



Conveyor Roller Catalogue

About Damon Industry



GLOBAL LEADING MANUFACTURER OF CONVEYOR ROLLERS

—Providing European local manufacturing, sales and services

Damon Industry provides millions pieces of rollers all over the world every year for many industries. With decades' professional experience of conveyor roller, Damon Industry provides support for global companies to achieve efficient logistics.

Damon Industry, since its establishment, has always been committed to providing the highest quality conveyor rollers and services for a wide range of industries

Damon Industry has manufacturing bases in Asia, America and Australia, and providing local manufacturing, sales and services. Damon Industry has also set up a manufacturing base in Europe now, and has always been committed to be a high-quality supplier of conveyor rollers.

Damon Industry conveyor rollers are used in a variety of industries including food distribution, pharmacy, tobacco, clothing, postal express, logistics and distribution, manufacturing, rubber and airport industries. Damon Industry provides a vast range of reliable and innovative roller solutions. Our dedicated and experienced team of sales people and application engineers' work with our clients to ensure the products are suitable for the application and help users improve efficiency and reduce costs. We will always focus on supplying outstanding conveyor roller solutions to local and global customers.

Globally we have gained the consistent trust of our customers. These customers include influential equipment manufacturing companies and logistics system integrators. We provide customers with over 40 different products covering a variety of specifications to suit user's different requirements. The customers of using Damon Industry rollers are over Europe, Asia, America, Australia and Africa, and this range is gradually expanding.

We not only provide high-quality rollers, but also provide a full range of quality services for customers all over the world. From introducing the complete information based ERP management system to the independent research and development of the online roller dimensional drawing system service, we are viewing our market from a brand new perspective and are pleased to share our ideas of quality and innovation with every customer.

With the mission of "Creating value for customer's logistics systems", Damon Industry will strive for the vision of becoming "The most influential core components supplier and service provider for the global materials handling industry".

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Conveyor Roller Selection

Is the product suitable for a roller conveyor?

Products:

A Product with a hard and flat bottom surface such as cardboard, flat bottom plastic boxes, metal work bins, wooden pallets, etc. are suitable for roller conveyors. Product with a bottom surface that is soft or irregular such as soft boxes, handbags, components with an irregular bottom etc. are not suitable to be conveyed on a roller conveyor.



⚠ Objects with a small contact surface i.e. point contact or line contact, may damage the roller (localized abrasion, damage to the tapered sleeve, etc.)

Environment:

1. Plastic components are fragile at low temperatures. Different series rollers are suited to different temperatures (check characteristics for each series). When exceeding the specified temperature range, please contact us for advice.
2. In some circumstances of powder production, rubber lagged rollers cannot be used in a dustless environment.
3. Polyurethane absorbs colours easily and may not be suitable for transporting coloured packages or goods.

Roller Length:

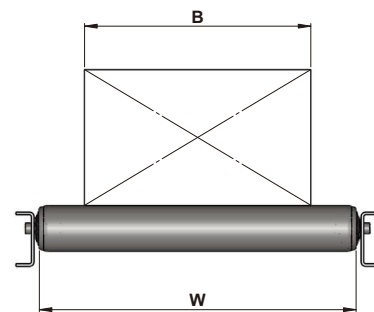
The suitable length of the roller should be selected according to the width of the product (length of roller surface, indicated by W). For straight conveying, calculate according to the formula below:

$$W = B + \Delta B$$

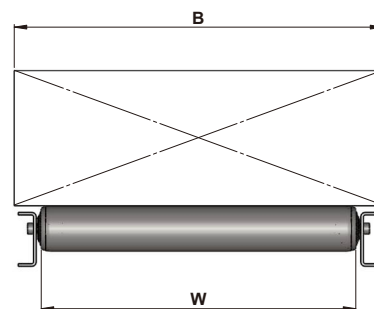
In the formula: **B** — width of goods

ΔB — width allowance, typically add 50 ~ 150 (mm)

⚠ For curved conveying, please refer to P78 for roller length selection.



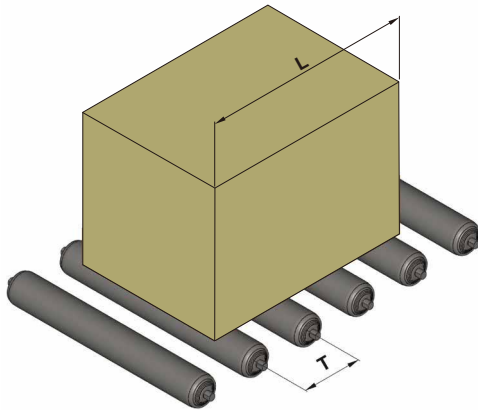
For goods with a very hard, sturdy base, where safety and normal conveying is not compromised, the width of the goods can exceed the length of the roller i.e. $W \geq 0.8B$.





Roller Pitch Selection:

To ensure the steady conveying of goods, the principles of selecting the correct roller pitch (roller centre distance, indicated by T) is a minimum 3 rollers to support the goods at any moment, i.e. $T \leq 1/3L$.



1. Products that require steady conveying, use $T = 1/4 \sim 1/5 L$ or smaller.
2. For flexible, long and thin products, you need to check the deflection of the product. The product deflection should be less than $1/500$ of the roller pitch otherwise it will greatly increase the running resistance.
3. The pitch of double sprocket conveyors must be calculated in multiples of $1/2$ the chain pitch. For details refer to P50.
4. The pitch of poly-vee rollers is limited by the type of poly-vee roller. For details refer to P45.

The loading on each individual roller must not exceed its maximum static loading (This loading refers to a uniformly distributed load without impact. If applying concentrated loading, the safety index will need to be increased).

Different Conveying Modes:

1. Gravity conveying: Manual pushing or declined roller bed:
 - ◇ Polymer bearing housing: 1200 series
 - ◇ Steel bearing housing: 1100, 1800 series
2. Driven conveying: AC gear motor drive or motor roller drive:
 - ◇ O-belt conveyor roller: 2240, 2260 series
 - ◇ Poly-vee conveyor roller: 2250 series
 - ◇ Timing belt conveyor roller: 2280 series
 - ◇ Sprocket conveyor roller:
 - 2214/2224 series (polymer sprocket, polymer bearing housing)
 - 2411/2421 series (steel sprocket, polymer bearing housing)
 - 2311/2321 series (steel sprocket, steel bearing housing)
3. Accumulating conveying: Motor drive. The product needs to accumulate on the conveyor line:
 - ◇ Friction driven accumulation:
 - 3214/3224 series (polymer sprocket)
 - 3211/3221 series (steel sprocket)
 - ◇ Adjustable accumulation: 3816/3826 series (steel sprocket)
4. Curve conveying:
 - ◇ Plastic tapered roller:
 - 1600, 2640, 2660, 2650, 2624 series
 - ◇ Steel tapered roller: 1500, 2521 series

Roller Overview

Load Capacity

The main factors which determine the roller load capacity are the tube, shaft and bearing. The load capacity is dictated by the weakest of them:

- 1.Excessive load will distort the tube during roller operation which may result in permanent damage leading to unstable conveying of the product.
- 2.If the load capacity of the shaft is insufficient, it will change the adaptive capacity of the shaft and influence the running performance.
- 3.If the load exceeds the permitted load of the bearing, it will greatly reduce the bearing’s lifespan.

You need to know the following design information:

- 1.The rated load capacity of a single roller is the uniformly distributed load on the roller surface (not point load).
- 2.The method of mounting the shaft to the conveyor frame. For example a internal threaded shaft has a higher load capacity than a loose mounted shaft such as a spring loaded shaft.
- 3.For each application, you need to consider how flat the product conveying surface is and any partial forces encountered during conveying.
- 4.Steel tube and stainless steel tube have similar mechanical properties with regards to load capacity so are typically considered to have same load capacity.
- 5.Increasing the thickness can strengthen the tube’s impact resistance (not easy to dent), but has little influence on the roller’s load capacity.
- 6.In some modes of conveying, especially in belt driven conveying, duty plays a decisive role rather than the load. The duty depends on the driving force such as belt maximum tension and chain tension.

⚠ Duty: Maximum conveying capacity of driven roller.
Load: Roller’s maximum load capacity.

Run Out

Run out is the key factor in how smooth the roller runs. It will influence the stability and reliability of conveying. If the run-out is excessive, it will lead to product jolting, deviation from normal conveying direction, influencing the accuracy of conveying, causing higher noise levels and may even cause partial product damage or a reduction in the conveyor’s lifespan.

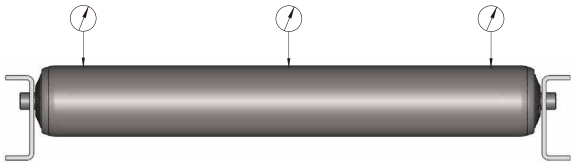
Damon’s conveyor rollers utilize high quality materials and strict manufacturing processes to ensure better run out performance than specified by JB/T 7012–2008.

Radial Run-out

Unit: mm

roller length	roller	tapered roller
100~500	0.5	0.7
> 500~1000	0.6	0.9
> 1000~1600	1.0	1.4
> 1600~2000	1.2	/
> 2000~2500	1.6	/

⚙ Remark: excludes PVC and grooved rollers



⚙ Choose the maximum data from the three points as the inspection data

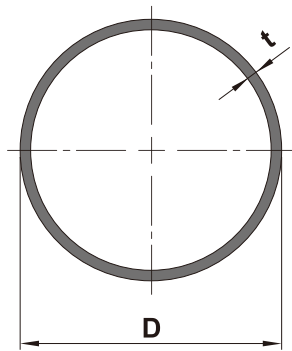




Tube Material

Steel

Following the ongoing development of tube making and welding techniques, steel tubes with precision welding replace the hot rolled seamless tube and become the most commonly used material for conveyor roller manufacturing. Precision welding tube satisfies the requirements for mechanical properties and curvature, the advantage is appearance, balance and cost.



Aluminium

The hardness of aluminium alloy is only 1/3 in comparison to steel tube and stainless steel tube. It weighs only 36% of steel tube and features water proof and rust proof properties. It is suitable for light weight applications and wet working conditions. It is also specified in some industries e.g. rubber.

PVC

The load capacity of PVC tube is much lower than steel tube of the same diameter but has the following features:

1. Corrosion resistant, good chemical stability.
2. Easy cleaning.
3. The roller is light, easy start-up.
4. Low noise, shockproof.

Common tube size:

Unit: mm

D	t
Φ30	1.5
Φ40	1.5
Φ50	1.5
	2.0
Φ60	2.0
	3.0
Φ80	2.0
	3.0
Φ89	3.0

Stainless Steel

Welded stainless steel tube is a commonly used material for conveyor rollers. It has an attractive appearance, good corrosion resistance and is much more durable than common steel tube. The two most commonly used material numbers are as follows:

Material	304
Magnetic	No
Corrosion resistance	Excellent corrosion resistance to aqueous alkali and most organic acids and mineral acids.
Main application	Kitchen appliances, automobile parts, building materials, food production facility, hospital tools.



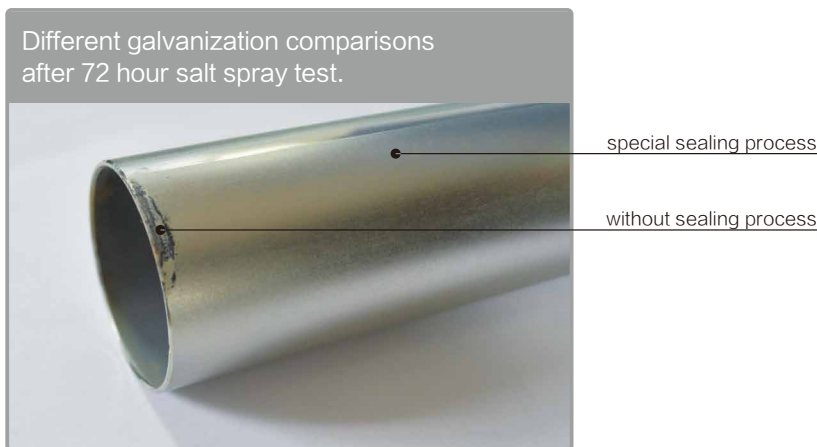
We have used stainless steel 304 as an example only. If you have a requirement for J4-200, please contact us for code confirmation.

Tube Surface Treatment

Zinc Plated

Forms a homogeneous, compact, well combined zinc coating through electrolysis. Compared with other metal, zinc is economic and easy to be coated. Corrosion prevention plating allows zinc to be used widely in the area of steel parts protection, especially in preventing oxide etch and is a common surface treatment for conveyor rollers.

1. Trivalent chromium blue white zinc plated, conforms to green environmental standards.
2. The acceptable thickness of the zinc layer for rollers is 8–12 μm .
3. Special sealing ensures our zinc plating is much more rust resistant than commonly available tube which has been proven in the salt spray tests (As pictured).
4. Zinc plating does not have strong resistance to abrasion. It will wear gradually during operation. If required, you can choose hard chrome plating or other surface treatments.
5. When rollers are shipped by sea, special packing for shipment is still needed.
6. Food is not permitted to come in direct contact with zinc plated surfaces.



Hard Chrome Plating

Thick chrome plating (above 20 μm) is formed on the surface of the component to improve the performance of the component with regards to hardness, abrasion resistance, temperature resistance and corrosion resistance.

