

About ZHAOWEI



SUZHOU ZHAOWEI is a subsidiary of ZHAOWEI GROUP, which is committed to the field of intelligent transportation and distribution, and provides customers with cost-effective power roller units. SUZHOU ZHAOWEI focuses on the R & D, design, and production of the core drive components of Intelligent conveyor, with a fully independently-developed industry chain. ZHAOWEI's industrial power roller solution mainly serves in goods transportation of e-commerce, airports, pharmaceuticals, factories and other automation fields, to improve operational efficiency and reduce logistics costs.

ZHAOWEI GROUP is a micro-drive system solution provider integrating design, R&D and manufacturing. ZHAOWEI was listed on the Shenzhen Stock Exchange in 2020. Its headquarter is located in the beautiful seaside city of Shenzhen, with subsidiaries and offices in Dongguan, Suzhou, Hong Kong, Germany, Shanghai, and the U.S.A. for a global strategic layout.



National Enterprise
Technology Center



Individual Championship
For National Manufacturing
Industry



China Grand Awards for Industry
Commendation Award



China Patent Award
Outstanding Award

Quality and System Certification

- ZHAOWEI management system is the core part of company operation. All employees strictly comply with the ISO system from product design, development to production.
- We are committed to controlling risks and improving product reliability under harsh environmental conditions.
- Our mission is to provide innovative products that meet customer's needs.

Products Certification:



Suzhou ZHAOWEI Industrial Science & Technology Co.,Ltd
No.180 Lvliangshan Road, Suzhou New Zone, Suzhou City, Jiangsu Province

Power Roller R&D and Production Base
Dongguan ZHAOWEI Machinery & Electronics Co., Ltd
No.2 Lingang Road, Wang Niudun Town, Dongguan City, Guangdong Province, China

Telephone:

400 0082 880 / +86 135 3777 5677

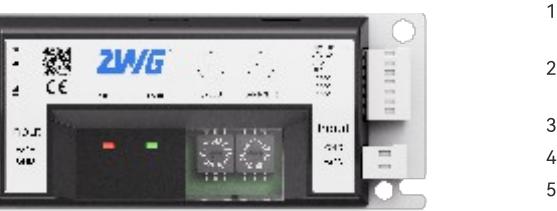
Email: cn.sales@szzhaowei.net Web: www.zwgt.cn

Shenzhen · Dongguan · Suzhou · Shanghai · Hong Kong · Germany · USA

ZWG | ZHAOWEI



Magnetic Encoder Drive Controller (80W)



Feature

1. Speed Setting (Rotary switch code-15 gears, IO input-7 gears)
2. Rotation Direction Options (Rotary switch code / IO Input)
3. Acceleration and Braking Ramp Adjustment
4. Switch between Digital to Analog
5. LED Light Status Indicator
6. Braking Resistor
7. RS485 Communication

IP20 Drive Controller (450W)



Feature

1. Speed Closed-Loop Control
2. 15-Step DIP Switch Speed Adjustment
3. Stepless Speed Control via 2-10V Analog Input
4. 4-Step Digital Speed Preset
5. 16-Step Accel/Decel Time Adjustment
6. T2-Wire Forward/Reverse Operation
7. Electronic Brake / Servo Brake
8. Dual LED Status Indicators
9. Fault Output Signal
10. PNP/NPN Switchable IO Inputs
11. 48V Power Supply (Withstands >60V)
12. RS485 Communication

IP54 Drive Controller (80W)



Feature

1. Speed Setting (DIP switch -15 gears, IO input-7 gears)
2. Rotation Direction Control (DIP switch / IO Input)
3. Acceleration and Braking Ramp Adjustment
4. LED Light Status Indicator
5. Braking Resistor

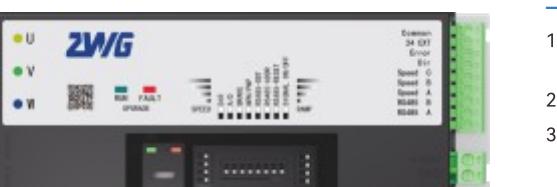
Drive Controller-750W



Feature

1. Speed Closed-Loop Control
2. 15-Step DIP Switch Speed Adjustment
3. Stepless Speed Control via 2-10V Analog Input
4. 4-Step Digital Speed Preset
5. 16-Step Accel / Decel Time Adjustment
6. T2-Wire Forward / Reverse Operation
7. Electronic Brake / Servo Brake
8. Dual LED Status Indicators
9. Fault Output Signal
10. PNP / NPN Switchable IO Inputs
11. RS485 Communication

IP20 Drive Controller (255W)



Feature

1. Speed Setting (DIP switch-15 gears, IO Input-7 gears)
2. Rotation Direction Control (IO input)
3. Acceleration and Braking Ramp Adjustment (8-step DIP switch)
4. LED Light Status Indicator
5. Braking Resistor

