# 100W High Torque DC Motor Drum Drive Roller Conveyor Roller For Linear Conveyors

#### **Basic Information**

Place of Origin: China JiangsuBrand Name: Winroller

• Certification: CE, ROHS2.0, EMC, ISO9001

Model Number: Winroller 100W High Torque DC Motor Drum

Drive Roller Conveyor Roller

Minimum Order Quantity: 1stick
Price: Contact Us
Packaging Details: Wooden case
Delivery Time: 7-15 word days
Payment Terms: TT, L/C



### **Product Specification**

Supply Ability:

Product Name: 100W High Torque DC Motor Drum Drive

1000000/year

Roller Conveyor Roller

Motor Type: DC Brushless Gear Deceleration Motor Drum

Power: 80W / 100W
Dimensions: 50mm In Diameter
Voltage: DC24V / DC48V
Rated Speed: 0.87~120m/min

Maximum Load: 400kg

Applications: Linear Conveyors, Small Belt Conveyors,

Zero Pressure Accumulation Conveyors,

• Protection Class: IP54

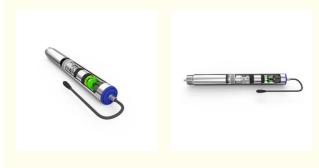
Pipe: Galvanized Steel, Stainless304
 Highlight: High Torque DC Motor Roller,

Linear Conveyors DC Motor Roller,

100W Motor Drive Roller



#### More Images



## 100W High Torque DC Motor Drum Drive Roller Conveyor Roller For Linear Conveyors

#### Features Overview of 100W High Torque DC Motor Drum Drive Roller Conveyor Roller

The High Torque Motor Drum Roller features a robust 100W brushless motor, engineered to deliver high torque for heavy-duty applications. Its powerful performance ensures smooth and efficient handling of large loads, making it ideal for industrial environments that require consistent torque output. With its energy-efficient design and low noise operation, this motor drum roller is perfect for applications where high torque and reliable control are essential.

#### Function of 100W High Torque DC Motor Drum Drive Roller Conveyor Roller

The **High Torque DC Motor Drum Drive Roller** is designed to provide reliable and efficient power for conveyor systems and automated material handling applications. Equipped with a **high-torque DC motor**, it offers powerful drive capabilities, ensuring smooth and consistent movement of products, even in heavy-duty environments. The roller is ideal for high-load conditions, enabling the transport of bulky items such as pallets, boxes, and heavy containers.

One of the key functions of this motor drum roller is its ability toadjust speed precisely, making it versatile across various conveyor setups. Whether it's a fast-moving sorting line or a slow, steady accumulation process, the roller can be fine-tuned to match the specific operational needs. This adaptability makes it particularly useful in logistics, manufacturing, and packaging systems where precise control is required to maintain efficiency.

Additionally, the **brushless DC motor** ensures that the roller operates with minimal maintenance, providing a longer lifespan and reducing the wear and tear typically associated with traditional motorized systems. The motor's high torque output makes it suitable for overcoming start-stop cycles, inclines, or high-friction scenarios, further enhancing its functionality in demanding industrial settings.

#### Application of 100W High Torque DC Motor Drum Drive Roller Conveyor Roller

Logistics and Warehousing: Efficiently handles the movement of heavy cartons, pallets, and containers in sorting and distribution systems.

Manufacturing Assembly Lines: Provides reliable torque for moving products along automated assembly lines, ensuring smooth and continuous production.

**Packaging Industry**: Ideal for driving conveyors in packaging systems, supporting high-speed and precision-driven operations.

Material Handling: Capable of transporting bulk materials and large items in industrial settings, offering consistent performance under heavy loads.

**Zero-Pressure Accumulation (ZPA) Conveyors**: Ensures jam-free and smooth operation in accumulation conveyors, perfect for sensitive product handling.

**E-commerce Fulfillment Centers**: Facilitates the fast and efficient transfer of goods, supporting high-volume order processing and fulfillment.

Food and Beverage Processing: Suitable for hygienic environments with stainless steel options, ensuring safe transport of food products.