1. Excellent abrasion resistance.
2. The coefficient of sliding friction is only 50% compared to steel and iron.
3. Slight oxidation of the chrome layer leads to surface passivation, a thin and transparent film. After long periods of exposure at room temperature the passivation film causes discolouration and forms a protective layer for the chrome finish.
4. The chrome layer is brittle and is not suitable for bearing any large distortion which may cause breakage or spalling of the chrome layer.



Rubber Lagging/Polyurethane

For effectively improving conveying efficiency, eliminating slip such as specified area acceleration, small inclines, etc., we need to add friction between the contact surfaces. Rubber lagging is the most commonly used method. It may also provide protection to the conveyed surface of the product and reduce the conveying noise.

Natural Rubber:

- 1.High elasticity under room temperature.
- 2.Good mechanical hardness, small loss on lag.
- 3.Good electrical insulation properties.
- 4.Akali resistant. No resistance to strong acids.
- 5.Low resistance to oil and solvent.

Nitrile Butadiene Rubber (NBR):

- 1.Excellent resistance to oil.
- 2.Good abrasion and heat resistance.
- 3.Low elasticity.
- 4.Poor cold and ozone resistance.
- 5.Low electrical insulation properties.

Polyurethane(PU):

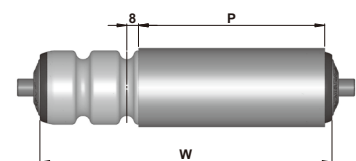
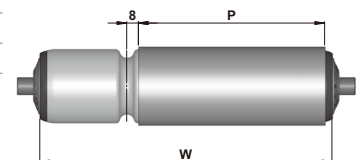
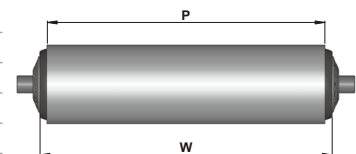
- 1.High abrasive resistance
- 2.High level of oil and water resistance.
- 3.Biological aging resistance.
- 4.High mechanical strength.

PVC Sleeve/PU Sleeve

As an alternative to traditional rubber lagging, you can select PVC sleeving which combine most of the properties of rubber lagging. The PVC sleeve has similar properties to rubber lagging in the areas of increased friction, bottom surface protection and reduced noise. It has a short lead time and is cost effective.

Except PVC soft rubber, you also can choose PU soft rubber, which can reduce the noise during material transportation compared with steel pipes, especially the steel material box, which can provide high protection for sensitive materials and have a larger friction coefficient. It has higher abrasion resistance, better cut resistance and stronger aging resistance than PVC sleeves.

Material	Soft PVC	PU
Tube diameter	Φ 30/40/50/60mm	Φ 50mm
Thickness	2mm	2mm
Colour	Grey, RAL7042	Black, RAL7021
Hardness	Shore(A) 63 ± 5	Shore(A) 83 ± 3
Resistance	No resistance to oil and gasoline	Oil or gasoline resistant
Electrical insulation	Non-conducting	Non-conducting
Suitable temperature	-25℃~+50℃	-30℃~+40℃
Other	Not food grade material	Comply with ROHS standards

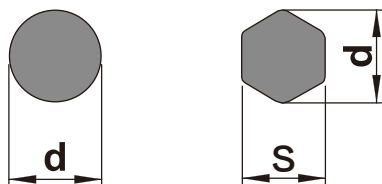


1. Typically the sleeve covers the roller's outside surface (As pictured).
2. If you only require a portion of roller to be covered, please confirm the length of PVC sleeve and the position.
3. Where running the roller generates axial force, e.g. axial movement or axial push and pull, the length of PVC elastic sleeve should be increased.
4. We recommend that the side of the roller with a groove should not be covered with a sleeve (As pictured).

Shaft

The total load on the roller is borne by the shaft which must sustain the entire weight. Damon has chosen to adopt high quality carbon structural steel as the shaft material which has a increased hardness and conforms to GB/T 905 requirements.

Shaft Size



Round shaft(mm):

d: $\Phi 8$, $\Phi 10$, $\Phi 12$, $\Phi 15$, $\Phi 17$, $\Phi 20$, $\Phi 25$

Hexagonal shaft(mm):

S: 11hex

d: $\Phi 12$

Surface Treatment

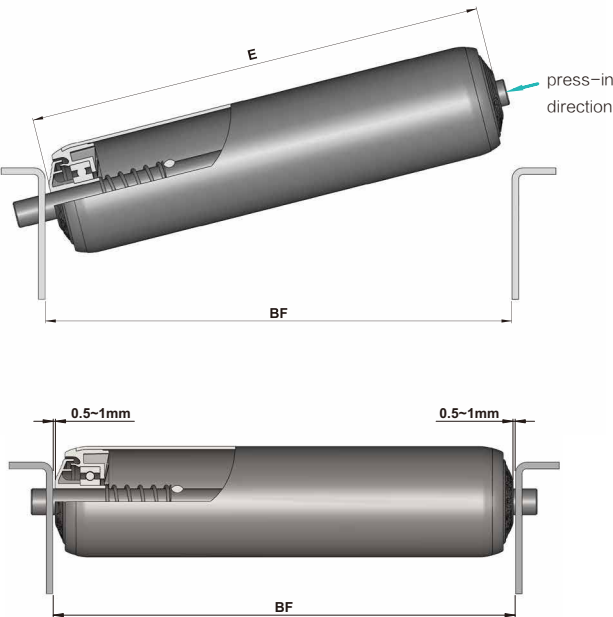
The standard shaft surface treatment is antirust oil. Zinc plated shafts are only used in stainless steel or PVC rollers.

Installation Method

- 1.The roller installation method determines the complexity of roller assembly. Different installation methods also influence the load capacity of the roller.
- 2.Following are examples of common installation methods and their features. Installation method can be customized.

Spring loaded:

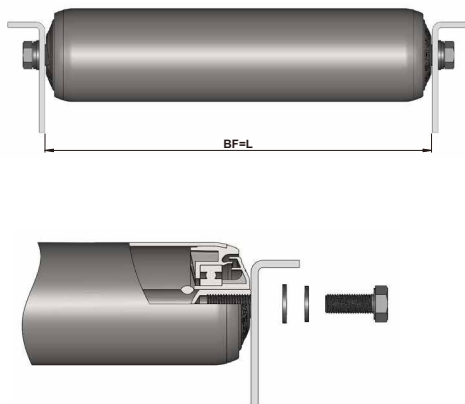
- 1.This is the most popular installation method for gravity rollers. Assembly and disassembly is simple and quick.
- 2.Installation clearance is required between the inner width of the frame and the roller. Different clearances are required for different roller diameters, shaft diameters and height of roller. Typically allow 0.5 ~ 1mm gap each side.
- 3.Cross braces are required between the frames to stabilize and reinforce the conveyor.
- 4.The spring loaded installation method is not recommended for sprocket rollers.





Internal thread:

1. This is the typical installation method for sprocket rollers.
The roller is fastened to the frame with a bolt on each end.
2. Assembly and disassembly is more time consuming.
3. Bolt hole clearance in the frame should not be too large.
Typically the clearance should be 0.5mm. For example, for an M8 bolt the recommended mounting hole is $\Phi 8.5\text{mm}$.
4. When using an aluminium frame, the shaft should be of a large diameter with a small diameter fixing bolt to reduce the risk of the shaft breaking through the aluminium frame.



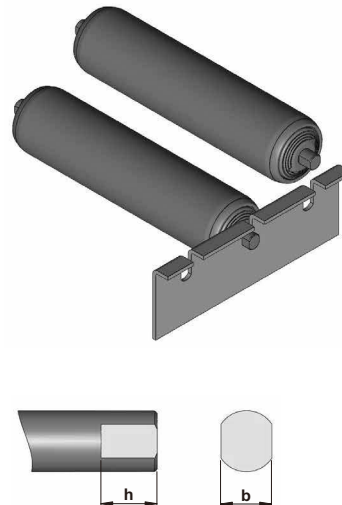
External thread:



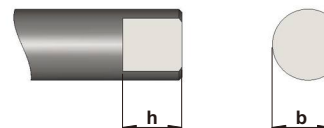
⚠ Nuts are required on the inside and outside of the frame to ensure the roller runs smoothly.

Flat milling:

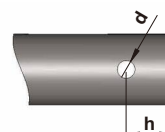
1. Originating from the mining idler roller, the round end of the roller shaft is machined flat to fit into a slot in the frame. Assembly and disassembly is very easy.
2. Flat milling shaft type rollers are not suitable for sprocket rollers, poly-vee rollers or other driven roller applications.



Pressed semicircle (D shape):



Pin hole:



Bearing

The bearings are the most important component of the roller. The correct choice of bearing directly determines the reliability and lifespan of the roller.

Common Types

Depending on the roller application, the roller will utilize different types of bearings with the appropriate tolerance, lubrication and seal.



Unit: mm

Bearing type	Outer ring	Inner ring	Width
6001	28	12	8
6002	32	15	9
6202	35	15	11
6003	35	17	10
6004	42	20	12
6204	47	20	14
6205	52	25	15

Lubrication:

- 1.Good adhesion, difficult to run off and leak.
- 2.Long lubricating life, no need to replenish or change the grease.

Clearence:

The clearence of the bearing ensures the bearing runs freely, smoothly and without resistance. To ensure the bearing runs reliability and the axis remains centred, the number of balls to bear the load is maximised.

The clearence of the bearing suitable for the roller is C3. This has a large influence on the bearing’ s dynamic performance including noise, vibration, friction, running accuracy and lifespan.

Seal:

The purpose of the bearing seal is to prevent inner grease from leaking and outside contaminants such as dust, water and other such contaminants from entering into the inside of the bearing. The seal ensures the bearing runs safely and with the utmost sustainably under all conditions.

We recommend using the RZ sealing method which combines the advantages of both the RS and ZZ. It has the same low friction as the ZZ and also has similar seal and dustproof performance to the RS.



Roller Part Number

E.G.: 2.321 . JHA . ACC - 800 - 863

① ② ③ ④ ⑤

① Series features

The specifications and details including conveying method, structural features, driving mode. The first character refers to the roller's conveying method.

- 1 — gravity conveying
- 2 — driven conveying
- 3 — accumulating conveying

② Tube features

The specifications and details of roller tube material, diameter and surface treatment.

③ Shaft features

The specifications and details of shaft material, diameter, surface treatment and installation method.

④ Roller width

Roller's theoretical working surface. This may vary between different types of rollers. Use W to indicate width. Units are in mm.

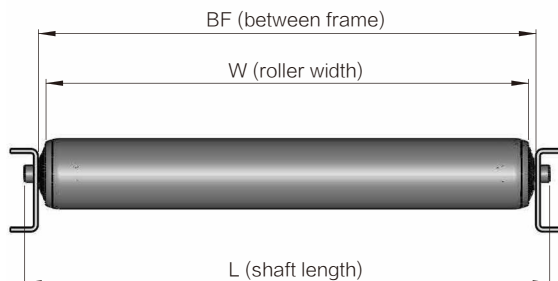
⑤ Length of shaft

Roller's shaft length. Use L to indicate length. Units are in mm. In some installation methods such as internal thread, L=BF.



Frame inner width

- 1.Distance between two frames. Use BF to indicate.
- 2.Generally this is the key factor in determining the roller length.
- 3.Please use "BF" as the basis of calculating the length when selecting rollers.

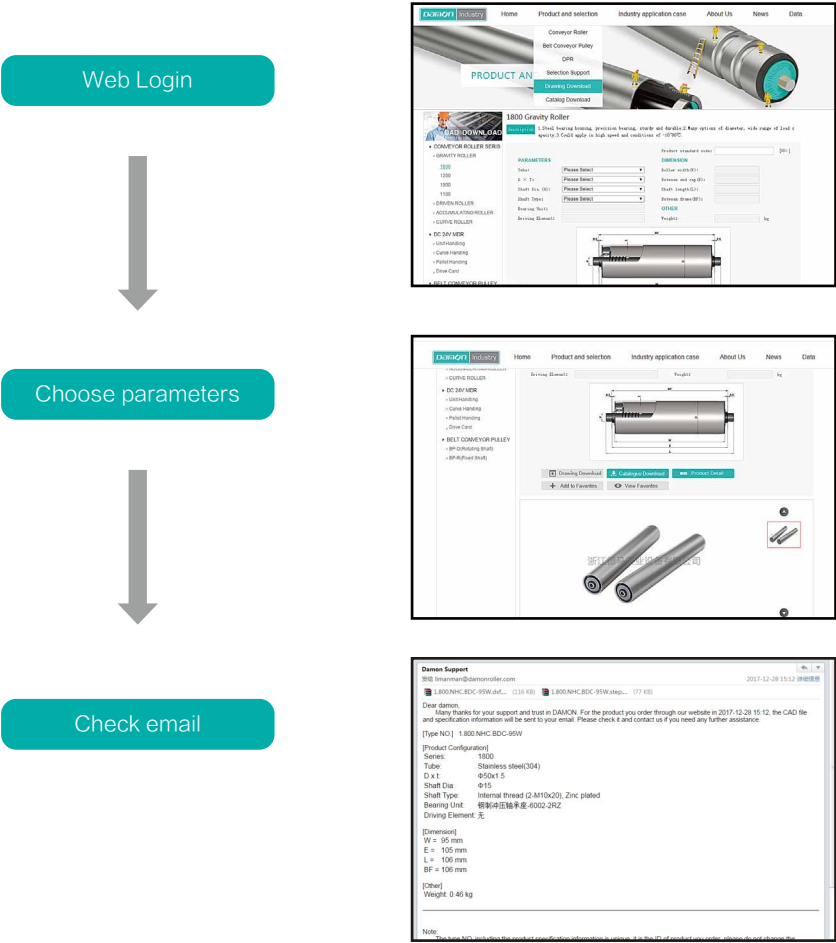


Dimensional Drawing Download

Damon Industry developed the first web based roller drawing download system which allows the customer to obtain the required information quickly, save costs of design drawings and communication and share the latest releases of Damon Industry products.