1 Drive 4 (Internal Motor Control) ECT Bus Controller



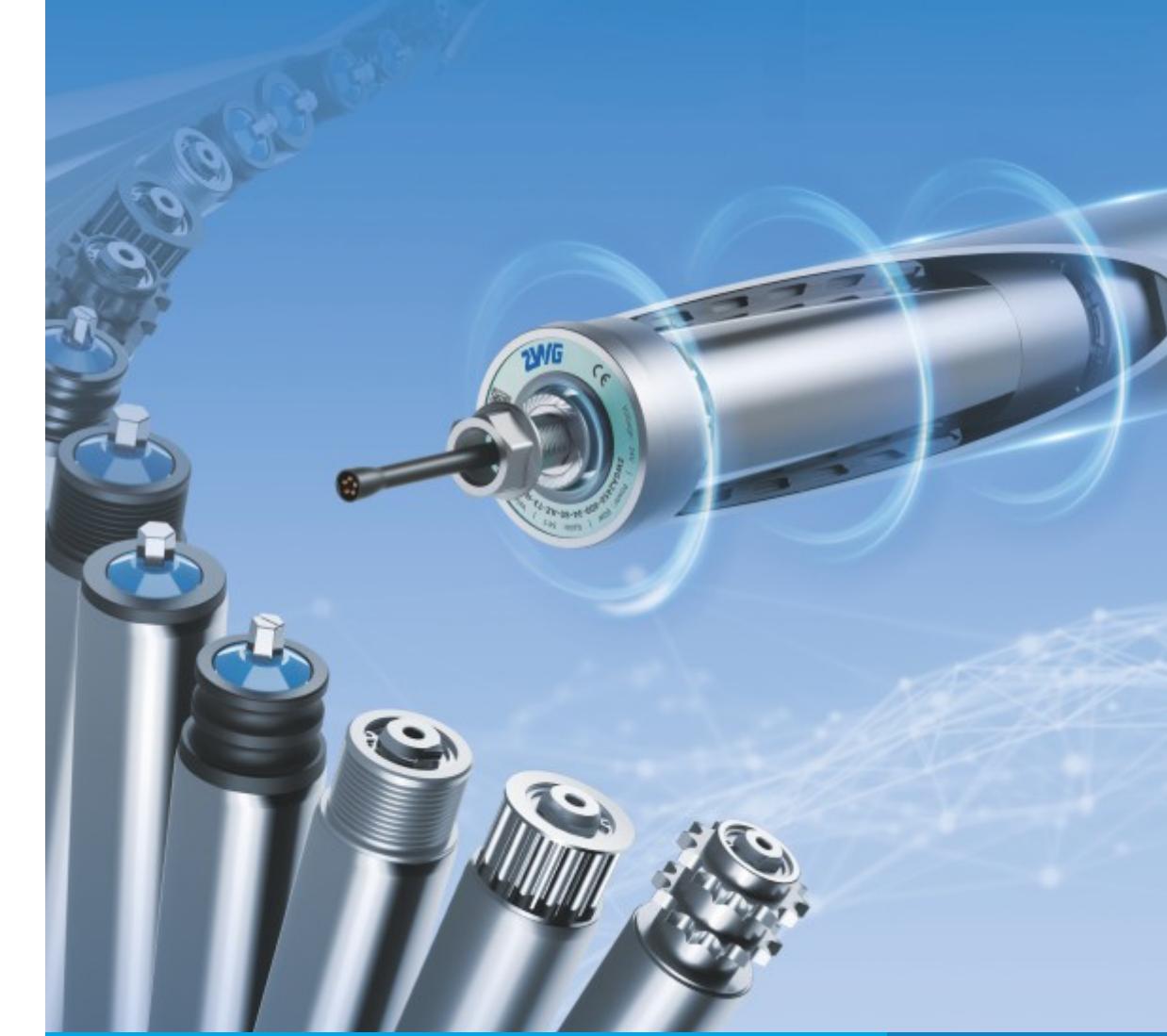
Feature

1. Plug and use after replacement, no addressing or configuration required
2. LED light status indicator for all function
3. Integrated logic for zero-pressure accumulation conveyance
4. Configuration via PLC, PC tools (Currently developed models of power roller)
5. Built-in 100M Ethernet switch
6. Clamp voltage through braking chopper
7. Functional grounding connection of the shielding layer of the communication line
8. Reverse polarity protection for input and output voltage supply
9. Speed closed-loop Control

ZWG | ZHAOWEI

POWER ROLLER SERIES

Committed to the development of intelligent transportation and delivery, to become a global supplier of core drive components.



