

## DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel For Conveyor Systems

Our Product Introduction

for more products please visit us on [drum-roller.com](http://drum-roller.com)

### Basic Information

- Place of Origin: China Jiangsu
- Brand Name: Winroller
- Certification: CE, ROHS2.0, EMC, ISO9001
- Model Number: Winroller DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel
- 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: DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel
- Motor Type: DC Brushless Gear Deceleration Motor Drum
- Voltage: 24V / 48V
- Dimensions: 50mm In Diameter
- Power: 40W / 80W
- Rated Speed: 1~95.4m/min
- Maximum Load: 200kg
- Rated Current: 3.3A ( 24V ) , 6.12A ( 48V )
- Starting Current: 3.0A ( 24V ) , 5.0A ( 48V )
- Cylinder Length: 200mm
- Material: Carbon Steel
- Pipe: Steel, Galvanizedistainless Steel (SUS304)
- Protection Class: P66 / IP67
- Surface Treatment: Zinc Plating



### More Images



## DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel For Conveyor Systems

### Features Overview of DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel

The 48V DC Brushless Motor Drive Steel Roller delivers exceptional performance with its high-efficiency, low-noise operation and precise speed control, making it perfect for industrial automation and logistics systems. Built with durable steel, it ensures long-term reliability and reduced maintenance, while the brushless motor technology enhances energy efficiency. Compatible with smart control systems, this roller offers flexible integration for smooth, consistent operation across various automated applications.

### Function of DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel

The DC Brushless Motor Drive Steel Roller is engineered for efficient and reliable material transport in automated systems across industries such as logistics, packaging, and manufacturing. This roller utilizes a brushless DC motor, providing consistent torque and precise speed control, which makes it ideal for applications requiring accurate material handling. The motor's efficiency reduces mechanical wear, leading to lower maintenance needs and an extended service life compared to traditional brushed motors.

#### Key Features:

**Power Supply:** Operates on a standard voltage of 24V/48V DC, ensuring compatibility with various power systems.

**Speed Range:** Offers a wide speed range, typically from 1 to 95 m/min, allowing for adaptability in different applications.

**Load Capacity:** Designed to handle loads up to 200 kg, making it suitable for heavy-duty applications.

**Material Construction:** Features a robust steel design, available in galvanized or stainless steel (SUS304), ensuring durability and resistance to wear and corrosion.

**Protection Rating:** With an IP66/67 rating, it provides excellent protection against dust and water, making it suitable for harsh operating environments.

**Operating Temperature:** Functions effectively within an ambient temperature range of -5°C to +40°C.

**Environmental Compatibility:** Designed to operate in environments with 30-90% relative humidity (non-condensing).

Additionally, the roller's energy-efficient operation ensures lower power consumption while maintaining high performance, resulting in cost savings during continuous operation. The integration of smart control options allows for real-time adjustments, enhancing operational flexibility and efficiency.

By ensuring reliable and efficient material transport, the **DC Brushless Motor Drive Steel Rollers** significantly boosts productivity in automated processes, enabling faster throughput and reduced downtime in demanding environments. Its robust construction, combined with advanced motor technology, makes it an indispensable component for modern industrial automation.

### Application of DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel

**Automated Conveyor Systems:** Used for transporting goods in warehouses and distribution centers.

**Packaging Lines:** Ideal for moving packaged products through various stages of the packaging process.

**Material Handling:** Efficiently handles bulk materials in manufacturing and processing facilities.

**Sorting Systems:** Facilitates the sorting of items in logistics and distribution operations.

**Assembly Lines:** Supports the assembly of products by transporting components to different workstations.

**Food Processing:** Ensures safe and efficient transport of food items in processing plants, with options for food-grade materials.

**Pharmaceutical Industry:** Used in drug manufacturing and distribution to maintain product integrity and safety.

**E-commerce Fulfillment Centers:** Enhances the efficiency of order picking and shipping processes.

**Airport Baggage Handling:** Utilized in conveyor systems for the transport of luggage and cargo.

**Textile Industry:** Facilitates the movement of fabrics and finished garments in production facilities.

**Automotive Manufacturing:** Supports the transportation of parts and assemblies along the production line.

**Printing and Publishing:** Used in conveyor systems to transport printed materials through various processing stages.

### Technical Parameters of DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel

DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel

Dimensions	50mm in diameter	Motor Type	DC brushless gear deceleration motor drum
Cylinder Length	> 200MM	Voltage	24V , 48V
Power	40W , 80W	Rated Speed	1~95.4m/min
Maximum Load	200Kg	Material	Carbon steel
Surface Treatment	Zinc plating	Ambient Temperature	-5 ~+40
Ambient Humidity	30 - 90%RH(No condensation)	Rated Current	3.3A(24V) , 6.12A(48V)
Starting Current	3.0A(24V) , 5.0A (48V)	Protection class	IP66/67

