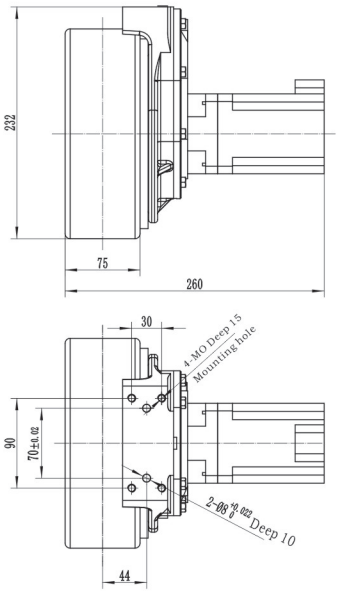
Main performance parameter

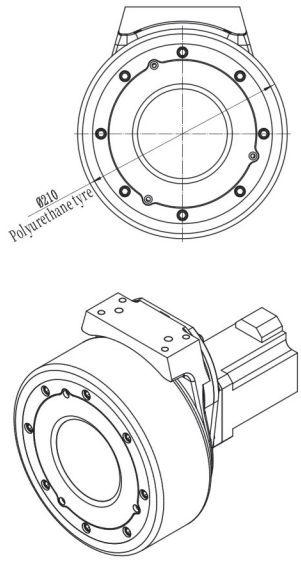
Model		HW210-SM750-48-44-JZ
	Performance index	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.75
	Voltage V	48
	Rated current A	19
	Rated torque Nm	2.39
	Rated speed r/min	3000
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction
	Reduction ratio	44.03：1
Brake	Brake torque Nm	6
	Rated voltage V	DC24
Tyre	Wheel material	Rubber
	Wheel size	Φ210X75
Steering part	Motor type	Servo motor
	Motor power kW	0.2
	Voltage V	48
	Rated current A	5.1
	Rated torque Nm	0.64
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	275:1
	Encoder type	Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	0-44.9
	Rated traction N	910
	Carrying capacity Kg	500
	Net weight Kg	38

※Reduction ratio optional24.685 27.43 48.9 ※ Motor power optional1Kw

※Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HW210 Differential Wheel Series







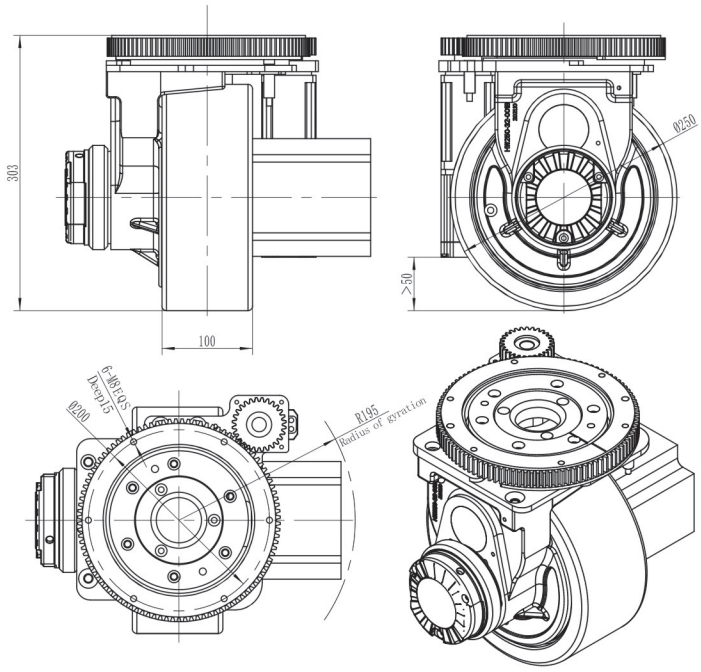
Main performance parameter

Model		HW210-SM400-48-CS	HW210-SM750-48-CS
	Performance index	Parameter	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	0.4	0.75
	Voltage V	48	48
	Rated current A	10.1	19.9
	Rated torque Nm	1.27	2.39
	Rated speed r/min	3000	3000
	Speed fbk sel	Incremental encoder	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction	Secondary gear reduction
	Reduction ratio	27.43	27.43
Brake	Brake torque Nm	6	6
	Rated voltage V	DC24	DC24
Tyre	Wheel material	Polyurethane	Polyurethane
	Wheel size	210X75	210x75
Steering part	Motor type	-	-
	Motor power kW	-	-
	Voltage V	-	-
	Rated current A	-	-
	Rated torque Nm	-	-
	Rated speed r/min	-	-
	Reducer type	-	-
	Reduction ratio	-	-
	Encoder type	-	-
Other	Steering limit angle	-	-
	Travel speed m/min	0-75	0-75
	Rated traction N	298	561
	Carrying capacity Kg	700	700
	Net weight Kg	18	20

※ Reduction ratio optional 24.685

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HW250 Horizontal Drive Wheel Series