Login to Damon Industry official website to try “Drawing Download System”

<http://eu.damonroller.com/Home/CadDownload?roleId=201709075daba11e>





Additional Design Information

1. The longer and wider the goods, the more reliably the goods will convey in a straight line. If the goods are very short and small, installing auxiliary devices should be considered to ensure the goods convey straight.
2. The taller the goods, the higher the risk of them failing over during conveying. Please consider the following solutions:
 - ◇ Reduce the roller pitch to allow more rollers to support the goods.
 - ◇ Avoid sudden acceleration or braking.
 - ◇ When conveying on an incline or decline, check the centre of gravity of the goods to determine the risk of the goods falling off the conveyor.
3. Our anti-static design inside the roller will transmit the electric charge to the shaft of the roller and then discharge it through the earth connection to the conveyor frame. (only effective when rolling) Please note, do not allow the frame surface treatment to inhibit the earth connection.
4. The conveyors mentioned are for non-impact loading. Where impact loading occurs, you need to not only reinforce the conveyor frame and support legs but also the roller:
 - ◇ Reduce the roller pitch accordingly.
 - ◇ Increase the roller diameter or tube thickness.
5. Our standard products will satisfy your requirements of operation under normal environmental conditions and humidity. If the rollers are subject to long term exposure in a humid environment, please consider stainless steel or other water-proof and anti-corrosion materials.





GRAVITY CONVEYING

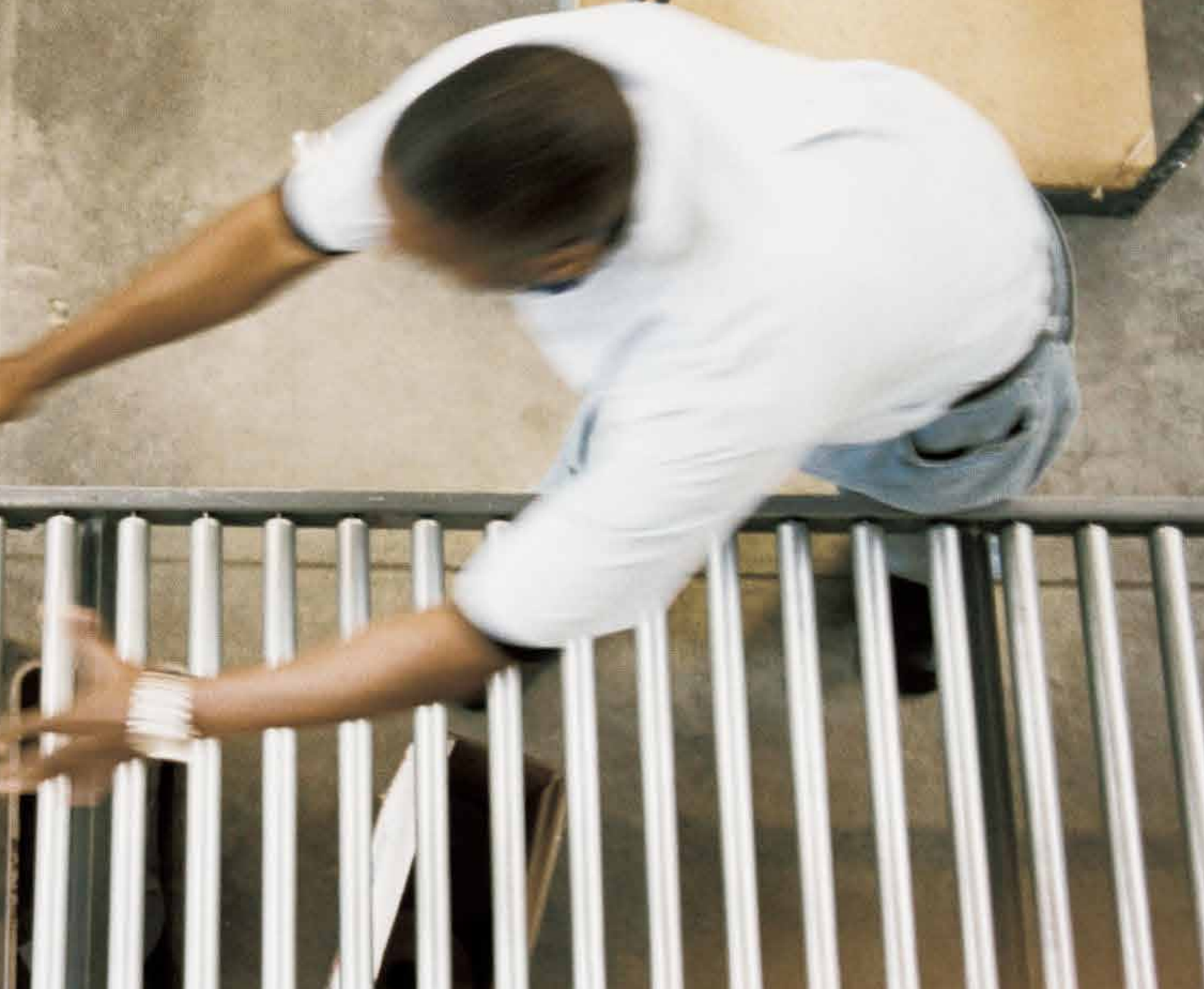
Gravity conveyors are the most popular and simple method of conveying goods. Rollers are non-powered. Goods are moved and conveyed by gravity or human force. It is usually arranged horizontally or declined.

Horizontal Arrangement:

The goods are moved by human force. Suitable for the conveying of light weight products, short distances and infrequent work.

Declined Arrangement:

The goods are conveyed in the decline direction by gravity force. Increasing the weight of the goods and the angle of the decline increases the speed of the goods.



Rollers are listed according to their series and available features.

Products features	Series	Diameter	End components	Page
Semi precision bearing, light running, the ability to withstand impact loads is better than other series.	1100	Φ30/40/50		16-20
Polymer bearing housing, most popular in carton conveyors, attractive and low noise.	1200	Φ40/50/60/80		21-25
Steel bearing housing, strong and durable, available in many diameters, high load capacity.	1800	Φ50/60/80/89		26-31

1100 Series Gravity Conveyor Roller



1100 Series

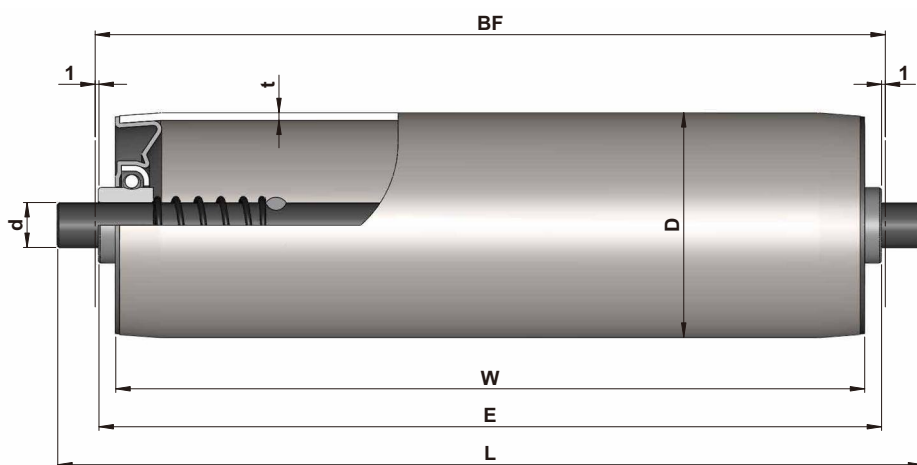
Light, Medium Duty Conveyor Roller

Product Features

- Fitted with specially designed semi-precision bearings
- The ball bearing tolerance is greater than a precision ball bearing. These Rollers have the ability to withstand higher impact loads than other series rollers.
- The environmental working conditions are broad. They can be used in both High and low temperature applications.
- Anti-static design.
- Slightly higher noise levels compared with precision ball bearings.
- Cannot be used as belt conveyor idlers and friction belt conveyor.
- Temperature range: – 20°C ~ + 80°C.

Specifications

Bearing Unit	
Semi-precision bearing	Steel, zinc plated



1100 Series Spring Loaded

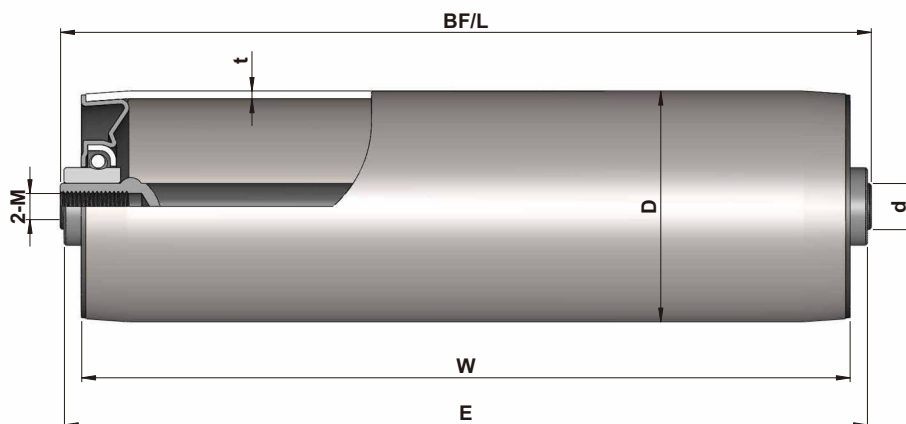
Tube Dia.(D)	Shaft Dia.(d)			
Φ30	Φ8/10	BF=W+6	E=W+5	L=W+26
Φ40	Φ8/11hex	BF=W+6	E=W+5	L=W+26
Φ40	Φ10/12	BF=W+7	E=W+6	L=W+27
Φ50	Φ8/10/12	BF=W+11	E=W+9	L=W+31
Φ50	11hex	BF=W+6	E=W+5	L=W+26
Φ60	Φ10/12	BF=W+11	E=W+9	L=W+31

Tube	D*T	Shaft Dia.(d)			
		Φ8	Φ10	Φ12	11hex
Steel, zinc plated	Φ30x1.5	1.100.SCC.ABA	1.100.SCC.AMA		
	Φ40x1.5	1.100.SEC.ABA	1.100.SEC.AMA	1.100.SEC.ACA	1.100.SEC.BFA
	Φ50x1.5	1.100.SHC.ABA	1.100.SHC.AMA	1.100.SHC.ACA	1.100.SHC.BFA
	Φ60x2.0		1.100.SOC.AMA	1.100.SOC.ACA	
Steel, zinc plated with PVC sleeve (2mm)	Φ30x1.5	1.100.SCD.ABA	1.100.SCD.AMA		
	Φ40x1.5	1.100.SED.ABA	1.100.SED.AMA		
	Φ50x1.5	1.100.SHD.ABA	1.100.SHD.AMA	1.100.SHD.ACA	1.100.SHD.BFA
	Φ60x2.0		1.100.SOD.AMA	1.100.SOD.ACA	
Steel, zinc plated with PU sleeve (2mm)	Φ50x1.5	1.100.SHV.ABA	1.100.SHV.AMA	1.100.SHV.ACA	1.100.SHV.BFA
	Φ30x1.5	1.100.NCC.BBA	1.100.NCC.BMA		
Stainless steel	Φ40x1.5	1.100.NEC.BBA	1.100.NEC.BMA	1.100.NEC.BCA	1.100.NEC.BFA
	Φ50x1.5	1.100.NHC.BBA	1.100.NHC.BMA	1.100.NHC.BCA	
	Φ60x2.0		1.100.NOC.BMA	1.100.NOC.BCA	
Aluminium	Φ50x1.5	1.100.AHC.ABA	1.100.AHC.AMA	1.100.AHC.ACA	
	Φ60x2.0	1.100.AOC.ABA	1.100.AOC.AMA	1.100.AOC.ACA	



Φ50 rollers can be fitted with PVC sleeve (2mm)/PU sleeve (2mm/3mm),PVC/PU sleeve is not anti-static.

