



Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller For Zero Pressure Accumulation Conveyors

Our Product Introduction

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Basic Information

- Place of Origin: China Jiangsu
- Brand Name: Winroller
- Certification: CE, ROHS2.0, EMC, ISO9001
- Model Number: Winroller Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller
- Minimum Order Quantity: 1 stick
- Price: Contact Us
- Packaging Details: Wooden case
- Delivery Time: 7-15 word days
- Payment Terms: TT, L/C
- Supply Ability: 1000000/year



Product Specification

- Product Name: Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller
- Drive Model: H100 ZPA Bus Controller
- Cylinder Diameter: 50mm
- Voltage: DC24V, DC48V
- Power: 40W / 50W / 80W / 100W
- Maximum Load: 400kg
- Rated Speed: 0.8~120m/min
- Cylinder Material: Galvanized Steel, Stainless304
- Applications: Zero Pressure Accumulation Conveyors, Linear Conveyors, Unit Handling Conveyor Systems
- Motor Type: DC Brushless Gear Deceleration Motor Drum
- Protection Class: IP54
- Highlight: **Intelligent Motorised Drum Rollers, Motorised Drum Rollers DC48V, DC24V motorised drum roller**



More Images



Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller For Zero Pressure Accumulation Conveyors

Features Overview of Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller

The Drum Motor Conveyor Drive Roller is a state-of-the-art solution designed for modern material handling systems, featuring an integrated **ZPA Bus Controller**. This innovative controller enables precise and intelligent control over the roller's operation, facilitating seamless integration into Zero Pressure Accumulation (ZPA) systems. With its ability to synchronize multiple rollers and manage speed adjustments efficiently, this drum motor roller ensures smooth, jam-free product flow while optimizing energy consumption. Its robust construction and high-performance capabilities make it ideal for various applications, including logistics, packaging, and automated production lines, where reliable operation and efficiency are paramount.

Function of Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller

The Intelligent Drum Motor Conveyor Drive Roller with ZPA Bus Controller is designed to facilitate Zero Pressure Accumulation (ZPA), allowing products to accumulate without exerting pressure on adjacent items. This functionality is essential for preventing product damage and ensuring a smooth flow throughout the conveyor system. By leveraging the ZPA Bus Controller, the roller synchronizes its operation with other rollers, enabling precise control over speed and movement. This results in efficient handling of goods, minimizing the risk of jams and optimizing energy consumption, making it ideal for high-volume logistics and automated material handling environments.

Equipped with advanced control technology, the drum motor allows for precise speed adjustments and operational flexibility. Users can easily adapt the roller's performance to different workflow requirements, ensuring optimal efficiency across various applications. This adaptability makes it suitable for environments with varying load sizes and speeds, from high-speed sorting lines to slow accumulation processes.

Additionally, the drum motor features built-in monitoring and diagnostic capabilities, which provide real-time feedback on the roller's performance. This functionality allows for proactive maintenance and troubleshooting, reducing downtime and improving overall system reliability. With its robust construction and advanced features, the Intelligent Drum Motor Conveyor Drive Roller is a vital component in modern automated systems, driving productivity and ensuring smooth operations in logistics, manufacturing, and distribution centers.

Application of DC48V Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller

Zero Pressure Accumulation Conveyors: Enables controlled accumulation of products without pressure, preventing damage and ensuring smooth product flow.

Linear Conveyors: Provides reliable and efficient drive capabilities for straight conveyor systems, facilitating the transport of goods over long distances.

Unit Handling Conveyor Systems: Efficiently moves various unit loads, including boxes, pallets, and containers, in industrial settings.

Automated Material Handling Systems: Integrates seamlessly into fully automated systems, enhancing operational efficiency and reducing manual handling.

Packaging Lines: Optimizes the movement of items through packaging processes, ensuring accurate and timely handling of products.

Food and Beverage Processing: Suitable for transporting food products while maintaining compliance with hygienic standards.

Logistics and Distribution Centers: Enhances sorting and transport efficiency in high-volume environments, improving overall workflow.