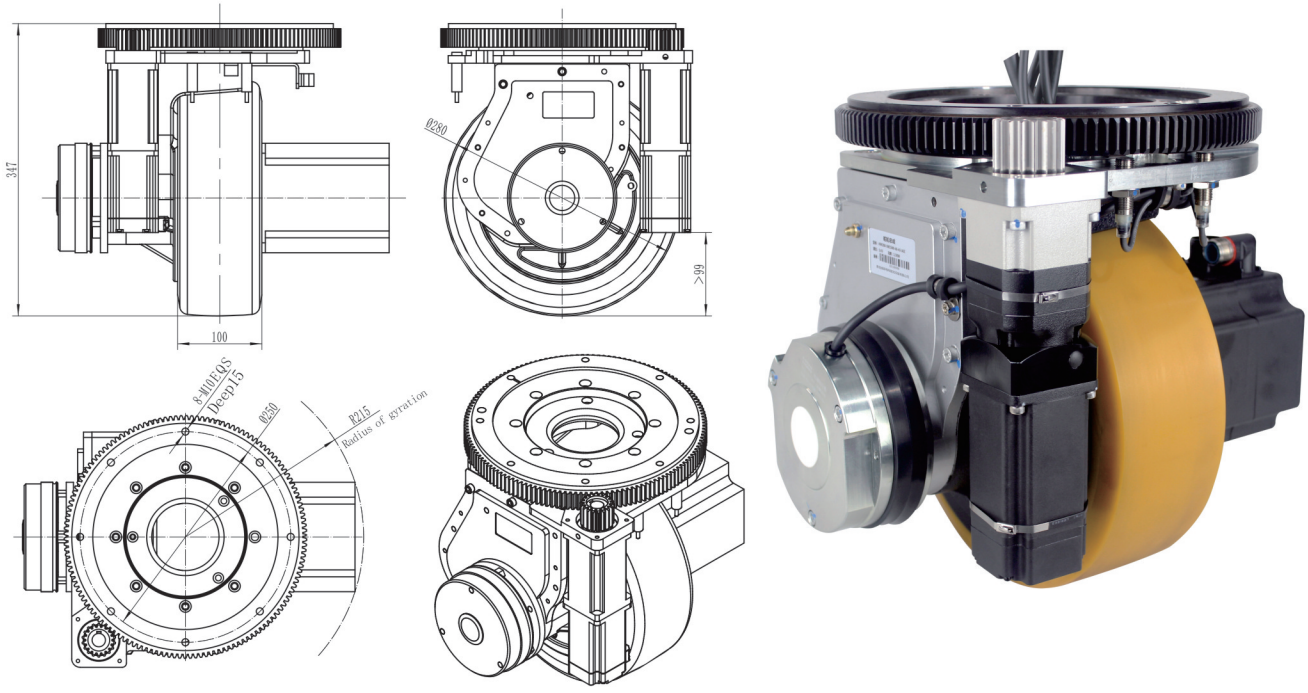


Main performance parameter

Model		HW250-SM1500-48	HW250-SM2500-48
	Performance index	Parameter	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	1.5	2.5
	Voltage V	48	48
	Rated current A	37.4	61
	Rated torque Nm	5	7.96
	Rated speed r/min	3000	3000
	Speed fbk sel	Incremental encoder	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction	Secondary gear reduction
	Reduction ratio	31. 43: 1	31. 43
Brake	Brake torque Nm	8	16
	Rated voltage V	DC24	DC24
Tyre	Wheel material	Polyurethane /Rubber	Polyurethane /Rubber
	Wheel size	ϕ250X100	ϕ250X100
Steering part	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	0.4	0.4
	Voltage V	48	48
	Rated current A	10.1	10.1
	Rated torque Nm	1.27	1.27
	Rated speed r/min	3000	3000
	Reducer type	Secondary planetary gear reduction	Secondary planetary gear reduction
	Reduction ratio	196:1	327:1
	Encoder type	Incremental encoder/Absolute encoder	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°	±110°
	Travel speed m/min	0-70	0-75
	Rated traction N	1140	1800
	Carrying capacity Kg	1000	1500
	Net weight Kg	51	52

※Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HW280 Horizontal Drive Wheel Series



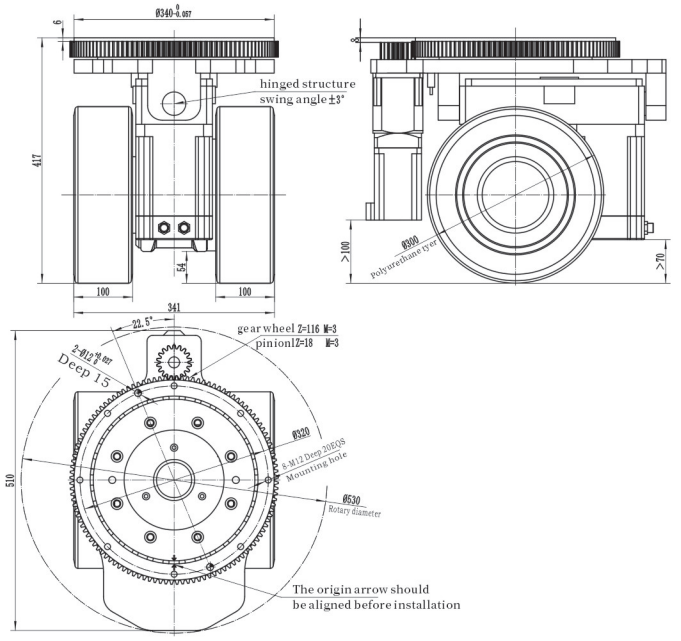
Main performance parameter

Model		HW280–SM1500–48	HW280–SM2500–48
	Performance index	Parameter	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	1.5	2.5
	Voltage V	48	48
	Rated current A	37.4	61
	Rated torque Nm	5	7.96
	Rated speed r/min	3000	3000
	Speed fbk sel	Incremental encoder	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction	Secondary gear reduction
	Reduction ratio	31. 43: 1	43
Brake	Brake torque Nm	16	16
	Rated voltage V	Dc24	Dc24
Tyre	Wheel material	Polyurethane /Rubber	Polyurethane /Rubber
	Wheel size	ϕ 280X100	ϕ 280X100
Steering part	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	0.4	0.4
	Voltage V	48	48
	Rated current A	37.4	61
	Rated torque Nm	1.27	1.27
	Rated speed r/min	3000	3000
	Reducer type	Secondary planetary gear reduction	Secondary planetary gear reduction
	Reduction ratio	394:1	394:1
	Encoder type	Incremental encoder/Absolute encoder	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°	±110°
	Travel speed m/min	0–60	0–60
	Rated traction N	1010	1600
	Carrying capacity Kg	2000	2000
	Net weight Kg	60	63

※ Reduction ratio optional 43, 62.86

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HW300 Differential Drive Wheel Series





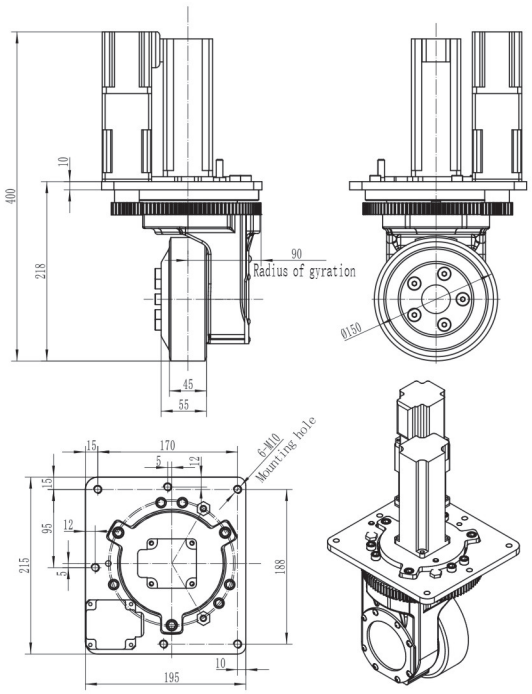
Main performance parameter

Model		HW300-SM3000-48-65-SL	HW430-SM5000-48-65-SL
	Performance index	Parameter	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	3	5
	Voltage V	48	48
	Rated current A	72	111
	Rated torque Nm	9.55	23
	Rated speed r/min	3000	3000
	Speed fbk sel	Incremental encoder	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction	Secondary gear reduction
	Reduction ratio	63.72	60.9
Brake	Brake torque Nm	16.5	32
	Rated voltage V	DC24	DC24
Tyre	Wheel material	Polyurethane /Rubber	Polyurethane /Rubber
	Wheel size	300X100	430X170
Steering part	Motor type	Synchronous servo	Synchronous servo
	Motor power kW	1	1.5
	Voltage V	48	48
	Rated current A	26.7	37.4
	Rated torque Nm	3.18	5
	Rated speed r/min	3000	3000
	Reducer type	Secondary planetary gear reduction	Secondary planetary gear reduction
	Reduction ratio	394：1	394：1
	Encoder type	Incremental encoder/Absolute encoder	Incremental encoder/Absolute encoder
Other	Installation Height mm	417	575
	Steering limit angle	±110°	±110°
	Travel speed m/min	0-45	0-45
	Rated traction N	3650	5860
	Carrying capacity Kg	3000	7000
	Net weight Kg	170	210

