

Food Grade Customised PVC Tapered Conveyor Motor Drive Roller For Food Processing

Our Product Introduction

for more products please visit us on drum-roller.com

Basic Information

- Place of Origin: China Jiangsu
- Brand Name: Winroller
- Certification: CE,SGS,ISO9001,ROHS,UL
- Model Number: Winroller DGBL50A
- Minimum Order Quantity: 1stick
- 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: Food Grade Customised PVC Tapered Conveyor Motor Drive Roller For Food Processing
- Surface Treatment: PVC Soft Adhesive
- Application: Food Industry
- Roller Material: Food Grade 304 Stainless Steel
- Cylinder Diameter: 50mm
- Voltage: DC24V
- Rated Power: 40W
- Linear Velocity: 22m/min
- Rated Torque: 2.8N·M
- Ambient Temperature: -10~+50
- Ambient Humidity: ≤35%
- Running Noice: Below 60db
- Protection Class: IP54
- Usage Mode: V-belt Pulleys, Timing Pulleys, O-belt



More Images



Product Description

Food Grade Customised PVC Tapered Conveyor Motor Drive Roller For Food Processing

Features Overview of Food Grade Customised PVC Tapered Conveyor Motor Drive Roller

The Food Grade Customised PVC Tapered Conveyor Motor Drive Roller is designed for the food processing industry, utilizing food-grade 304 stainless steel and a PVC coating for optimal performance and safety. Winroller enhances this offering with extensive customization options, allowing you to select different materials, surface treatments, and specifications tailored to specific applications, ensuring that each roller meets the unique demands of various operational environments.

Function of 50mm Food Grade Customised PVC Tapered Conveyor Motor Drive Roller

- Food-Grade Materials:** Constructed from 304 stainless steel and food-grade PVC for safety.
- Compact Design:** Efficient use of space with a streamlined structure.
- High Rotational Efficiency:** Optimizes transportation speed and performance.
- Low Noise Operation:** Operates at ≤ 60dB for a quieter working environment.
- IP65 Protection:** Provides waterproof and dustproof capabilities for various conditions.
- Class B Insulation:** Ensures high safety standards to prevent electrical issues.
- Custom Lengths:** Roller length can be tailored to fit specific conveyor requirements.
- Custom Drive Types:** Options for different motor drive configurations to suit applications.
- Material Customization:** Choice of materials for outer layers, such as wear-resistant or corrosion-resistant options.
- Temperature Adaptability:** Functions effectively within a temperature range of -10 to +50°C, customizable for specific environments.

Application of Food Grade Customised PVC Tapered Conveyor Motor Drive Roller

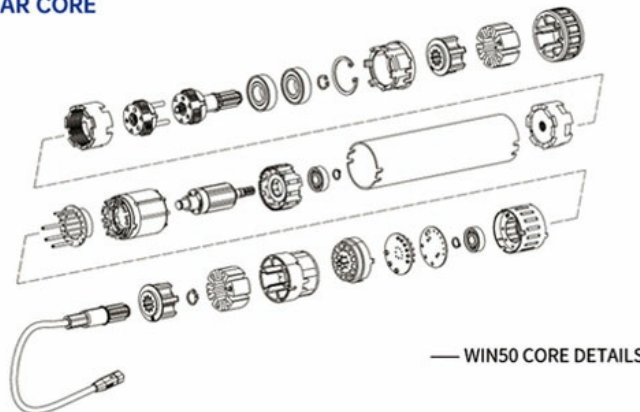
- Food Processing:** Ideal for transporting raw and processed food products in various stages of production.
- Beverage Industry:** Used for handling bottles, cans, and cartons in bottling and packaging lines.
- Pharmaceuticals:** Suitable for conveying pharmaceutical products and packaging materials in a clean environment.
- Packaging Solutions:** Efficiently moves packaged goods through packing and sorting processes.
- Bakery Operations:** Facilitates the transport of dough, baked goods, and packaging in bakeries.
- Confectionery:** Handles chocolates and candies in production and packaging lines.
- Meat and Poultry Processing:** Ensures safe and hygienic transport of meat products during processing.
- Dairy Industry:** Used for conveying milk, cheese, and yogurt products through various stages of production.
- Fresh Produce Handling:** Moves fruits and vegetables through washing, sorting, and packaging processes.