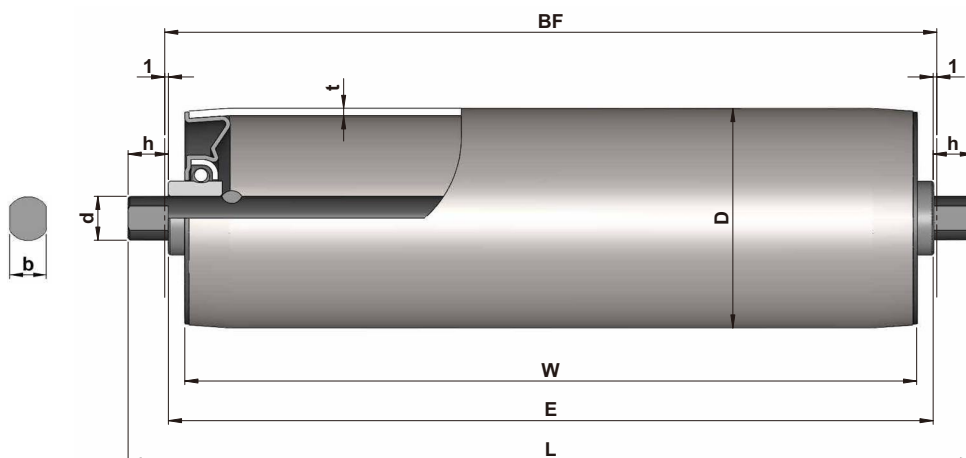
1100 Series Gravity Conveyor Roller



1100 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ30	Φ8/10	BF=W+6	E=W+5	L=W+6
Φ40	Φ8	BF=W+6	E=W+5	L=W+6
Φ40	Φ10/12	BF=W+7	E=W+6	L=W+7
Φ50	Φ8/10/12	BF=W+11	E=W+9	L=W+11
Φ60	Φ10/12	BF=W+11	E=W+9	L=W+11

Tube	D*T	Shaft Dia.(d)		
		Φ8(M5x10)	Φ10 (M6x10)	Φ12 (M8x15)
Steel, zinc plated	Φ30x1.5	1.100.SCC.ABC	1.100.SCC.AMC	
	Φ40x1.5	1.100.SEC.ABC	1.100.SEC.AMC	1.100.SEC.ACC
	Φ50x1.5	1.100.SHC.ABC	1.100.SHC.AMC	1.100.SHC.ACC
	Φ60x2.0		1.100.SOC.AMC	1.100.SOC.ACC
Steel, zinc plated with PVC sleeve (2mm)	Φ30x1.5	1.100.SCD.ABC	1.100.SCD.AMC	
	Φ40x1.5	1.100.SED.ABC	1.100.SED.AMC	
	Φ50x1.5	1.100.SHD.ABC	1.100.SHD.AMC	1.100.SHD.ACC
	Φ60x2.0		1.100.SOD.AMC	1.100.SOD.ACC
Steel, zinc plated with PU sleeve (2mm)	Φ50x1.5	1.100.SHV.ABC	1.100.SHV.AMC	1.100.SHV.ACC
Stainless steel	Φ30x1.5	1.100.NCC.BBC	1.100.NCC.BMC	
	Φ40x1.5	1.100.NEC.BBC	1.100.NEC.BMC	1.100.NEC.BCC
	Φ50x1.5	1.100.NHC.BBC	1.100.NHC.BMC	1.100.NHC.BCC
	Φ60x2.0		1.100.NOC.BMC	1.100.NOC.BCC
Aluminium	Φ50x1.5	1.100.AHC.ABC	1.100.AHC.BMC	1.100.AHC.ACC
	Φ60x2.0	1.100.AOC.ABC	1.100.AOC.AMC	1.100.AOC.ACC



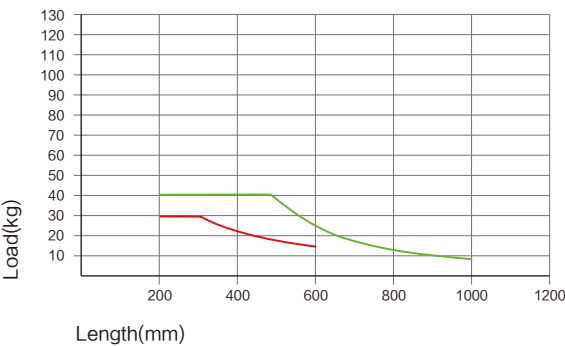
1100 Series Milled Flats

Tube Dia.(D)	Shaft Dia.(d)			
Φ30	Φ8/10	BF=W+6	E=W+5	L=W+26
Φ40	Φ8	BF=W+6	E=W+5	L=W+26
Φ40	Φ10/12	BF=W+7	E=W+6	L=W+27
Φ50	Φ8/10/12	BF=W+11	E=W+9	L=W+31
Φ60	Φ10/12	BF=W+11	E=W+9	L=W+31

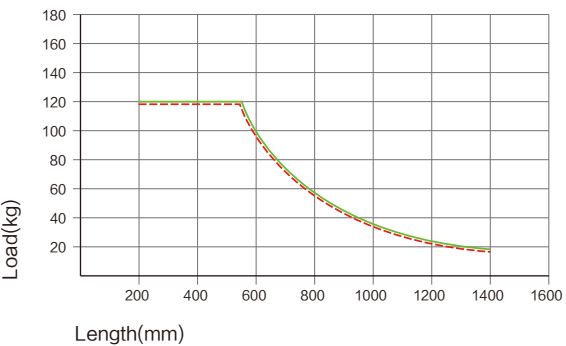
Tube	D*T	Shaft Dia.(d)		
		Φ8 (b/h=6/11)	Φ10 (b/h=8/11)	Φ12 (b/h=10/11)
Steel, zinc plated	Φ30x1.5	1.100.SCC.ABB	1.100.SCC.AMB	
	Φ40x1.5		1.100.SEC.AMB	1.100.SEC.ACB
	Φ50x1.5		1.100.SHC.AMB	1.100.SHC.ACB
	Φ60x2.0		1.100.SOC.AMB	1.100.SOC.ACB
Steel, zinc plated with PVC sleeve (2mm)	Φ30x1.5	1.100.SCD.ABB	1.100.SCD.AMB	
	Φ40x1.5		1.100.SED.AMB	
	Φ50x1.5		1.100.SHD.AMB	1.100.SHD.ACB
	Φ60x2.0		1.100.SOD.AMB	1.100.SOD.ACB
Steel, zinc plated with PU sleeve (2mm)	Φ50x1.5		1.100.SHV.AMB	1.100.SHV.ACB
Stainless steel	Φ30x1.5	1.100.NCC.BBB	1.100.NCC.BMB	
	Φ40x1.5		1.100.NEC.BMB	1.100.NEC.BCB
	Φ50x1.5		1.100.NHC.BMB	1.100.NHC.BCB
	Φ60x2.0		1.100.NOC.BMB	1.100.NOC.BCB
Aluminium	Φ50x1.5		1.100.AHC.AMB	1.100.AHC.ACB
	Φ60x2.0		1.100.AOC.AMB	1.100.AOC.AVB

1100 Series Gravity Conveyor Roller

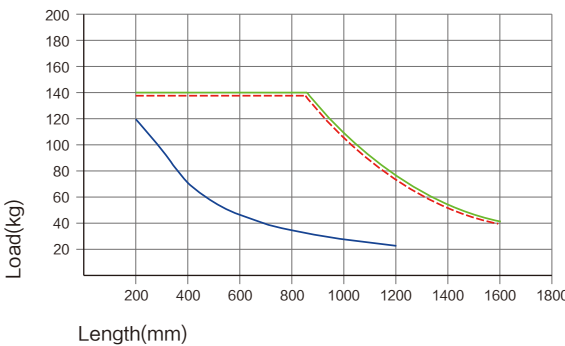
1100 Series Load Capacity



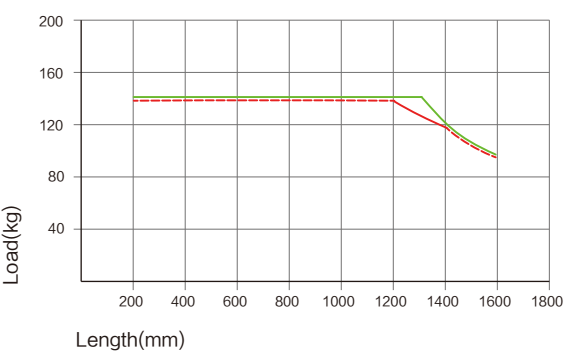
- Steel tube Φ30x1.5, shaft Φ10, spring loaded
- Steel tube Φ30x1.5, shaft Φ8, spring loaded



- Steel tube Φ40x1.5, shaft Φ12, spring loaded
- Steel tube Φ40x1.5, shaft Φ12, internal thread

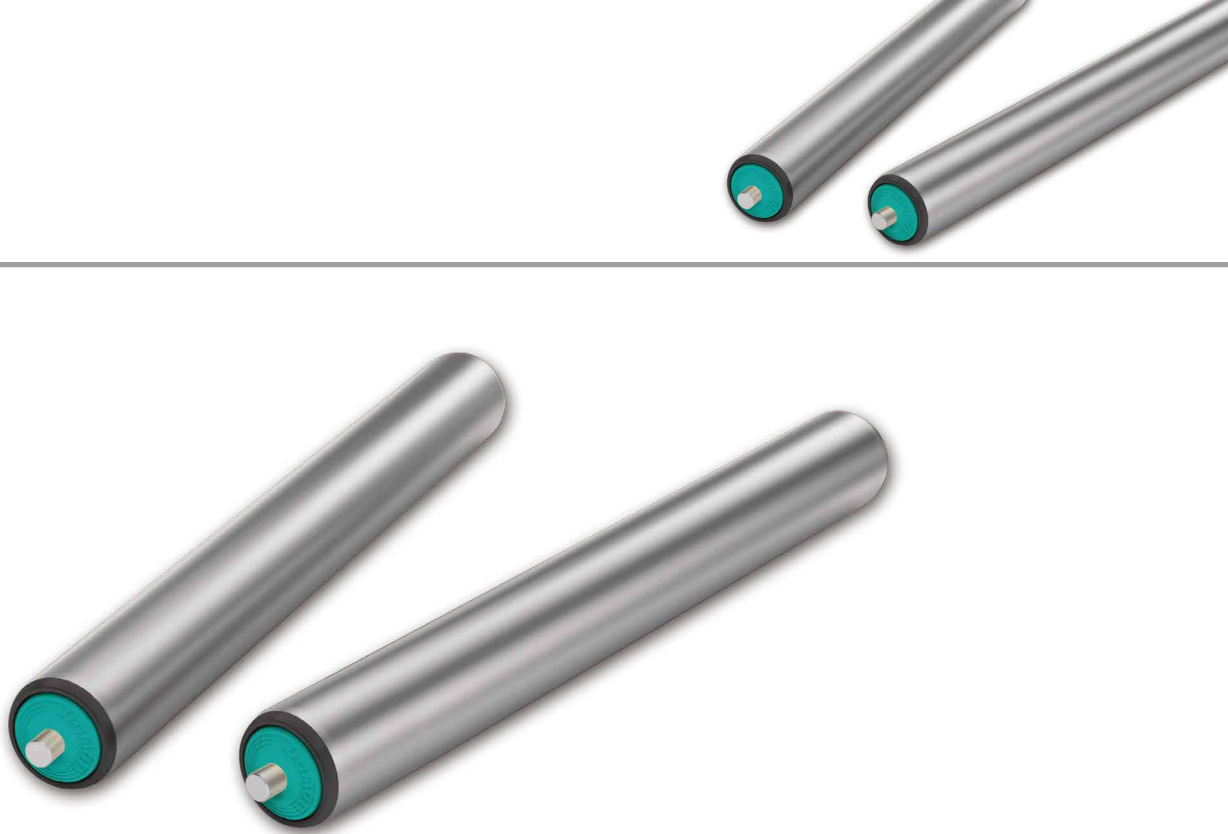


- Steel tube Φ50x1.5, shaft Φ12/hex11, spring loaded
- Steel tube Φ50x1.5, shaft Φ12, internal thread
- Steel tube Φ50x1.5, shaft Φ8, spring loaded



- Steel tube Φ60x2.0, shaft Φ12, internal thread
- Steel tube Φ60x2.0, shaft Φ12, spring loaded

⚠ Above data shows the static load capacity of the roller for a uniformly distributed load.



1200 Series

Universal Conveyor Roller

Product Features

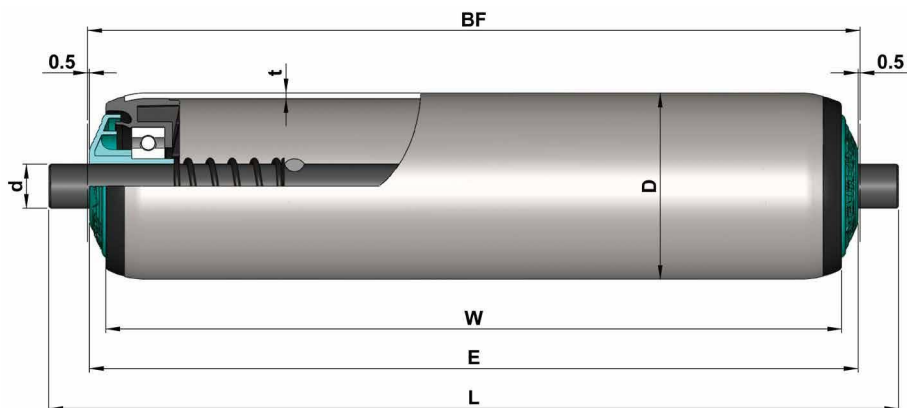
- It is widely used and the most popular product in the gravity roller series. It is commonly used in carton conveying applications.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- Can be configured with different bearings according to the application. Meets the requirements for light gravity chutes.
- Suitable for the high speed applications. Maximum speed varies with roller length and diameter. Maximum speed up to 2~3m/s.
- Standard configuration with anti-static design surface impedance $\leq 10^6 \Omega$.
- Temperature range: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$.
- Humidity range: 30%~ 90% RH (non-condensation).

Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002/6003/6205

1200 Series Gravity Conveyor Roller



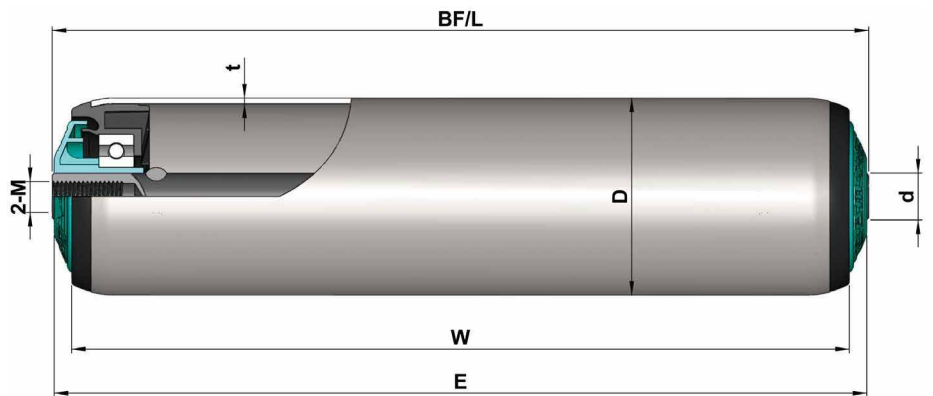
1200 Series Spring Loaded

Tube Dia.(D)	Shaft Dia.(d)			
Φ40	Φ8/10/12/11hex	BF=W+10	E=W+9	L=W+31
Φ50	Φ8/10/12/11hex	BF=W+10	E=W+9	L=W+31
Φ60	Φ10/12/11hex	BF=W+10	E=W+9	L=W+31

Tube	D*T	Shaft Dia.(d)			
		Φ8	Φ10	11hex	Φ12
Steel, zinc plated	Φ40x1.5	○	1.200.SEC.AMA	1.200.SEC.BFA	1.200.SEC.ACA
	Φ50x1.5	○	1.200.SHC.AMA	1.200.SHC.BFA	1.200.SHC.ACA
	Φ50x2.0		○	1.200.JWA.BFA	1.200.JWA.ACA
	Φ60x2.0		○	1.200.SOC.BFA	1.200.SOC.ACA
Steel, zinc plated with PVC sleeve (2mm)	Φ40x1.5	○	1.200.SED.AMA	1.200.SED.BFA	1.200.SED.ACA
	Φ50x1.5	○	1.200.SHD.AMA	1.200.SHD.BFA	1.200.SHD.ACA
	Φ50x2.0		○	○	○
	Φ60x2.0			1.200.SOD.BFA	1.200.SOD.ACA
Steel, zinc plated with PU sleeve (2mm)	Φ50x1.5	○	1.200.SHV.AMA	1.200.SHV.BFA	1.200.SHV.ACA
	Φ50x2.0		○	○	○
Stainless steel	Φ50x1.5	○	1.200.NHC.BMA	1.200.NHC.BFA	1.200.NHC.BCA
	Φ60x2.0		○	1.200.NOC.BFA	1.200.NOC.BCA
Aluminium	Φ50x1.5	○	1.200.AHC.AMA	1.200.AHC.BFA	1.200.AHC.ACA
	Φ60x2.0		○	1.200.AOC.BFA	1.200.AOC.ACA
PVC	Φ50x2.5	○	1.200.P8C.BMA	○	1.200.P8C.BCA

○ — Available configuration

⚙️ Φ50 rollers can be fitted with PVC sleeve (2mm)/PU sleeve (2mm/3mm),PVC/PU sleeve is not anti-static.



1200 Series Internal Thread

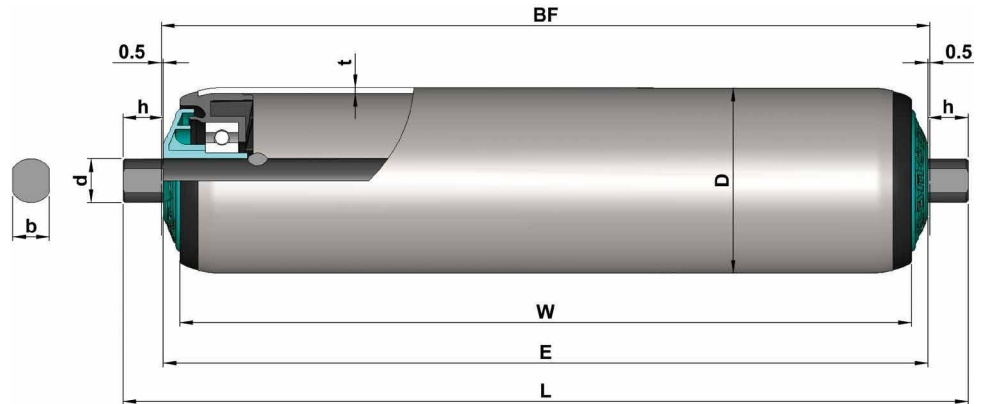
Tube Dia.(D)	Shaft Dia.(d)			
Φ40	Φ12	BF=W+10	E=W+9	L=W+10
Φ50	Φ12/15/17	BF=W+10	E=W+9	L=W+10
Φ60	Φ12/15/17	BF=W+10	E=W+9	L=W+10
Φ80	Φ20	BF=W+12	E=W+11	L=W+12

Tube	D*T	Shaft Dia.(d)			
		Φ12 (M8x15)	Φ15 (M10x20)	Φ17 (M12x25)	Φ20 (M12x25)
Steel, zinc plated	Φ40x1.5	1.200.SEC.ACC			
	Φ50x1.5	1.200.SHC.ACC	1.200.SHC.ADC	1.200.SHC.AGC	
	Φ50x2.0	1.200.SWC.ACC	1.200.SWC.ADC	○	
	Φ60x2.0	1.200.SOC.ACC	1.200.SOC.ADC		
	Φ60x3.0			1.200.JLA.AGC	
	Φ80x3.0				1.200.J6A.AEC
Steel, zinc plated with PVC sleeve (2mm)	Φ40x1.5	1.200.SED.ACC			
	Φ50x1.5	1.200.SHD.ACC	1.200.SHD.ADC	1.200.SHD.AGC	
	Φ50x2.0	○	○	○	
	Φ60x2.0	1.200.SOD.ACC	1.200.SOD.ADC		
Steel, zinc plated with PU sleeve (2mm)	Φ50x1.5	1.200.SHV.ACC	1.200.SHV.ADC	1.200.SHV.AGC	
	Φ50x2.0	○	○	○	
Stainless steel	Φ50x1.5	1.200.NHC.BCC	1.200.NHC.BDC	1.200.NHC.BGC	
	Φ60x2.0	1.200.NOC.BCC	1.200.NOC.BDC		
Aluminium	Φ50x1.5	1.200.AHC.ACC	1.200.AHC.ADC		
	Φ60x2.0	1.200.AOC.ACC	○		
PVC	Φ50x2.5	1.200.P8C.BCC	1.200.P8C.BDC		

○—Available configuration

⚙️ Φ50 rollers can be fitted with PVC sleeve (2mm)/PU sleeve (2mm/3mm), PVC/PU sleeve is not anti-static.

1200 Series Gravity Conveyor Roller



1200 Series Milled Flats

Tube Dia.(D)	Shaft Dia.(d)			
Φ40	Φ12	BF=W+10	E=W+9	L=W+31
Φ50	Φ12/15/17	BF=W+10	E=W+9	L=W+31
Φ60	Φ12/15/17	BF=W+10	E=W+9	L=W+31
Φ80	Φ20	BF=W+12	E=W+11	L=W+41

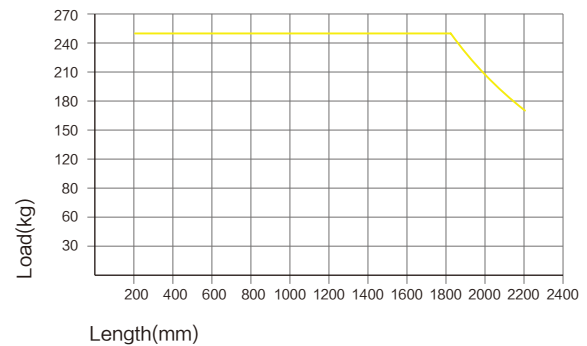
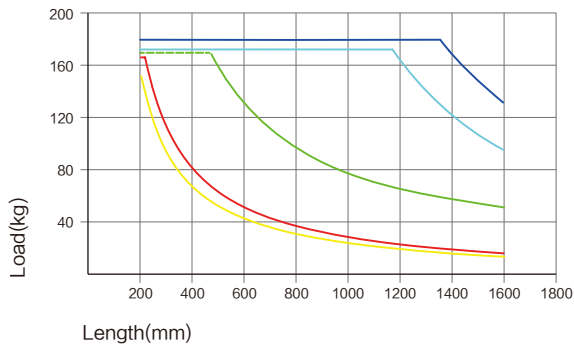
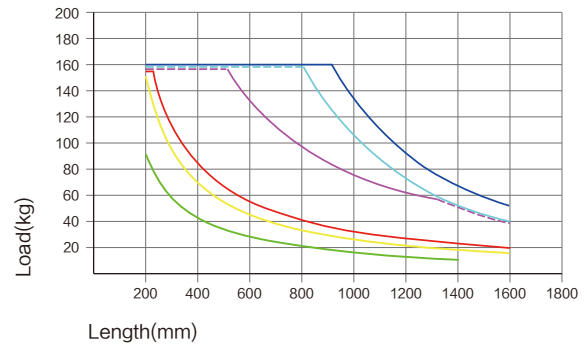
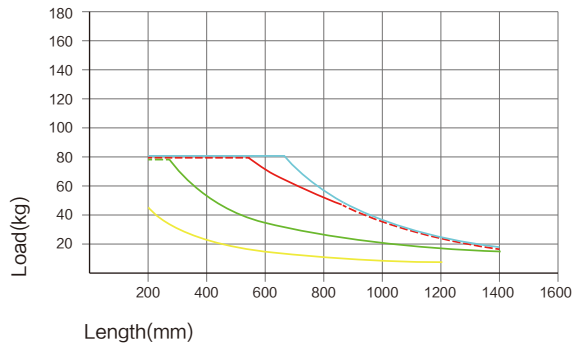
Tube	D*T	Shaft Dia.(d)			
		Φ12 (b/h=10/11)	Φ15 (b/h=12/11)	Φ17(b/h=15/11)	Φ20 (b/h=16/15)
Steel, zinc plated	Φ40x1.5	1.200.SEC.ACB			
	Φ50x1.5	1.200.SHC.ACB	1.200.SHC.ADB	1.200.SHC.AGB	
	Φ50x2.0	1.200.JWA.ACB	1.200.JWA.ADB		
	Φ60x2.0	1.200.SOC.ACB	1.200.SOC.ADB		
	Φ60x3.0			1.200.JLA.AGB	
	Φ80x3.0				1.200.J6A.AEB
Steel, zinc plated with PVC sleeve (2mm)	Φ40x1.5	1.200.SED.ACB			
	Φ50x1.5	1.200.SHD.ACB	1.200.SHD.ADB		
	Φ50x2.0	○	○		
	Φ60x2.0	1.200.SOD.ACB	1.200.SOD.ADB		
Steel, zinc plated with PU sleeve (2mm)	Φ50x1.5	1.200.SHV.ACB	1.200.SHV.ADB		
	Φ50x2.0	○	○		
Stainless steel	Φ50x1.5	1.200.NHC.BCB	1.200.NHC.BDB		
	Φ60x2.0	1.200.NOC.BCB	1.200.NOC.BDB		
Aluminium	Φ50x1.5	1.200.AHC.ACB	1.200.AHC.ADB		
	Φ60x2.0	1.200.AOC.ACB	○		
PVC	Φ50x2.5	1.200.P8C.BCB	1.200.P8C.BDB		

○——Available configuration


Φ50 rollers can be fitted with PVC sleeve (2mm)/PU sleeve (2mm/3mm),PVC/PU sleeve is not anti-static.



1200 Series Load Capacity



⚠ Above data shows the static load capacity of the roller for a uniformly distributed load.