## 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.

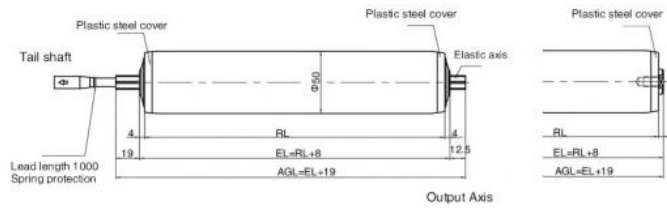


### BL50 Section part indication drawing



- 1.The wire
- 2.The outlet end shaft
- 3.Before the bearing seat
- 4.The motor
- 5.Gear box
- 6.Rotate the flange
- 7.cylinder
- 8.After the bearing seat
- 9.End of shaft
- 10.Hall chip

### BL50 Outlining Dimensions



RL = Reference length/Order length \* (including capping)  
 EL = Installation length  
 AGL is the total length of the axis.

Φ50	40W-standard type				80W-reinforced			
	8-20		25-64		13-20		25-64	
Linear speed (m/min)								
Internal thread/elastic shaft*	Internal thread	Elastic axis	Internal thread	Elastic axis	Internal thread	Elastic axis	Internal thread	Elastic axis
Plastic flat cover	245	245	230	230	270	270	255	255

Brand: winroller  
 Voltage: 24V/48V  
 Type: DC brushless gear deceleration motor drum  
 Power: 40W/80W  
 Dimensions: 50mm in diameter  
 material: carbon steel  
 Cylinder length: > 200MM  
 surface treatment: zinc plating

### BL50 Technical Data

	AS mode	HAS mode
Voltage	DC24V/48V	
Rated output power	40W	80W
Rated current	3.3A	6.12A
Starting current	3.0A	5.0A
ambient temperature	-5C~+40C	
ambient humidity	30 - 90%RH(No condensation )	

9-core gold pin plug motor interface  
 Pipe: steel, galvanized/stainless steel (SUS304)  
 Diameter: Φ 50/ Φ 60mm  
 Maximum roller length: 1000mm (please contact us if more than 1000mm)  
 Standard length of cable: 600mm, extension cable can be provided if necessary

### BL50 Static Load Capacity

Diameter ( mm )	Length ( mm )							
	300	400	500	600	700	800	900	1000
Φ50	80	70	60	55	50	45	40	35

Unit: Kg

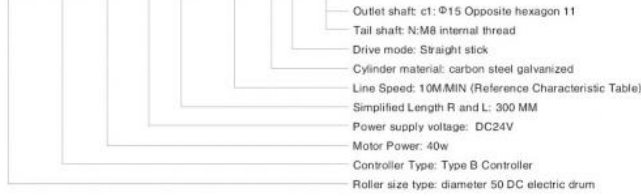
BL50 Mechanical Parameters

DGBL50-40W/80W CHARACTERISTIC TABLE OF DC MOTOR ROLLER—24V/48V

NOMINAL SPEED	RATED SPEED (SPEED RANGE)	MOTOR 40W – STANDARD TYPE				MOTOR 80W – STANDARD REINFORCED TYPE			
		24V		RATED POWER: 40W		24V		RATED POWER: 80W	
		48V				48V			
		TORQUE (N.m)		TRACTION (N)		TORQUE (N.m)		TRACTION (N)	
	MMIN	RATED	START	RATED	START	RATED	START	RATED	START
8	1.0-11.8	5.23	15.70	209.28	627.84	-	-	-	-
13	1.6-18.8	3.29	9.87	131.55	394.64	6.39	19.16	255.45	766.35
16	1.9-23.9	2.58	7.75	103.36	310.08	5.02	15.05	200.71	602.14
20	2.5-30.4	2.03	6.09	81.21	243.63	3.94	11.83	157.70	473.11
25	3.1-37.7	1.64	4.91	65.40	196.20	3.18	9.53	127.00	381.00
31	3.9-47.1	1.31	3.92	52.32	156.96	2.54	7.62	101.00	304.80
39	4.9-58.9	1.05	3.14	41.86	125.57	2.03	6.10	81.28	243.84
50	6.3-75.0	0.82	2.47	32.89	98.66	1.60	4.79	63.86	191.59
64	8.0-95.4	0.65	1.94	25.84	77.52	1.25	3.76	50.18	150.53