#### Technical Parameters of 100W High Torque DC Motor Drum Drive Roller Conveyor Roller

100W High Torque DC Motor Drum Drive Roller Conveyor Roller

			-
Motor Type	DC brushless gear deceleration motor drum	Power	80W / 100W
Dimensions	50mm in diameter	Voltage	DC24V / DC48V
Rated Speed	0.87~120m/min	Maximum Load	400kg
Protection Class	IP54	Pipe	Galvanized steel, stainless304
Applications	Linear Conveyors, small belt conveyors,	conveyors, ze	ro pressure accumulation

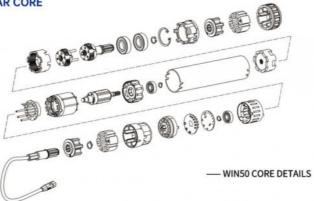
#### Φ50 DC series electric roller

#### 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		DC	24V		DC48V							
Motor type	Standard		Enho	inced	Stan	dard	Enhanced					
Working system	S1	S2	S1	52	S1	52	S1	52				
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 noice	(≤ 55dB)											
Standard cable length	1000mm											
Tube length	300~1500mm											
Working ambient temperature				-30°C	~60°C							
Motor shaft				d12	mm							
Anti-Static	yes											
Shel I thickness	1.5mm											
Shell material	X:galvanized steel S3:stainless304											
Shell outside coat		P:PU c	oated JT:	sleeve JZ:	rubber Ji	P:PVC JG:s	ilicone					

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

#### WIN50-MOTORIZED ROLLER CHARACTERISTIC TABLE

#### WIN50 Motorized roller characteristic table

Norminal speed	range 8.7%~100%	Standard							Enhanced									
		S1 working system(40W) S2 working						g system(50W)		S1 working system(80W) S2 v					working syste (100W)			
		Torque N.m		Traction N		Torque N.m		Traction N		Torque N.m		Traction N		Torque N.m		Traction N		
		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 mov applications, such as AGV or AMR load equipment)

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





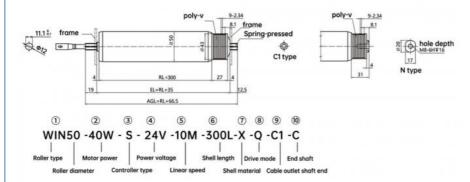








#### [SELECTION SAMPLE]



2 Motor power

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

3 Controller type S100, K100, HB100

 Power voltage DC24V, DC48V

S Linear speed

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

6 Shell length

Customized according to requirements

Thell material

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

® Drive mode

Q:poly-v V:V wheel

T:synchronous wheel

I: Plain straight, No interlocking

L:Dual sprockets

O:Round groove

U:crowned

ZT:taper sleeve

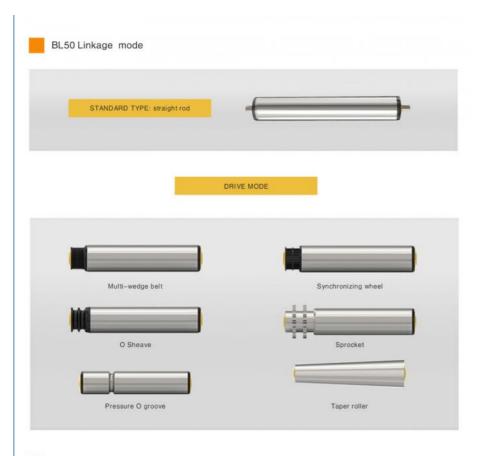
 Cable outlet shaft end С1:Ф12 Hex 11

C2: M12 Hex 11

@ End shaft

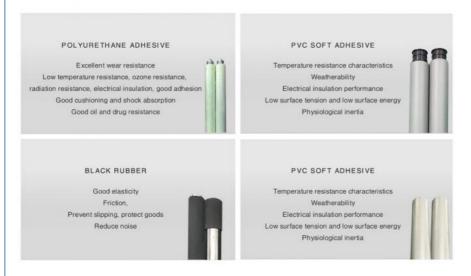
C: Ф12 Hex 11

N: M8 internal thread



#### 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 100W High Torque DC Motor Drum Drive Roller Conveyor Roller







### WIN R≪LLER JIANG SU Winroller Technology Co., Ltd.

+86 18168399322

winroller.market@gmail.com

drum-roller.com

No. 7, Xiye Road, Huishan District, Wuxi City, Jiangsu Province, China