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ZWG Power Roller Solution

ZHAOWEI launches the MDR product platform under the new brand name ZWG, which utilizes self-developed precision gearboxes, motors and high-performance controllers to bring customers stable and efficient the MDR solutions.

Moreover, ZWG integrates R&D, design, manufacturing and sales to efficiently solve customers' diversified conveying needs.

High-Load Conveying

ZWG Products adopt self-developed tensioning sleeve

- 50mm Metal Tensioning Structure >150N.m
- 60mm Metal Tensioning Structure >180N.m
- 76/80/89mm Metal Tensioning Structure >300N.m

Chinese Utility Model Patent Number: ZL2023202977237

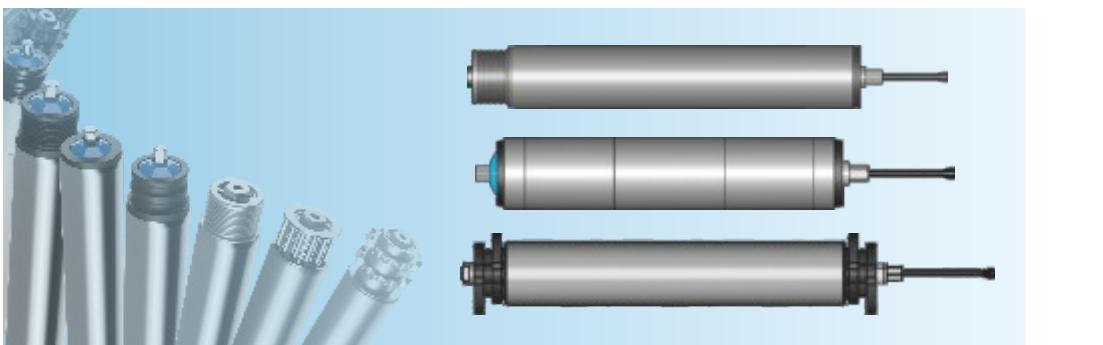
Installation and Control

- Diversity and flexibility, widely compatible with common conveyor lines.
- All-in-one integration. Easy to assemble & disassemble.



Power Roller Series

50 mm Power Roller



The Ø50mm power roller is designed for case-handling conveyor machinery, such as cardboard boxes, totes, pallets, or tires. It is also suitable for zero-pressure accumulation conveyors.

Crowned Dumb Power Roller can effectively mitigate belt misalignment (tracking issues), resulting in a more flexible conveyor system.

Power Roller-Right Angle Transfer is capable of rotating 90° in a single stroke with precision. Efficient connection between different conveyor lines is realized.

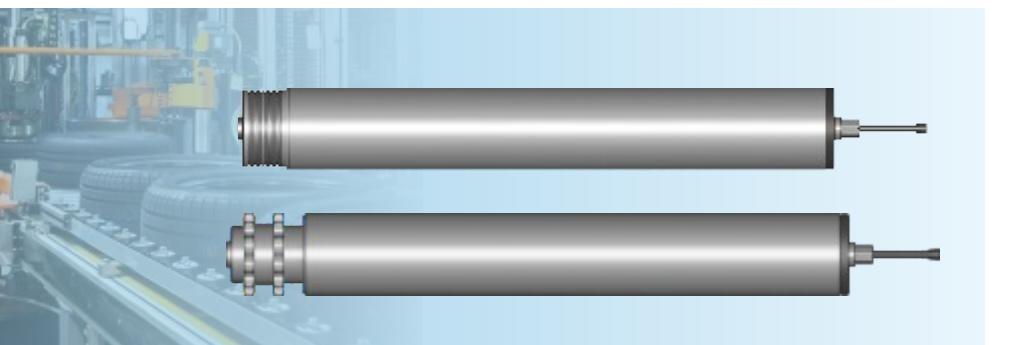
Feature

- Energy Efficient: High overall efficiency
- Flexibility: Meet diversified project application needs
- Quiet: Noise level below 50 dB

Basic Parameters

Rated Voltage	24V		48V		
Rated Current (A)	2.2	3.1	4.5	1.1	1.5
Start-up Current (A)	5.5	7.8	11.3	2.8	3.8
Rated Power (W)	35	50	80	35	50
Maximum Noise	50 dB				
Cable Length	Hall Power Roller: 1m (extendable by 1m) Magnetic Encoder Power Roller: 0.5m standard (extendable by 2m)				
Protection Class	IP54 / IP66				
Tube Material	Galvanized Steel, Stainless Steel				
Tube Dimension	60 mm diameter, 2 mm thick				
Axis	11 mm HEX, Thread M12 x 1, double D				
Temperature	-40°C to +55°C				

60 mm Power Roller



For medium-sized pallet with a maximum carrying capacity up to 600 kg. The drive is made of stainless steel, while the motor shaft is also optimized for stable performance in heavy-duty conveying scenarios such as home appliances, truck tires, and especially in NEV industry.