Technical Parameters of Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller

Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller

Drive Model	H100 ZPA bus controller	Cylinder Diameter	50mm
Voltage	DC24V, DC48V	Power	40W / 50W / 80W / 100W
Rated Speed	0.87~120m/min	Maximum Load	400kg
Cylinder Material	Galvanized steel, stainless304	Protection Class	IP54
Applications	Zero pressure accumulation conveyors, linear conveyors, unit handling conveyor systems		

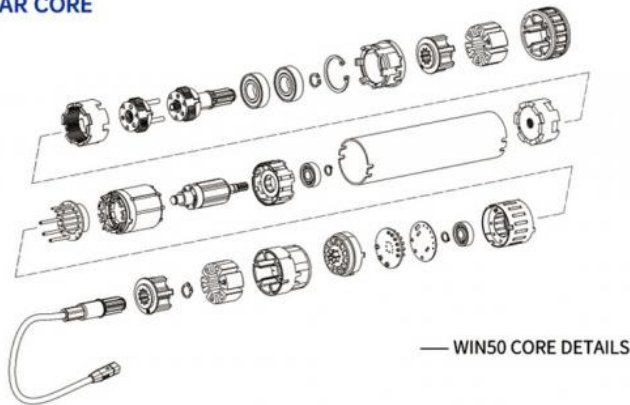
Φ50 DC series electric roller

Low speed and high torque

The roller will be equipped with professional driver for forward and reverse control and speed control.



MODULAR CORE



BASIC TECHNICAL PARAMETERS

Voltage	DC24V				DC48V			
	Standard		Enhanced		Standard		Enhanced	
Motor type	S1	S2	S1	S2	S1	S2	S1	S2
Working system								
Rated power	40W	50W	80W	100W	40W	50W	80W	100W
Rated current	3A	3.5A	6A	6.8A	1.5A	1.8A	3.2A	4.0A
Starting current	6A	7.0A	11.6A	13.6A	3.0A	3.6A	6.6A	8.0A
Unload running noise	(< 55dB)							
Standard cable length	1000mm							
Tube length	300~1500mm							
Working ambient temperature	-30°C ~60°C							
Motor shaft	d12mm							
Anti-Static	yes							
Shell I thickness	1.5mm							
Shell material	X:galvanized steel S3:stainless304							
Shell outside coat	P:PU coated JT:sleeve JZ:rubber JP:PVC JG:silicone							

Note: Switch S1/S2 working system through the controller dip switch function.

WIN50-MOTORIZED ROLLER CHARACTERISTIC TABLE

WIN50 Motorized roller characteristic table

Nominal speed	Speed adjustable range 8.7%~100%	Standard								Enhanced							
		S1 working system(40W)				S2 working system(50W)				S1 working system(80W)				S2 working system (100W)			
		Torque N.m		Traction N		Torque N.m		Traction N		Torque N.m		Traction N		Torque N.m		Traction N	
m/min	rated	start	rated	start	rated	start	rated	start	rated	start	rated	start	rated	start	rated	start	
10	0.87-10	5.5	30.3	220	1210	6.7	33.5	268	1340	9.5	52.5	380	2090	10.6	53	424	2120
14	1.22-14	3.98	21.9	159.2	875.6	4.8	24	192	960	6.8	37.4	272	1496	7.68	38.4	307.2	1536
22	1.91-22	2.8	15.4	112	616	3.37	16.85	134.8	647	4.7	25.8	188	1034	5.36	26.8	214.4	1072
26	2.26-26	2.4	13.2	96	528	2.9	14.5	116	580	4.1	22.6	164	902	4.6	23	184	920
36	3.13-36	1.7	9.4	68	374	2.1	10.5	84	420	2.9	16	116	638	3.3	16.5	132	660
51	4.43-51	1.20	6.6	48	264	1.44	7.2	57.6	288	2.0	11	80	440	2.3	11.5	92	460
60	5.22-60	1.02	5.6	40.8	224.4	1.24	6.2	49.6	248	1.75	9.6	70	385	1.97	9.85	78.8	394
83	7.22-83	0.74	4.1	29.6	162.8	0.9	4.5	36	180	1.3	7.2	52	286	1.42	7.1	56.8	284
120	10.44-120	0.51	2.8	20.4	112.2	0.62	3.1	24.8	124	0.88	4.8	35.2	193.6	0.98	4.9	39.2	196

NOTE: ■ 3-STAGES OF GEAR REDUCTION □ 2-STAGES OF GEAR REDUCTION

S1 working system--Suitable for continuous material transfer, such as belt conveyor.

S2 working system--Suitable for intermittent material transfer, such as box transfer.

※ 1. 1N=0.1kgf, 1N·m=0.1kgf·m;

※ 2. The value of the characteristic table is for reference only;

※ 3. At constant speed closed loop control, no load or rated load, the speed is consistent;

※ 4. The speed adjustable range is 8.7%~100% of the rated speed;

※ 5. Other speeds can be customized:For faster speeds, please refer to DGDD direct drive motorized roller catalog

※ 6. Sprocket drive mode conform this table.; Poly-V belt drive mode single modular load 200KG Max.

O belt mode single modular load 35kg Max.

reminder:

The switch power supply of a single motorized roller should be selected 1.5 times according to the motorized roller power.