※ Motor power optional

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HL150 Vertical Drive Wheel Series



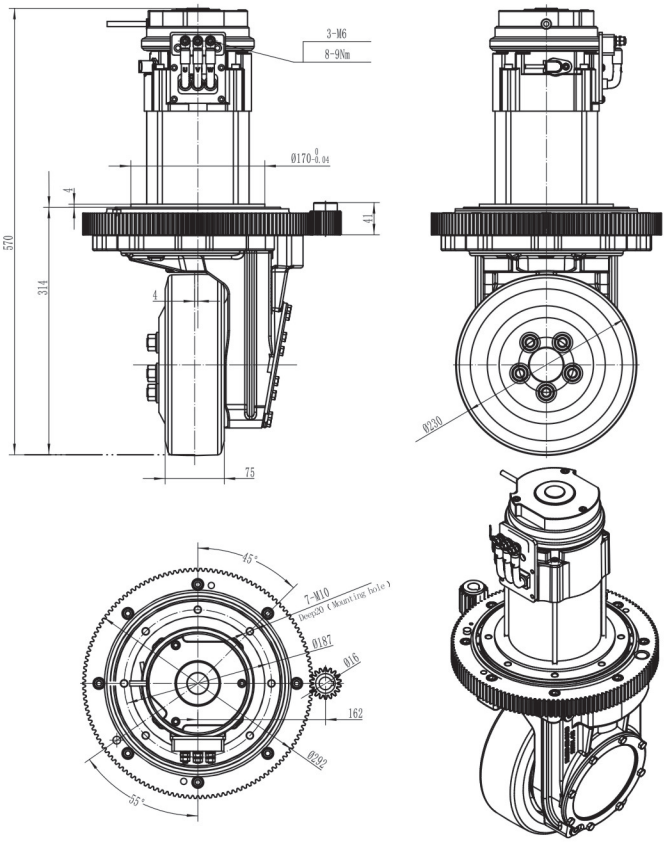


Main performance parameter

Model		HL150-SM400-48-19-A1	HL150-SM600-48-19
	Performance index	Parameter	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	0.4	0.6
	Voltage V	48	48
	Rated current A	10.1	16.5
	Rated torque Nm	1.27	1.91
	Rated speed r/min	3000	3000
	Speed fbk sel	Incremental encoder	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction	Secondary gear reduction
	Reduction ratio	18.9	18.9：1
Brake	Brake torque Nm	1.5	4
	Rated voltage V	DC24	Dc24
Tyre	Wheel material	Polyurethane /Rubber	Polyurethane /Rubber
	Wheel size	150X45	ϕ 150X45
Steering part	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	0.2	0.2
	Voltage V	48	48
	Rated current A	5.1	5.1
	Rated torque Nm	0.64	0.64
	Rated speed r/min	3000	3000
	Reducer type	Secondary planetary gear reduction	Secondary planetary gear reduction
	Reduction ratio	250：1	250:1
	Encoder type	Incremental encoder/Absolute encoder	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°	±110°
	Travel speed m/min	0-74	0-74
	Rated traction N	390	430
	Carrying capacity Kg	300	300
	Net weight Kg	18	20

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HL230 Vertical Drive Wheel Series



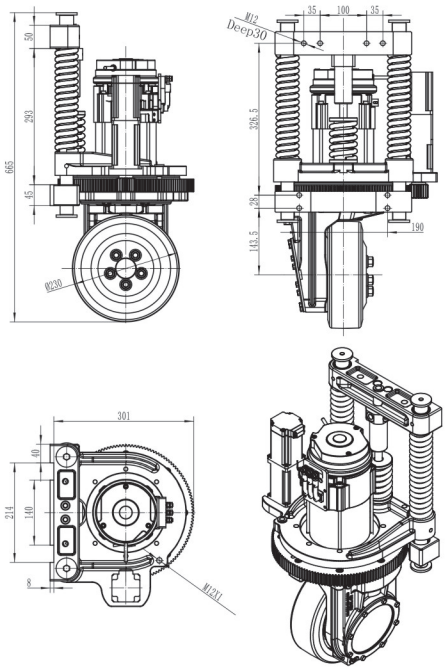


Main performance parameter

Model		HL230-AC1600-24-22B	HL230-AC2200-24-22B
	Performance index	Parameter	Parameter
Travel motor	Motor type	AC induction motor	AC induction motor
	Motor power kW	1.6	2.2
	Voltage V	24	24
	Rated current A	78	105
	Rated torque Nm	5.66	6.26
	Rated speed r/min	2560	3352
	Speed fbk sel	Pulse type	Pulse type
Gearbox	Reducer type	Secondary gear reduction	Secondary gear reduction
	Reduction ratio	22.07：1	22.07：1
Brake	Brake torque Nm	16	16
	Rated voltage V	Dc24	DC24
Tyre	Wheel material	Polyurethane/Rubber	Polyurethane/Rubber
	Wheel size	ϕ230X75	ϕ230X75
Other	Steering limit angle	None	None
	Travel speed m/min	0-100	0-100
	Rated traction N	1000	1080
	Maximum traction N	2500	2700
	Carrying capacity Kg	1200	1200
	Net weight Kg	58	60

※ Voltage optional DC48V
※ Reduction ratio optional14.5 16.7 22.07 27.31
※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HL230 Vertical Drive Wheel Series