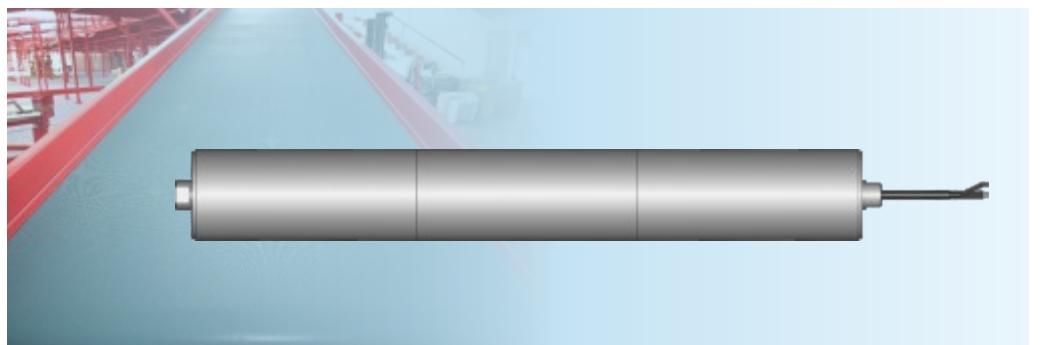
Feature

- Energy Efficient: High overall efficiency
- Flexibility: Meet diversified project application needs
- Quiet: Noise level below 50 dB

Basic Parameters

Rated Voltage	24V		48V		
Rated Current (A)	2.2	3.1	4.5	1.1	1.5
Start-up Current (A)	5.5	7.8	11.3	2.8	3.8
Rated Power (W)	35	50	80	35	50
Maximum Noise	50 dB				
Cable Length	Hall Power Roller: 1m (extendable by 1m) Magnetic Encoder Power Roller: 0.5m standard (extendable by 2m)				
Protection Class	IP54 / IP66				
Tube Material	Galvanized Steel, Stainless Steel				
Tube Dimension	60 mm diameter, 2 mm thick				
Axis	11 mm HEX, Thread M12 x 1, double D				
Temperature	-40°C to +55°C				

80 mm Drum Motor



The 80 mm Drum Motor (for conveyor turnings) utilizes a drum-shaped outer tube to avoid belt deviation and improve efficiency and stability.

For belt conveyor lines with irregular cargo size, especially for bulk goods, it can be combined with traditional roller lines for more flexibility.

Feature

- Energy Efficient: Higher Efficiency & Torque
- Flexibility: Similar to the installation of regular 80 mm drum motor
- Quiet: Noise level below 50 dB
- Drum Tube: Avoiding belt deviation and improves efficiency and stability

Basic Parameters

Rated Voltage	48 V
Rated Current (A)	7
Start-up Current (A)	15
Rated Power (W)	225
Maximum Noise	55 dB
Cable Length	1 m
Protection Class	IP54 / IP66
Tube Material	Galvanized Steel, Stainless Steel, Carbon Steel Chrome Plated
Tube Dimension	80 mm diameter, 3.75 mm thick
Axis	Double D (Φ25 x 20)
Temperature	-40°C to +55°C

ZWG PR - Drive Controller Series

Hall Controller: Mini Controller



Feature

- Closed-loop speed control
- 15-level DIP switch speed setting
- 4-level digital speed adjustment
- 8-step acceleration/deceleration time setting
- Bi-directional operation (2-wire forward/reverse)
- Servo brake function
- Dual-LED status indication
- Fault output functionality
- IO input control (PNP)
- Signal common terminal grounded with power supply

Hall Controller: 35W/50W/80W/120W



Feature

- Speed Closed-Loop Control
- 15-Speed DIP Switch Adjustment
- Stepless Speed Control (2-10V analog input)
- 4-Step Digital Speed Preset
- 16-Step Accel/Decel Time Adjustment
- 2-Wire Forward/Reverse Operation
- Sensorless Operation Support
- Electronic Brake / Servo Brake
- Dual LED Status Indicators
- Fault Signal Output
- Built-in Braking Resistor (Zero Pressure Release)
- PNP/NPN Switchable IO Inputs
- 24V/48V Quick Voltage Switching

Hall Controller: ZPA Accumulation Controller



Feature

- Closed-loop speed control
- 15-level DIP switch speed setting
- 2-10V analog voltage stepless speed regulation
- 4-level digital speed adjustment
- 16-step acceleration/deceleration time setting
- Bi-directional operation (2-wire forward/reverse)
- Dual-LED status indication
- Fault output functionality
- IO input control, PNP/NPN switchable
- 24V/48V quick switching
- Built-in ZPA logic (ZA/ZP function)
- Integrated timer and counter functions