BL50 Model analysis

DGBL50 - B - 40W - 24V - 300L - 10 MMIN - X - I - C1 N



BL50 Optional parameter table

DGBL	50	40W	B	24V	10M	300L	X	L	C1	N
Roller size type	Diameter	Power	Con-troller	Elegant power supply	speed	Cylinder length	Cylinder material	Linkage mode	Outlet end shaft	Tailend shaft
DGBL	50	40W 80W	B S D	24V 48V	reference resources: [ b150 Mechanical parameters ]	Custom-izable	X: Galvanizing of carbon steel G: Hard chromium plating on carbon steel P: Wrapped with polyurethane adhesive S3: Stainless steel 304 S2: Stainless steel 201 JT: Rubber JZ: Gluing JP: PVC soft adhesive JG: Stainless steel 304	Q: Multi-wedge belt ZT: Taper sleeve T: Synchronizing wheel E: O Sheave L: Sprocket O: Sprocket #: Knurling I: Straight roll U: Drum type	C1: Φ 12 hexagon opposite side 11 C2: M12 hexagon opposite Side 11	C1: Φ 12 hexagon opposite side 11 C2: M12 hexagon opposite Side 11 N: M8 internal thread
Other voltage and drum shape can be customized. ※ Special requirements: Dustproof and waterproof (IP65) -- HS; Brake: electronic brake or (mechanical brake - Z. Product discharge (adjustable product discharge) -- AJ; The elastic axis, TX; ※ The material of cone rod is only (galvanized, stainless steel).										

## BL50 Linkage mode



## BL50 Surface treatment

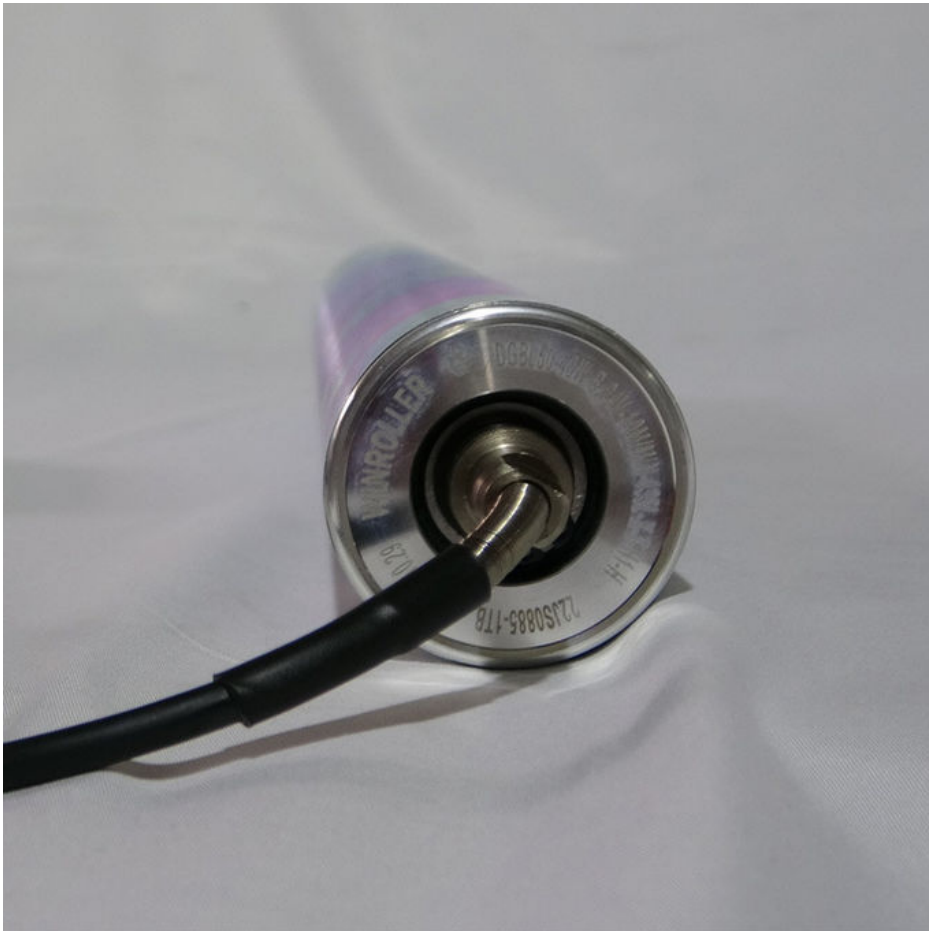
The standard model of the electric drum designed by our company is not covered by glue by default. If you need, we can do the glue wrapping treatment. The glue surface has plane, herringbone, diamond pattern, etc. Most specifications can have additional functions; For example, in different environments, 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.



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 DC48V Brushless Motor Drive Steel Roller With Alloy Synchronized Wheel





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