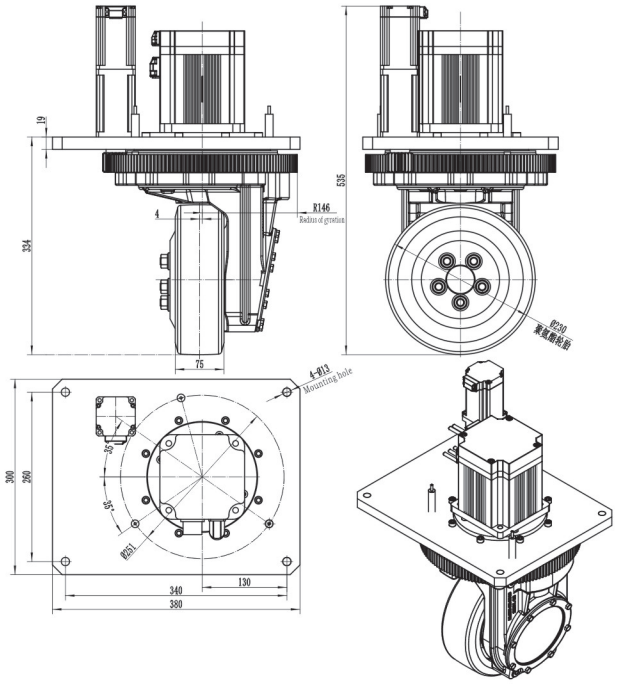
Main performance parameter

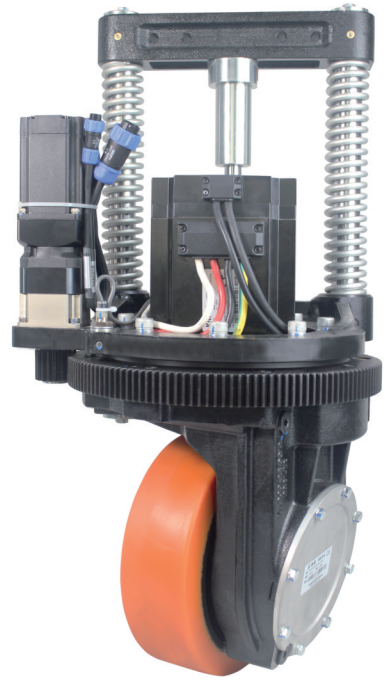
Model		HL230-AC1600-24-22-FD-SM	HL230-AC2200-24-22-FD-SM
	Performance index	Parameter	Parameter
Travel motor	Motor type	AC induction motor	AC induction motor
	Motor power kW	1.6	2.2
	Voltage V	24	24
	Rated current A	47	105
	Rated torque Nm	5.66	6.26
	Rated speed r/min	3250	2560
	Speed fbk sel	Pulse type	Pulse type
Gearbox	Reducer type	Secondary gear reduction	Secondary gear reduction
	Reduction ratio	22.07：1	22.07/27.31
Brake	Brake torque Nm	16	16
	Rated voltage V	Dc24	DC24
Tyre	Wheel material	Polyurethane /Rubber	Polyurethane /Rubber
	Wheel size	ϕ230X75	230*75
Steering part	Motor type	Permanent magnet synchronous servo motor	Permanent magnet synchronous servo motor
	Motor power kW	0.4	0.4
	Voltage V	48	48
	Rated current A	10.1	10.1
	Rated torque Nm	5.66	6.26
	Rated speed r/min	3000	3000
	Reducer type	Secondary planetary gear reduction	Secondary planetary gear reduction
	Reduction ratio	200:1	200:1
	Encoder type	Incremental encoder/Absolute encoder	Incremental encoder/Absolute encoder
Other	Steering limit angle	None	None
	Travel speed m/min	0-105	0-105
	Rated traction N	1000	1080
	Carrying capacity Kg	1200	1200
	Net weight Kg	91	92

※ Reduction ratio optional 22.07, 27.31

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HL230 Vertical Drive Wheel Series





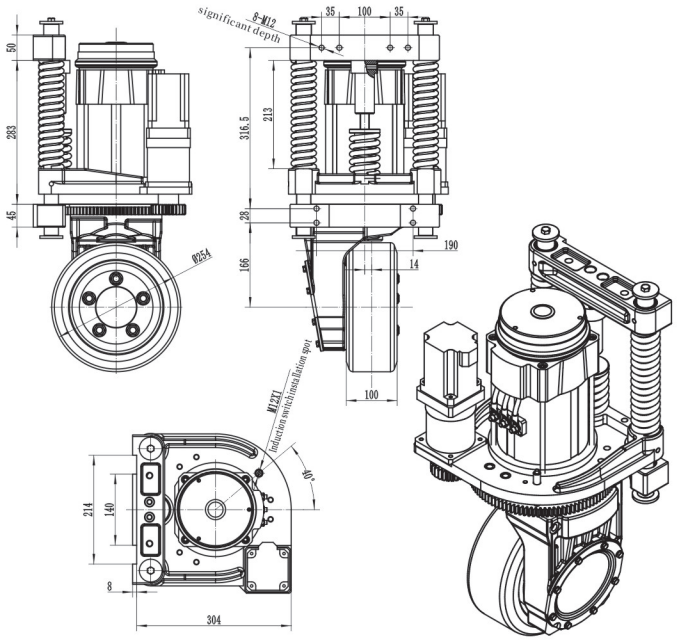
Main performance parameter

Model		HL230–SM2500–48–17
	Performance index	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	2.5
	Voltage V	48
	Rated current A	61
	Rated torque Nm	7.96
	Rated speed r/min	3000
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction
	Reduction ratio	27.31
Brake	Brake torque Nm	8
	Rated voltage V	DC24
Tyre	Wheel material	Polyurethane /Rubber
	Wheel size	230X75
Steering part	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.4
	Voltage V	48
	Rated current A	10.1
	Rated torque Nm	1.27
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	400:1
	Encoder type	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	0–78
	Rated traction N	1374
	Carrying capacity Kg	1200
	Net weight Kg	82

※ Reduction ratio optional 14.5, 16.7, 27.31

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HL254 Vertical Drive Wheel Series