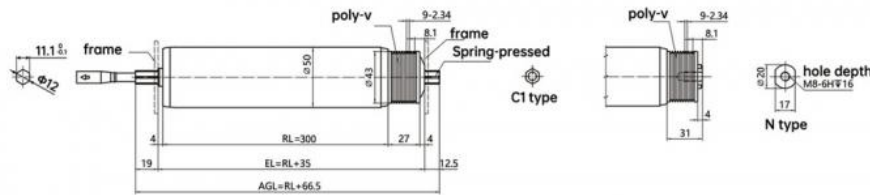
APPLICATION SCENARIOS

The motorized roller is mainly used for rolling transmission, such as: (straight line conveyor, transverse conveyor, accumulation conveyor, sorting conveyor and turning conveyor). There are also more and more applications, such as AGV or AMR load equipment)

-small loader -material box -package -pallet -bearer equipemnt



[SELECTION SAMPLE]



① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
WIN50 -40W - S - 24V -10M -300L-X -Q -C1 -C

Roller type | Motor power | Controller type | Power voltage | Linear speed | Shell length | Drive mode | End shaft
Roller diameter | Controller type | Linear speed | Shell material | Cable outlet shaft end

② Motor power

40W, 50W (Standard) ;
80W, 100W (Enhanced)

③ Controller type

S100, K100, HB100

④ Power voltage

DC24V, DC48V

⑤ Linear speed

10, 14, 22, 26, 36, 51, 60, 83, 120

⑥ Shell length

Customized according to requirements

⑦ Shell material

X:galvanized S3:S304
JZ:rubber coated JT:sleeve
JG:silicone JP:PVC
P:PU coated

⑧ Drive mode

Q:poly-v
V:V wheel
T:synchronous wheel
I: Plain straight, No interlocking
L: Dual sprockets
O: Round groove
#: knurl
U: crowned
ZT: taper sleeve

⑨ Cable outlet shaft end

C1: φ12 Hex 11
C2: M12 Hex 11

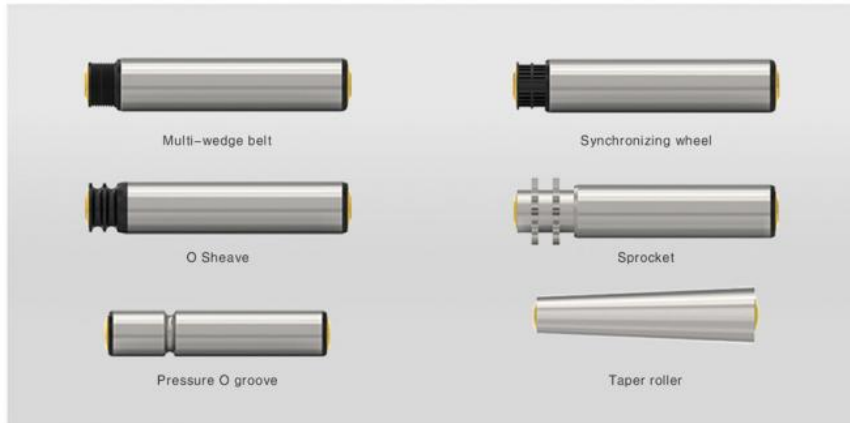
⑩ End shaft

C: φ12 Hex 11
N: M8 internal thread

BL50 Linkage mode



DRIVE MODE



BL50 Surface treatment

The standard model of the electric drum designed by our company is not covered by glue by default. If you need, we can do the glue wrapping treatment. The glue surface has plane, herringbone, diamond pattern, etc; Most specifications can have additional functions; For example, in different environments, the exposed parts such as shaft and barrel can be made of wear-resistant and corrosive materials, stainless steel, etc. Silica gel for food industry is food grade. Waterproof roller can be selected for those with waterproof requirements.


POLYURETHANE ADHESIVE

- Excellent wear resistance
- Low temperature resistance, ozone resistance, radiation resistance, electrical insulation, good adhesion
- Good cushioning and shock absorption
- Good oil and drug resistance



PVC SOFT ADHESIVE

- Temperature resistance characteristics
- Weatherability
- Electrical insulation performance
- Low surface tension and low surface energy
- Physiological inertia




BLACK RUBBER

- Good elasticity
- Friction,
- Prevent slipping, protect goods
- Reduce noise



PVC SOFT ADHESIVE

- Temperature resistance characteristics
- Weatherability
- Electrical insulation performance
- Low surface tension and low surface energy
- Physiological inertia



Note : It's just the typical technical data for you reference, The specification such as voltage, speed, torque, shaft can be customized by your needs. Please contact us for more details. Thanks.

Feature Picture of Intelligent Drum Motor Conveyor Drive Roller With ZPA Bus Controller





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