1800 Series Gravity Conveyor Roller



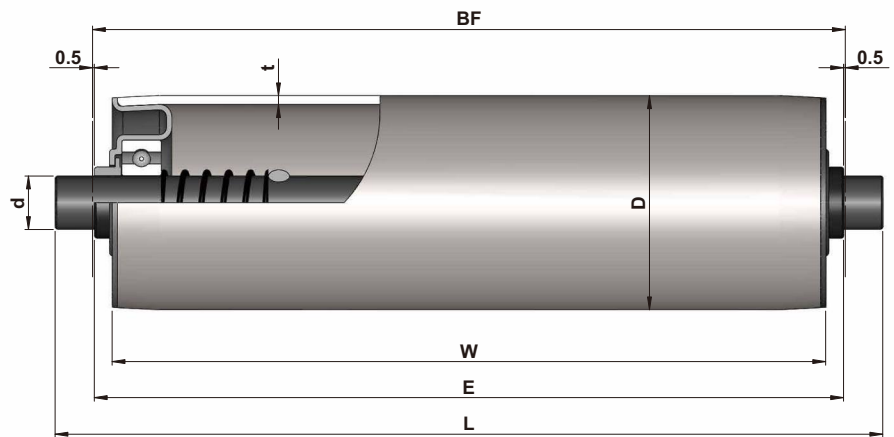
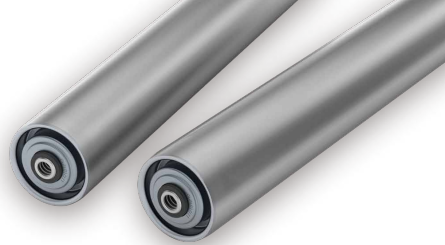
1800 Series Gravity Conveyor Roller

Product Features

- The precision ball bearing is secured in the steel stamped bearing housing. The bearing is tight and durable. Able to withstand greater axial forces than a plastic bearing unit.
- The environmental working conditions are broad. They can be used in both high and low temperature applications.
- Complete range of tube diameters available. High load capacity.
- Anti-static design.
- Not suitable for carrying roller & tensioning position of belt conveyor.
- Temperature range: -5℃ ~ +40℃,Remove the retaining ring on both sides (black), the temperature can reach -30 ℃ ~ +80 ℃.

Specifications

Bearing Unit	
Bearing housing	Steel, zinc plated
Precision ball bearing	6001/6202/6004/6204
Ground sleeve	Polyamide, black



1800 Series Spring Loaded

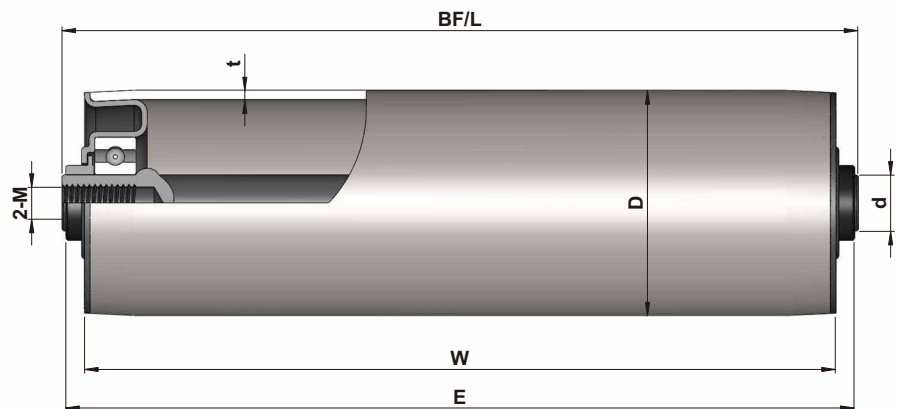
Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12	BF=W+9	E=W+8	L=W+30
Φ50	Φ15	BF=W+11	E=W+10	L=W+32
Φ60	Φ12/15	BF=W+11	E=W+10	L=W+32
Φ80	Φ20	BF=W+11	E=W+10	L=W+40
Φ89	Φ20	BF=W+11	E=W+10	L=W+40

Tube	D*T	Shaft Dia.(d)		
		Φ12	Φ15	Φ20
Steel, zinc plated	Φ50x1.5	1.800.SHC.ACA	1.800.SHC.ADA	
	Φ50x2.0	1.800.JWA.ACA	○	
	Φ60x2.0	1.800.SOC.ACA	1.800.SOC.ADA	
	Φ60x3.0		1.800.JLA.ADA	
	Φ80x2.0			○
	Φ80x3.0			1.800.J6A.AEA
	Φ89x3.0			1.800.JYA.AEA
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	1.800.SHD.ACA	1.800.SHD.ADA	
	Φ50x2.0	1.800.JWD.ACA	1.800.JWD.ADA	
	Φ60x2.0	1.800.SOD.ACA	1.800.SOD.ADA	
	Φ60x3.0		1.800.JLD.ADA	
Steel, zinc plated with PU sleeve (2mm)	Φ50x1.5	1.800.SHV.ACA	1.800.SHV.ADA	
	Φ50x2.0	1.800.JWV.ACA	1.800.JWV.ADA	
Stainless steel	Φ50x1.5	1.800.NHC.BCA	1.800.NHC.BDA	
	Φ60x2.0	1.800.NOC.BCA	1.800.NOC.BDA	
Aluminium	Φ50x1.5	1.800.AHC.ACA	1.800.AHC.ADA	
	Φ60x2.0	1.800.AOC.ACA	1.800.AOC.ADA	

○—Available configuration

- ⚙️ Φ50、60mm rollers can be fitted with PVC sleeve (2mm).
- Φ50 rollers can be fitted with PU sleeve ((2mm/3mm).
- PVC/PU sleeve is not anti-static.

1800 Series Gravity Conveyor Roller



1800 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12	BF=W+9	E=W+8	L=W+9
Φ50	Φ15	BF=W+11	E=W+10	L=W+11
Φ60	Φ12/15	BF=W+11	E=W+10	L=W+11
Φ80	Φ20	BF=W+11	E=W+10	L=W+11
Φ89	Φ20/25	BF=W+11	E=W+10	L=W+11

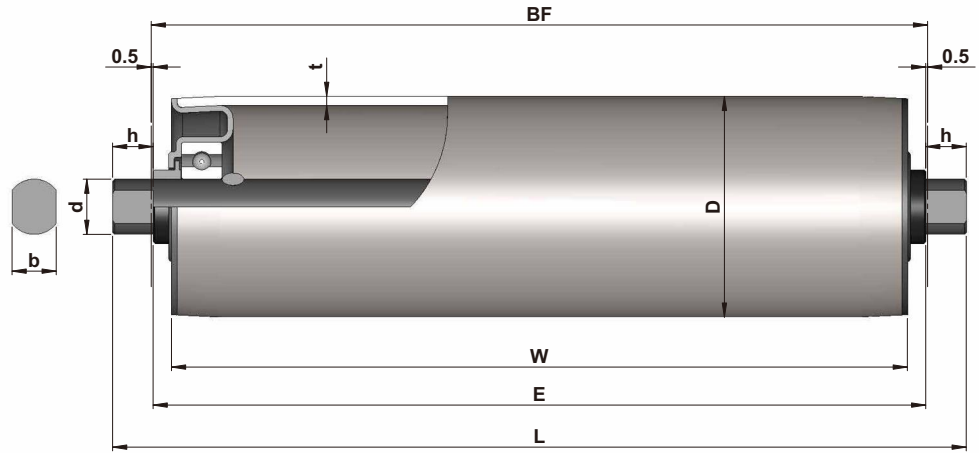
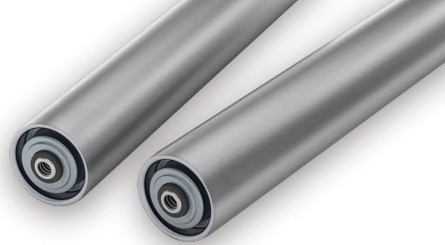
Tube	D*T	Shaft Dia.(d)				
		Φ12(M8x15)	Φ15(M10x20)	Φ17 (M12x25)	Φ20 (M12x25)	Φ25 (M12x25)
Steel, zinc plated	Φ50x1.5	1.800.SHC.ACC	1.800.SHC.ADC			
	Φ50x2.0	1.800.JWA.ACC	○	○		
	Φ60x2.0	1.800.SOC.ACC	1.800.SOC.ADC		○	
	Φ60x3.0		1.800.JLA.ADC	○		
	Φ80x2.0				○	
	Φ80x3.0				1.800.J6A.AEC	
Steel, zinc plated with PVC sleeve (2mm)	Φ89x3.0				1.800.JYA.AEC	○
	Φ50x1.5	1.800.SHD.ACC	1.800.SHD.ADC		○	
	Φ50x2.0	1.800.JWD.ACC	○			
	Φ60x2.0	1.800.SOD.ACC	1.800.SOD.ADC			
Steel, zinc plated with PU sleeve (2mm)	Φ60x3.0		1.800.JLD.ADC			
	Φ50x1.5	1.800.SHV.ACC	1.800.SHV.ADC			
	Φ50x2.0	1.800.JWV.ACC	○			
Stainless steel	Φ50x1.5	1.800.NHC.BCC	1.800.NHC.BDC			
	Φ60x2.0	1.800.NOC.BCC	1.800.NOC.BDC		○	
Aluminium	Φ50x1.5	1.800.AHC.ACC	○			
	Φ60x2.0	1.800.AOC.ACC	1.800.AOC.ADC		○	

○

Available configuration



Φ50、60mm rollers can be fitted with PVC sleeve (2mm).
 Φ50 rollers can be fitted with PU sleeve ((2mm/3mm).
 PVC/PU sleeve is not anti-static.



1800 Series Milled Flats

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12	BF=W+9	E=W+8	L=W+30
Φ50	Φ15	BF=W+11	E=W+10	L=W+32
Φ60	Φ12/15	BF=W+11	E=W+10	L=W+32
Φ80	Φ20	BF=W+11	E=W+10	L=W+40
Φ89	Φ20	BF=W+11	E=W+10	L=W+40

Tube	D*T	Shaft Dia.(d)		
		Φ12 (b/h=10/11)	Φ15 (b/h=12/11)	Φ20 (b/h=16/15)
Steel, zinc plated	Φ50x1.5	1.800.SHC.ACB	1.800.SHC.ADB	
	Φ50x2.0	1.800.JWC.ACB	○	
	Φ60x2.0	1.800.SOC.ACB	1.800.SOC.ADB	○
	Φ60x3.0		1.800.JLA.ADB	
	Φ80x2.0			○
	Φ80x3.0			1.800.J6A.AEB
	Φ89x3.0			1.800.JYA.AEB
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	1.800.SHD.BCB	1.800.SHD.ADB	
	Φ50x2.0	1.800.JWD.BCB	○	
	Φ60x2.0	1.800.SOD.ACB	1.800.SOD.ADB	
	Φ60x3.0		1.800.JLD.ADB	
Steel, zinc plated with PU sleeve (2mm)	Φ50x1.5	1.800.SHV.ACB	1.800.SHV.ADB	
	Φ50x2.0	1.800.JWV.ACB	○	
Stainless steel	Φ50x1.5	1.800.NHC.BCB	1.800.NHC.BDB	
	Φ60x2.0	1.800.NOC.BCB	1.800.NOC.BDB	○
Aluminium	Φ50x1.5	1.800.AHC.ACB	○	
	Φ60x2.0	1.800.AOC.ACB	1.800.AOC.ADB	○

○—Available configuration

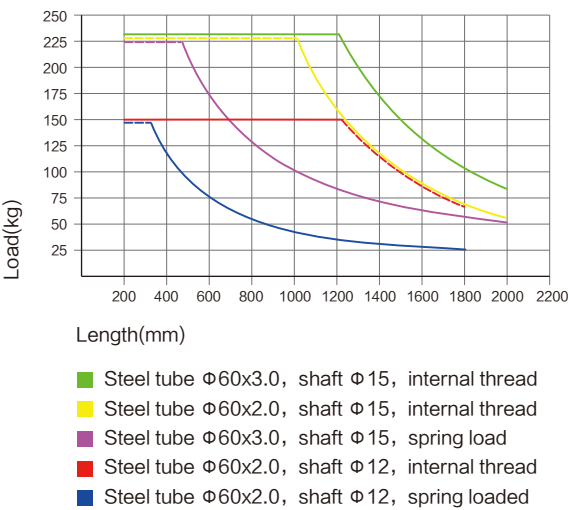
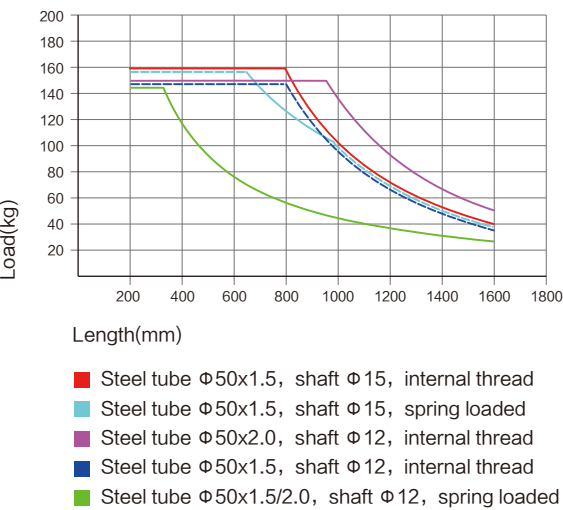
⚙️ Φ50、60mm rollers can be fitted with PVC sleeve (2mm).

Φ50 rollers can be fitted with PU sleeve ((2mm/3mm).

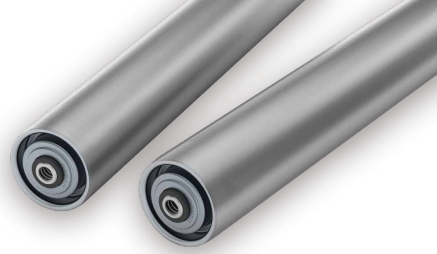
PVC/PU sleeve is not anti-static.