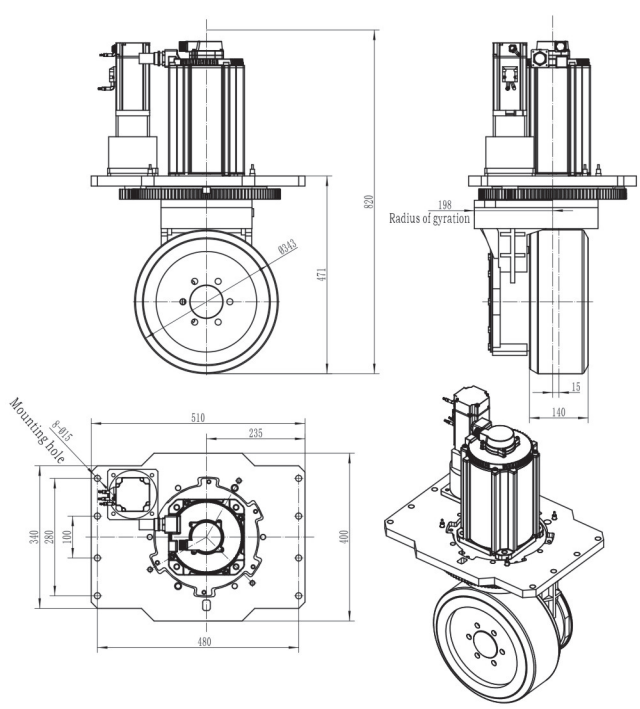
Main performance parameter

Model		HL254-AC2500-48-24-FD-SM
	Performance index	Parameter
Travel motor	Motor type	AC induction motor
	Motor power kW	2.5
	Voltage V	48
	Rated current A	60
	Rated torque Nm	7.1
	Rated speed r/min	3350
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction
	Reduction ratio	24.1：1
Brake	Brake torque Nm	16
	Rated voltage V	DC24
Tyre	Wheel material	Polyurethane
	Wheel size	ϕ254X100
Steering part	Motor type	Servo Motor
	Motor power kW	0.75
	Voltage V	48
	Rated current A	19
	Rated torque Nm	2.39
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	200:1
	Encoder type	Absolute encoder
Other	Steering limit angle	360 revolving
	Travel speed m/min	0-110
	Rated traction N	1180
	Carrying capacity Kg	1560
	Net weight Kg	105

※ Pillar suspension can be an option according to the request.

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HL343 Vertical Drive Wheel Series



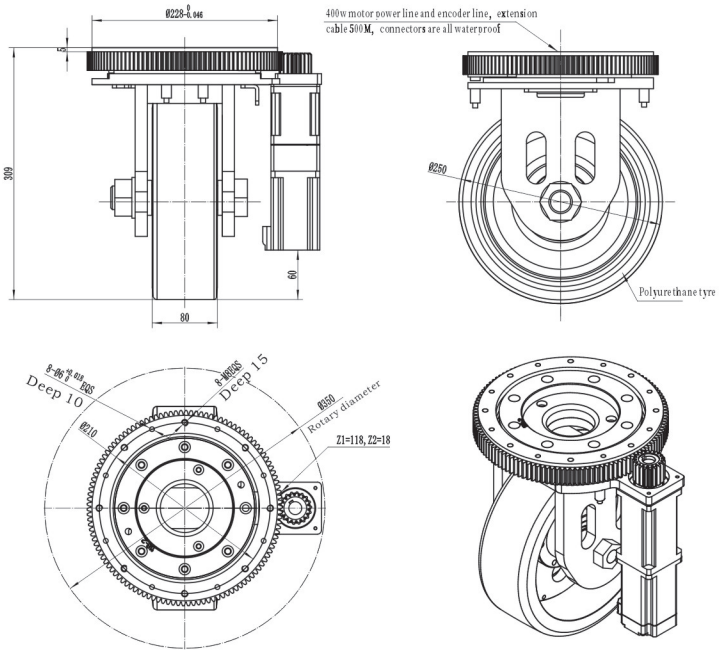


Main performance parameter

Model		HL343-AC4500-48-22
	Performance index	Parameter
Travel motor	Motor type	AC induction motor
	Motor power kW	4.5
	Voltage V	48
	Rated current A	107
	Rated torque Nm	14.8
	Rated speed r/min	2890
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction
	Reduction ratio	22.32：1
Brake	Brake torque Nm	40
	Rated voltage V	Dc24
Tyre	Wheel material	Polyurethane /Rubber
	Wheel size	ϕ343X140
Steering part	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.75
	Voltage V	48
	Rated current A	19
	Rated torque Nm	2.39
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	300:1
	Encoder type	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	0-139
	Rated traction N	1700
	Carrying capacity Kg	3000
	Net weight Kg	120

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HK250 Controllable Wheel Series



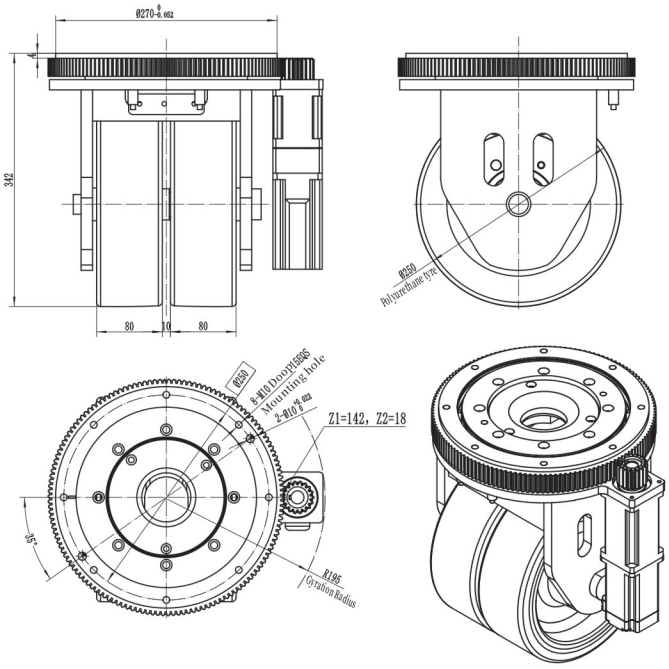


Main performance parameter

Model		HK250-SM400-48-ZK-DL
	Performance index	Parameter
Travel motor	Motor type	–
	Motor power kW	–
	Voltage V	–
	Rated current A	–
	Rated torque Nm	–
	Rated speed r/min	–
	Speed fbk sel	–
Gearbox	Reducer type	–
	Reduction ratio	–
Brake	Brake torque Nm	–
	Rated voltage V	–
Tyre	Wheel material	Polyurethane /Rubber
	Wheel size	250X80
Steering part	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.4
	Voltage V	48
	Rated current A	10.1
	Rated torque Nm	1.27
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	327：1
	Encoder type	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	–
	Rated traction N	–
	Carrying capacity Kg	1500
	Net weight Kg	35