Technical Parameters of Food Grade Customised PVC Tapered Conveyor Motor Drive Roller

Food Grade Customised PVC Tapered Conveyor Motor Drive Roller

Cylinder Diameter	50mm	Cylinder Length	Customised
Rated Power	40W	Voltage	DC24V
Rated Torque	2.8N·M	Linear Velocity	22m/min
Ambient Humidity	≤35%	Ambient Temperature	-10~+50
Protection Class	IP54	Insulation class	B
Surface Treatment	PVC Soft Adhesive	Roller Material	Food Grade 304 stainless steel
Application	Food industry	Linkage Mode	V-belt pulleys, timing pulleys, O-belt pulleys, Customised

MODULAR CORE



BASIC TECHNICAL PARAMETERS

Voltage	DC24V				DC48V			
	Standard		Enhanced		Standard		Enhanced	
Motor type	S1	S2	S1	S2	S1	S2	S1	S2
Working system	S1	S2	S1	S2	S1	S2	S1	S2
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

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	
		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.

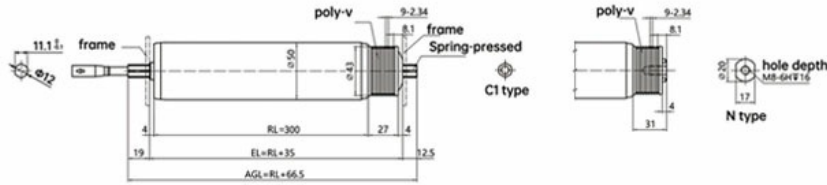
APPLICATION SCENARIOS

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 movement applications, such as AGV or AMR load equipment)

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



[SELECTION SAMPLE]



① WIN50 - 40W - S - 24V - 10M - 300L - X - Q - C1 - C
 Roller type | Motor power | Power voltage | Linear speed | Shell length | Drive mode | End shaft
 Roller diameter | Controller type | | | 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

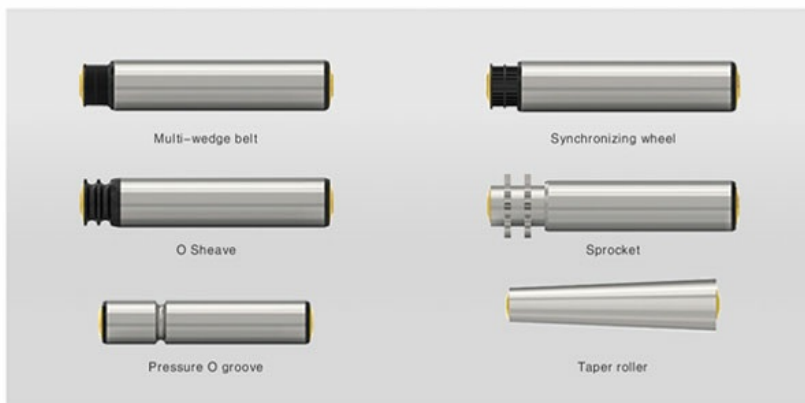
⑩ End shaft

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.

<p>POLYURETHANE ADHESIVE</p> <p>Excellent wear resistance Low temperature resistance, ozone resistance, radiation resistance, electrical insulation, good adhesion Good cushioning and shock absorption Good oil and drug resistance</p> 	<p>PVC SOFT ADHESIVE</p> <p>Temperature resistance characteristics Weatherability Electrical insulation performance Low surface tension and low surface energy Physiological inertia</p> 
<p>BLACK RUBBER</p> <p>Good elasticity Friction, Prevent slipping, protect goods Reduce noise</p> 	<p>PVC SOFT ADHESIVE</p> <p>Temperature resistance characteristics Weatherability Electrical insulation performance Low surface tension and low surface energy Physiological inertia</p> 

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 Food Grade Customised PVC Tapered Conveyor Motor Drive Roller





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