1800 Series Gravity Conveyor Roller

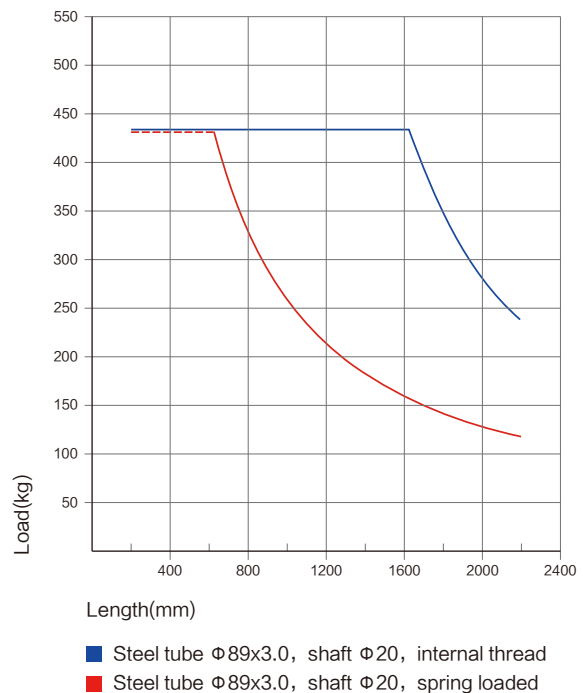
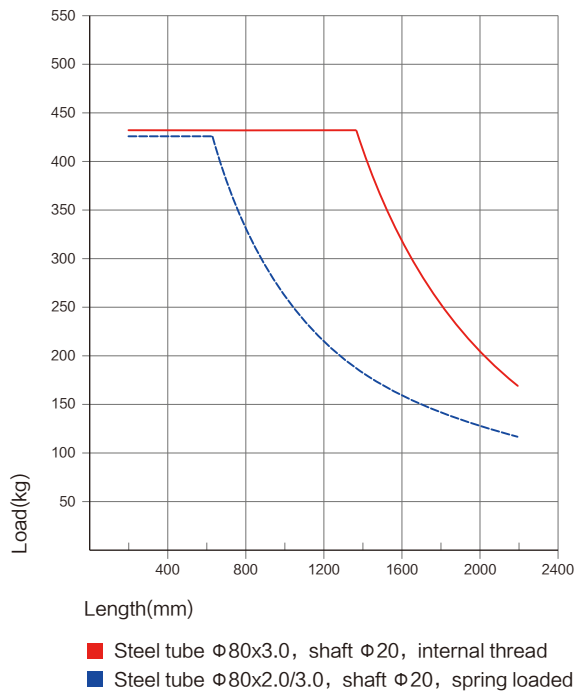
1800 Series Load Capacity



▲ Above data shows the static load capacity of the roller for a uniformly distributed load.



1800 Series Load Capacity



⚠ Above data shows the static load capacity of the roller for a uniformly distributed load.



DRIVEN CONVEYING

Driven conveying transports goods steadily, reliably and with accurate speed. According to the driving method, it may be classified as “belt driven conveying” or “chain driven conveying” .

Belt driven:

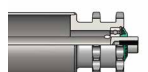
Reliable, low noise, low environmental pollution, able to run at high speed. Oily working conditions should be avoided.

Chain driven:

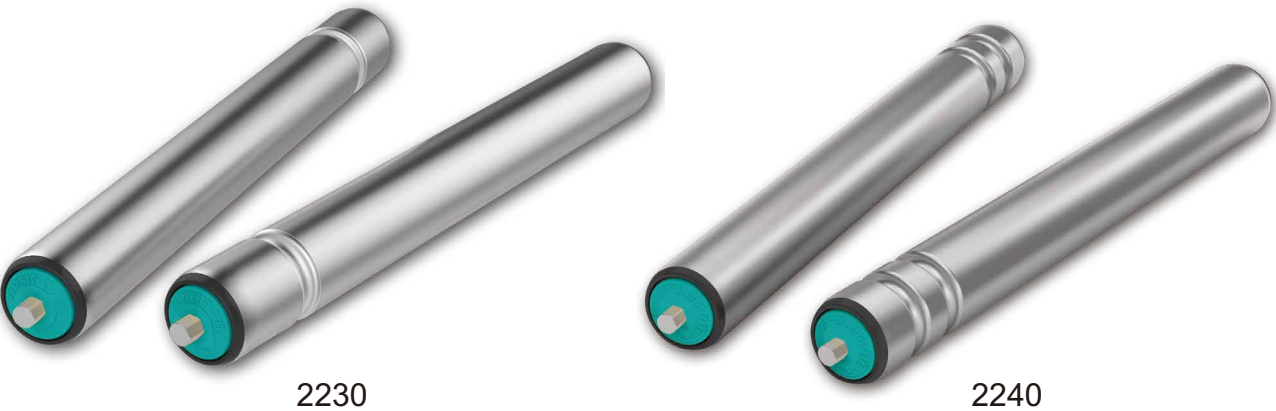
High load capacity. Suitable for a wide range of working environments including oil, water and high temperature however the chain is easily worn in a dusty environment. The conveying speed should not exceed 30m/min.



Rollers are listed according to their series and available features.

Product features	Series	Diameter	Driving Element	Page
O-belt drive, light/medium duty conveying, widely applied in carton conveying, custom groove position.	2230/2240	Φ40/50/60		34-39
O-belt pulley, light/medium duty conveying, reliable.	2260	Φ50		40-43
Poly-vee pulley, medium duty conveying, high speed, low noise.	2250	Φ50		44-47
Polymer timing pulley, with slip synchronous in conveying, medium load conveying, high speed, low noise.	2280	Φ50		48-49
Polymer sprocket, polyamide bearing housing, medium duty conveying, low noise	2214/2224	Φ50/60		50-53
Steel sprocket, polymer bearing housing, medium/heavy duty conveying, attractive look.	2411/2421	Φ50/60/80		54-57
Steel sprocket, steel bearing housing, heavy duty conveying, strong and durable, suitable for many working environments.	2311/2321	Φ50/60/80/89		58-62

2230/2240 Series Driven Conveyor Roller



2230/2240 Series

Single/Double Grooved Conveyor Roller

Product Features

- Compared with chain drive, the O-belt drive has the advantages of low noise and high speed. It is widely used for light/medium duty carton conveying.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- The position of the grooves can be customized.
- Standard configuration with anti-static design surface impedance $\leq 10^6 \Omega$.
- Temperature range: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$.
- Humidity range: 30%~ 90% RH (non-condensation).

Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide,black
End cap	Polypropylene, Damon green
Precision ball bearing	6002

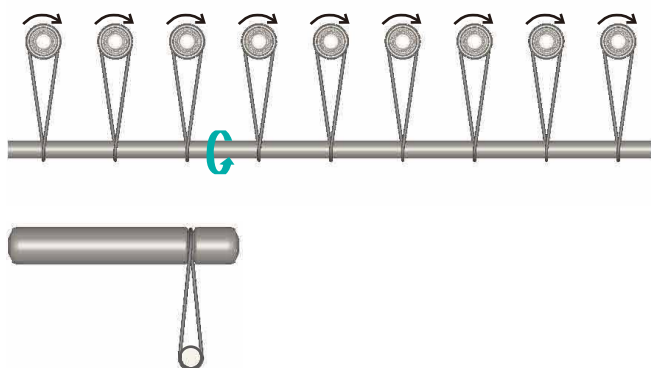


About duty

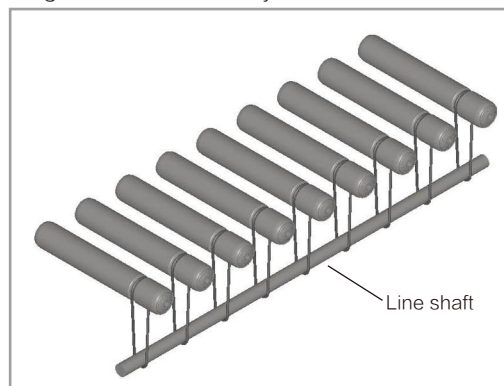
1. Duty is the maximum conveying capacity of driven roller (it is not roller's maximum load capacity) For more information about the load capacity, refer to the load capacity of 1200 series dia 50 roller on Page 27.
2. In driven conveying, duty plays a decisive role.
3. The duty capacity of the rollers depend on the drive method and drive capacity of the O-belt.
single goods should not over 30 kg.

Single Grooved Drive

1. The driving force for each roller is transmitted separately from the line shaft. It has a higher duty capacity in comparison to the double groove drive. Ideally suited for long conveyors. The maximum conveying length of each unit can be over 10 meters.
2. When used in curve conveyors, the line shaft is connected by universal joint couplings.
3. Maintenance is relatively difficult as you need to disassemble the entire line shaft.



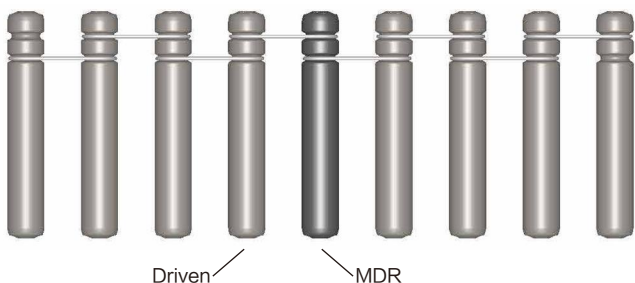
Single Grooved Drive Layout :



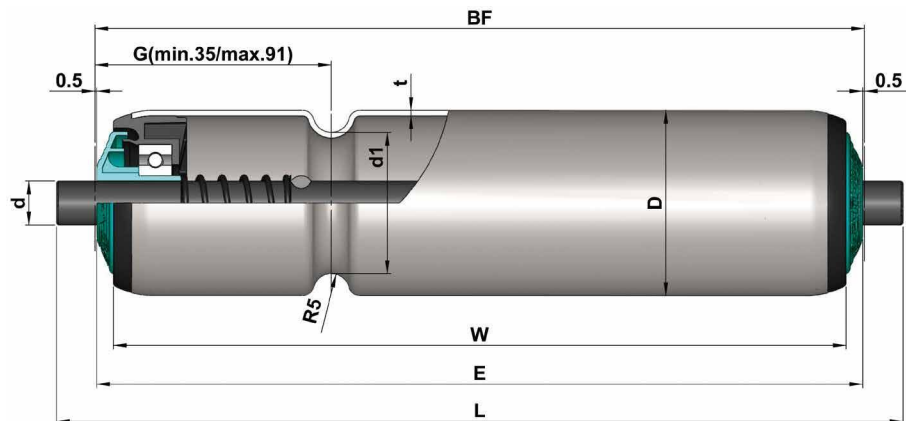
Double Grooved Drive

1. Simple arrangement. Easy installation and maintenance.
2. The driving torque deteriorates rapidly from roller to roller. Typically single MDR can only drive 7 to 8 rollers.
The weight of single items to be conveyed should not exceed 30kg.
3. The preloading value is required for the length of O-belt loop. It may vary according to the different O-belt suppliers. Please check the specifications with the O-belt supplier. Typically, reduce the preloading value by 5% – 8% from the theoretical length of loop.

Double Grooved Drive Layout :



2230/2240 Series Driven Conveyor Roller



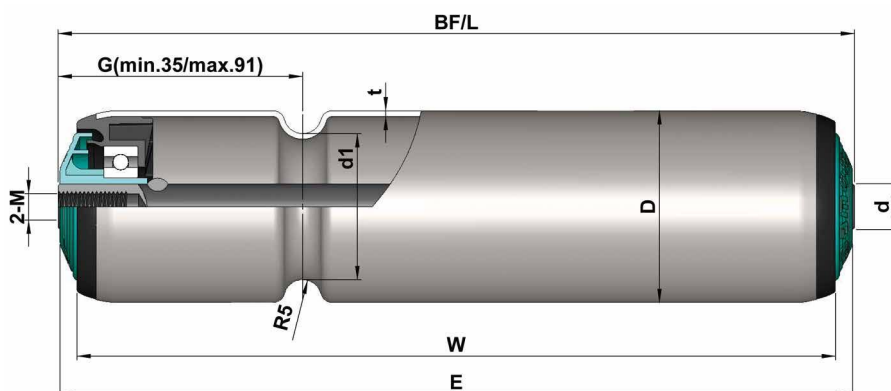
2230 Series Spring Loaded

Tube Dia.(D)	Shaft Dia.(d)				G	d1
Φ40	Φ8/10/12/11hex	BF=W+10	E=W+9	L=W+31	65	Φ30
Φ50	Φ8/10/12/11hex	BF=W+10	E=W+9	L=W+31	65	Φ38.5
Φ60	Φ10/12/11hex	BF=W+10	E=W+9	L=W+31	65	Φ48.0

Tube	D*T	Shaft Dia.(d)			
		Φ8	Φ10	11hex	Φ12
Steel, zinc plated	Φ40x1.5	○	2.230.SEC.AMA	2.230.SEC.BFA	2.230.SEC.ACA
	Φ50x1.5	○	2.230.SHC.AMA	2.230.SHC.BFA	2.230.SHC.ACA
	Φ60x2.0		○	2.230.SOC.BFA	2.230.SOC.ACA
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	○	2.230.SHD.AMA	2.230.SHD.BFA	2.230.SHD.ACA
Stainless steel	Φ50x1.5	○	2.230.NHC.BMA	2.230.NHC.BFA	2.230.NHC.BCA
	Φ60x2.0		○	2.230.NOC.BFA	2.230.NOC.BCA

○ — Available configuration

- 
Φ40/60mm rollers can be fitted with PVC sleeve (2mm).
- Φ50 rollers can be fitted with PU sleeve (2mm/3mm)
- PVC/PU sleeve is not anti-static.