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

HK250 Multi-directional Series



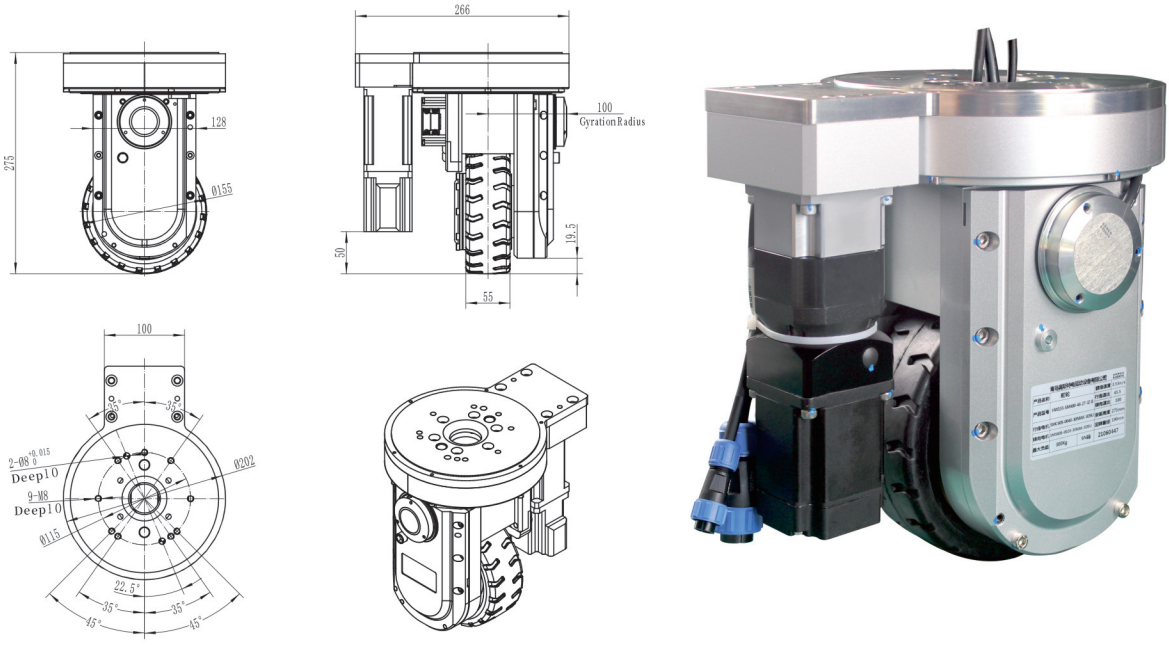


Main performance parameter

Model		HK250-SM400-48
	Performance index	Parameter
Travel motor	Motor type	--
	Motor power kW	--
	Voltage V	--
	Rated current A	--
	Rated torque Nm	--
	Rated speed r/min	--
	Speed fbk sel	--
Gearbox	Reducer type	--
	Reduction ratio	--
Brake	Brake torque Nm	--
	Rated voltage V	--
Tyre	Wheel material	Polyurethane
	Wheel size	ϕ 250X80
Steering part	Motor type	Servo Motor
	Motor power kW	0.4
	Voltage V	48
	Rated current A	10.1
	Rated torque Nm	1.27
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	394:1
	Encoder type	Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	--
	Rated traction N	--
	Carrying capacity Kg	2000
	Net weight Kg	45

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

Industry Customization (Construction Robot)

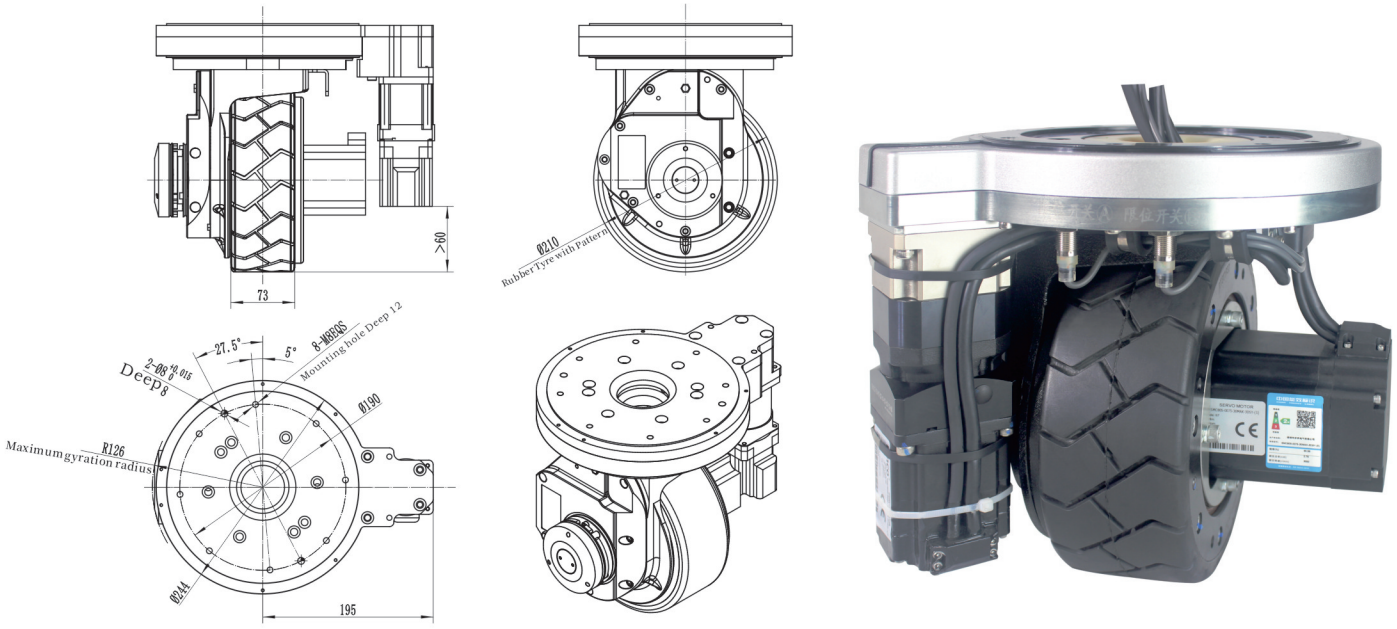


Main performance parameter

Model		HW155-SM400-48-JD-C
	Performance index	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.4
	Voltage V	48
	Rated current A	10.1
	Rated torque Nm	1.27
	Rated speed r/min	3000
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction
	Reduction ratio	45.5：1
Brake	Brake torque Nm	4
	Rated voltage V	Dc24
Tyre	Wheel material	Polyurethane /Rubber
	Wheel size	ϕ155X55
Steering part	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.2
	Voltage V	48
	Rated current A	5.1
	Rated torque Nm	0.64
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	138.6:1
	Encoder type	Incremental encoder/Absolute encoder
Other	Steering limit angle	±130°
	Travel speed m/min	0-32
	Rated traction N	670
	Carrying capacity Kg	300
	Net weight Kg	29

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

Industry Customization (Construction Robot)



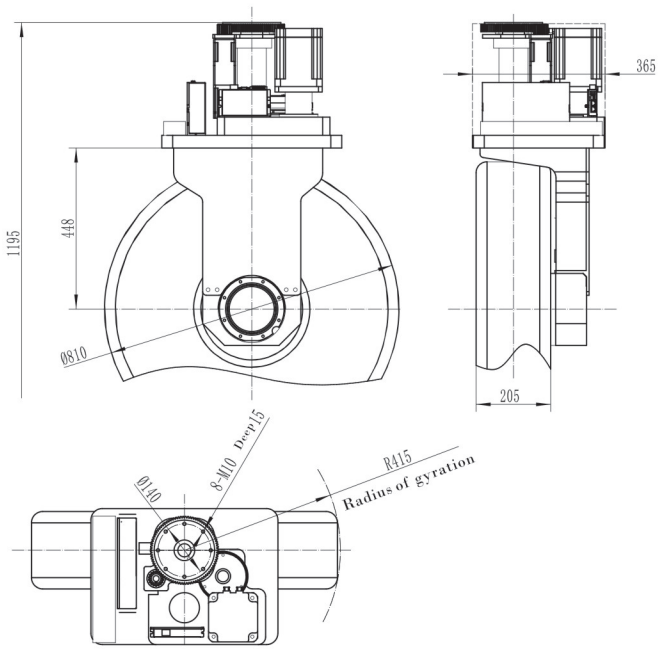
Main performance parameter

Model		HW210-SM750-48-44-35-190-SP
	Performance index	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.75
	Voltage V	48
	Rated current A	19
	Rated torque Nm	96
	Rated speed r/min	3000
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction
	Reduction ratio	44.03
Brake	Brake torque Nm	6
	Rated voltage V	DC24
Tyre	Wheel material	Rubber
	Wheel size	210X75
Steering part	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.4
	Voltage V	48
	Rated current A	6.5
	Rated torque Nm	0.64
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	192：1
	Encoder type	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	0-50
	Rated traction N	590
	Carrying capacity Kg	800
	Net weight Kg	52

※ Reduction ratio optional ※Motor power optional 1KW

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

Industry Customization (Agricultural Robot)



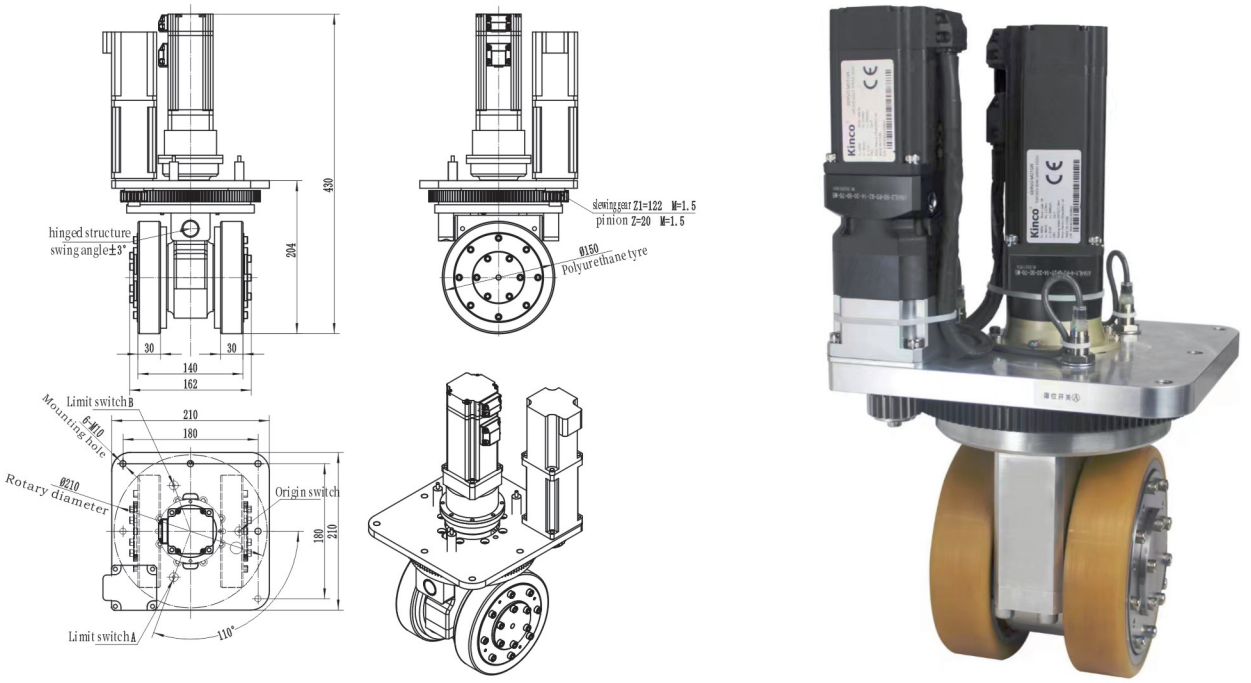


Main performance parameter

Model		HL810-SM2500-48-104
	Performance index	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	2.5
	Voltage V	48
	Rated current A	61
	Rated torque Nm	7.96
	Rated speed r/min	3000
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Three-stage gear reduction
	Reduction ratio	104.4：1
Brake	Brake torque Nm	16
	Rated voltage V	DC24
Tyre	Wheel material	Rubber
	Wheel size	ϕ810X205
Steering part	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.4
	Voltage V	48
	Rated current A	10.1
	Rated torque Nm	1.27
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	244.4:1
	Encoder type	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	0-73
	Rated traction N	1827
	Carrying capacity Kg	400
	Net weight Kg	120

※Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

Industry Customization (Medical Robot)



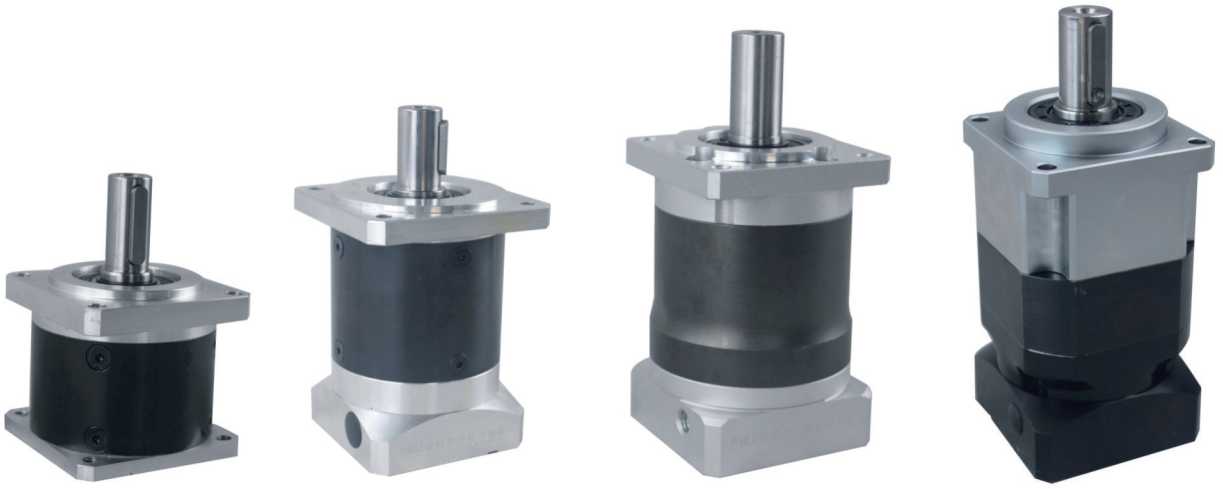
Main performance parameter

Model		HL150-SM400-48-19-A1
	Performance index	Parameter
Travel motor	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.4
	Voltage V	48
	Rated current A	10.1
	Rated torque Nm	1.27
	Rated speed r/min	3000
	Speed fbk sel	Incremental encoder
Gearbox	Reducer type	Secondary gear reduction
	Reduction ratio	25.95
Brake	Brake torque Nm	1.5
	Rated voltage V	DC24
Tyre	Wheel material	Polyurethane /Rubber
	Wheel size	150X45
Steering part	Motor type	Permanent magnet synchronous servo motor
	Motor power kW	0.2
	Voltage V	48
	Rated current A	5.1
	Rated torque Nm	0.64
	Rated speed r/min	3000
	Reducer type	Secondary planetary gear reduction
	Reduction ratio	250：1
	Encoder type	Incremental encoder/Absolute encoder
Other	Steering limit angle	±110°
	Travel speed m/min	0-55
	Rated traction N	590
	Carrying capacity Kg	300
	Net weight Kg	23

※ Motor power optional 600KW

※ Used for mobile robots(AGV), pallet stackers, pallet trucks, sweepers, aerial work trucks, etc.

Planetary Reducer Series



Product Features

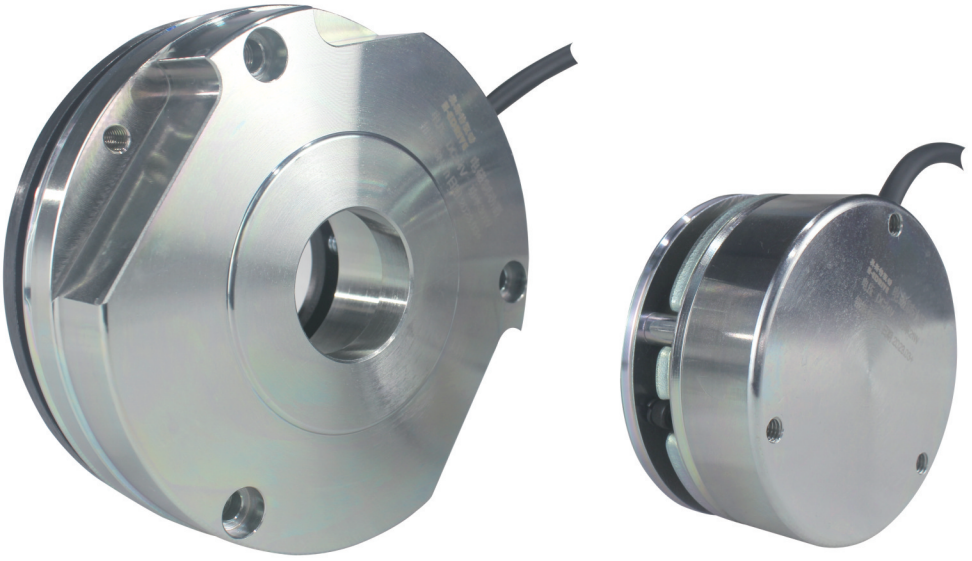
- The gear material is 20CrMnTi high-quality alloy steel, which is processed by gear grinding after carburizing;
- Gear accuracy can reach level 5, Rockwell hardness can reach HRC62, ensuring high wear resistance and long life of products;
- One-piece planetary frame design improves the torsional rigidity of the reducer;
- It has super radial and axial load bearing capacity, stable operation and low noise;

Product Characteristics

Performance index	Parameter
Rated torque Nm	35-450
Input speed (rated) r/min	3000
Efficiency %	one-level97%，two stage94%

※ Usually used with supporting motors, such as elevator industry, industrial vehicles, automation equipment, etc

Electromagnetic Brake Series



Product Features

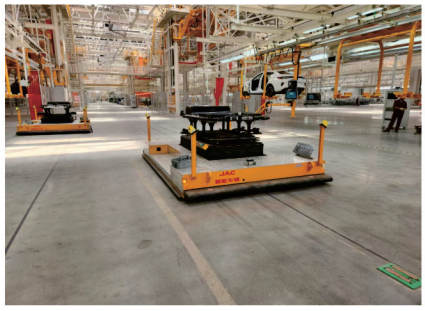
- Economical use, compact structure, more saving installation space
- High protection level, effective waterproof and dustproof, suitable for various indoor and outdoor working environments;
- The coil adopts H-class design, with high voltage resistance and long service life
- The product is made of friction materials and spring wires, with good wear resistance and stable torque
- Various low noise schemes ensure comfortable and reliable use

Product Characteristics

Performance index	Parameter
Braking torque Nm	4、6、12、16、30、60
Applicable voltage V	DC24 48 AC220
Maximum speed range r/min	6000–3500

※ Usually used with supporting motors, such as elevator industry, industrial vehicles, automation equipment, etc

Application Case





Cooperative Partner

HELI合力 中国合力 提升未来 | SANY | 安歌科技 Enotek | SIASUN 新松 | ZIKOO 智库智能

FANUC The Robot Experts | 遨博智能 AUBO | LGMG 临工智科 | JAC 江淮重工 | LEAD 先导

Gen-song | Zowell 卓一智能电动叉车 | SF TECHNOLOGY 顺丰科技 | 联核科技 LIANHE TECH | i-COW 木牛流马

lyric Robot 利元亨 play with lyric | XCMG 徐工集团 | 山东大学 | 未来机器人 VisionNav Robotics | 南京大学

BOSHI 博实 | ZOOMLION | AGV艾吉威 | 碧桂园 博智林机器人 Bright Dream Robotics | Glodon 广联达

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