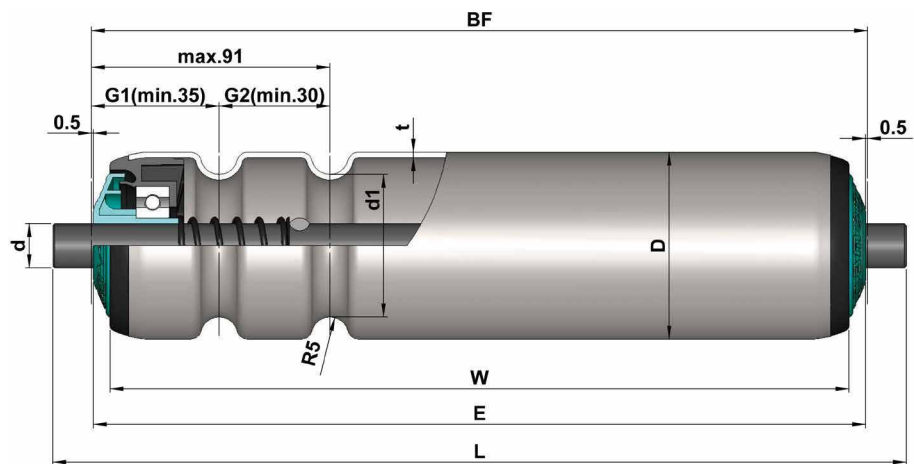
2230 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)				G	d1
Φ40	Φ12	BF=W+10	E=W+9	L=W+10	65	Φ30
Φ50	Φ12/15	BF=W+10	E=W+9	L=W+10	65	Φ38.5
Φ60	Φ12/15	BF=W+10	E=W+9	L=W+10	65	Φ48.0

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ40x1.5	2.230.SEC.ACC	
	Φ50x1.5	2.230.SHC.ACC	2.230.SHC.ADC
	Φ60x2.0	2.230.SOC.ACC	2.230.SOC.ADC
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	2.230.SHD.ACC	2.230.SHD.ADC
Stainless steel	Φ50x1.5	2.230.NHC.BCC	2.230.NHC.BDC
	Φ60x2.0	2.230.NOC.BCC	2.230.NOC.BDC

- ⚙️ Φ40/60mm rollers can be fitted with PVC sleeve (2mm).
- Φ50 rollers can be fitted with PU sleeve (2mm/3mm)
- PVC/PU sleeve is not anti-static.

2230/2240 Series Driven Conveyor Roller



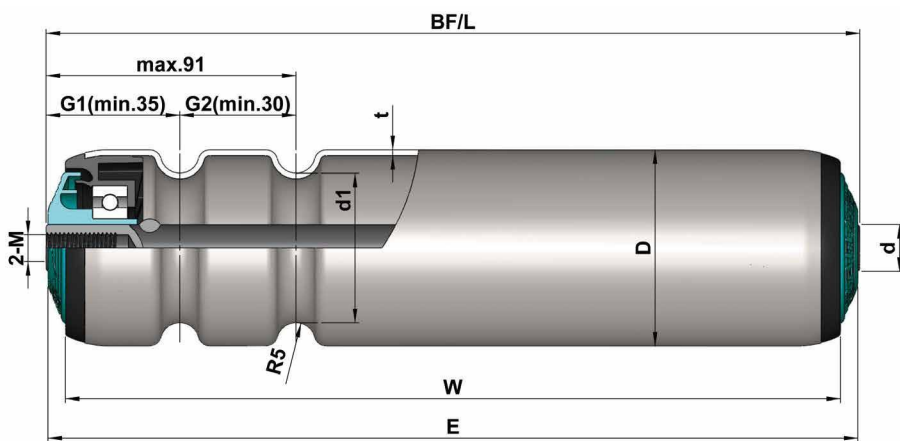
2240 Series Spring Loaded

Tube Dia.(D)	Shaft Dia.(d)				G1	G2	d1
Φ40	Φ8/10/12/11hex	BF=W+10	E=W+9	L=W+31	35	30	Φ30
Φ50	Φ8/10/12/11hex	BF=W+10	E=W+9	L=W+31	35	30	Φ38.5
Φ60	Φ10/12/11hex	BF=W+10	E=W+9	L=W+31	35	30	Φ48.0

Tube	D*T	Shaft Dia.(d)			
		Φ8	Φ10	11hex	Φ12
Steel, zinc plated	Φ40x1.5	○	2.240.SEC.AMA	2.240.SEC.BFA	2.240.SEC.ACA
	Φ50x1.5	○	2.240.SHC.AMA	2.240.SHC.BFA	2.240.SHC.ACA
	Φ60x2.0		○	2.240.SOC.BFA	2.240.SOC.ACA
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	○	2.240.SHD.AMA	2.240.SHD.BFA	2.240.SHD.ACA
Stainless steel	Φ50x1.5	○	2.240.NHC.BMA	2.240.NHC.BFA	2.240.NHC.BCA
	Φ60x2.0		○	2.240.NOC.BFA	2.240.NOC.BCA

○——Available configuration

- 
 Φ40/60mm rollers can be fitted with PVC sleeve (2mm).
- Φ50 rollers can be fitted with PU sleeve (2mm/3mm)
- PVC/PU sleeve is not anti-static.



2240 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)				G1	G2	d1
Φ40	Φ12/15	BF=W+10	E=W+9	L=W+10	35	30	Φ30
Φ50	Φ12/15	BF=W+10	E=W+9	L=W+10	35	30	Φ38.5
Φ60	Φ12/15	BF=W+10	E=W+9	L=W+10	35	30	Φ48.0

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ40x1.5	2.240.SEC.ACC	
	Φ50x1.5	2.240.SHC.ACC	2.240.SHC.ADC
	Φ60x2.0	2.240.SOC.ACC	2.240.SOC.ADC
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	2.240.SHD.ACC	2.240.SHD.ADC
Stainless steel	Φ50x1.5	2.240.NHC.BCC	2.240.NHC.BDC
	Φ60x2.0	2.240.NOC.BCC	2.240.NOC.BDC

- ⚙️ Φ40/60mm rollers can be fitted with PVC sleeve (2mm).
- Φ50 rollers can be fitted with PU sleeve (2mm/3mm)
- PVC/PU sleeve is not anti-static.

2260 Series Driven Conveyor Roller



2260 Series

O-Belt Pulley Roller

Product Features

- The O-belt pulley is located the end of the roller which separates the drive area and the conveying area avoiding interference between the O-belt and the conveyed goods.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- Because there is no grooving of the tube, the tube will not have any distortion and the roller will run more smoothly.
- Standard configuration with anti-static design surface impedance ≤ 10⁶ Ω。
- Temperature range: -5℃ ~ +40℃.
- Humidity range: 30%~ 90% RH (non-condensation).
Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polyproylene, Damon green
Precision ball bearing	6002
Drive Element	
O-belt pulley	Polyamide, black



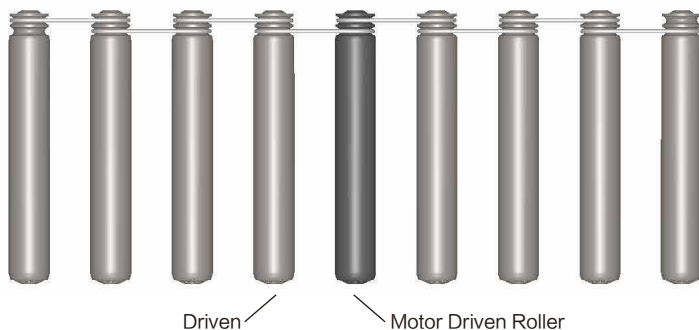
About duty

1. Duty is the maximum conveying capacity of driven roller (it's not roller's maximum load capacity) For more information about the load capacity, refer to the load capacity of 1200 series dia 50 roller on Page 27.
2. In driven conveying, duty plays a decisive role.
3. The duty capacity of the rollers depend on the drive method and drive capacity of the O-belt. Single items should not exceed 30kg.

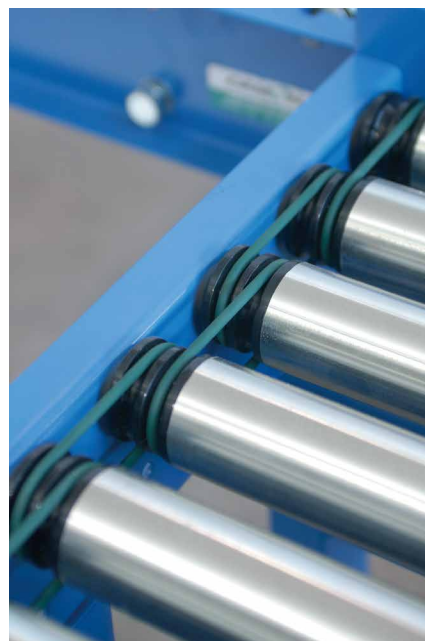
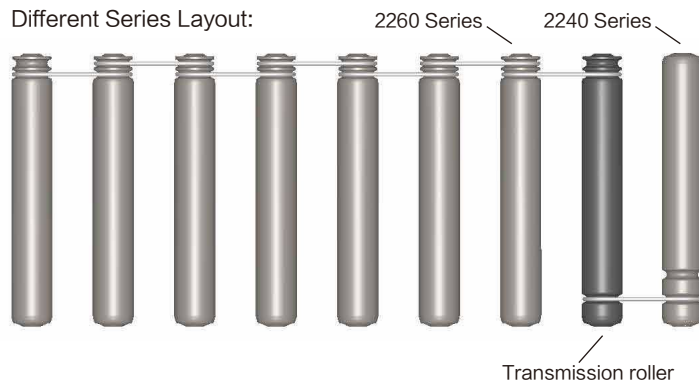
Double Grooved Pulley Drive

1. Simple arrangement. Easy installation and maintenance.
2. The driving torque deteriorates rapidly from roller to roller. Typically single MDR can only drive 7 to 8 rollers. The weight of single items to be conveyed should not exceed 30kg.
3. The preloading value is required for the length of O-belt loop. It may vary according to the different O-belt suppliers. Please check the specifications with the O-belt supplier. Typically, reduce the preloading value by 5% – 8% from the theoretical length of loop.

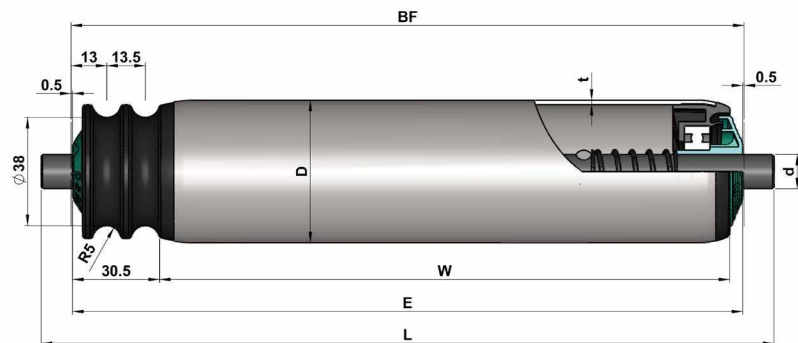
Double Grooved Pulley Drive Layout:



Different Series Layout:



2260 Series Driven Conveyor Roller



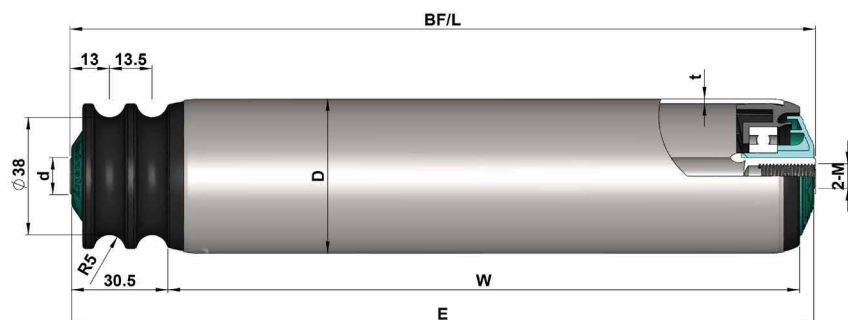
2260 Series Spring Loaded

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ10/12/11hex	BF=W+36	E=W+35	L=W+57

Tube	D*T	Shaft Dia.(d)		
		Φ10	11hex	Φ12
Steel, zinc plated	Φ50x1.5	○	2.260.SHC.BFA	2.260.SHC.ACA
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	○	2.260.SHD.BFA	2.260.SHD.ACA
Stainless steel	Φ50x1.5	○	2.260.NHC.BFA	2.260.NHC.BCA
Aluminium	Φ50x1.5	○	○	○

○—Available configuration

⚙️ Ø50 rollers can be fitted with PU sleeve (2mm/3mm).PVC/PU sleeve is not anti-static.



2260 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/15	BF=W+36	E=W+35	L=W+36

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	2.260.SHC.ACC	2.260.SHC.ADC
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	2.260.SHD.ACC	2.260.SHD.ADC
Stainless steel	Φ50x1.5	2.260.NHC.BCC	2.260.NHC.BDC
Aluminium	Φ50x1.5	○	○

○—Available configuration

⚙️ Φ50 rollers can be fitted with PU sleeve (2mm/3mm).PVC/PU sleeve is not anti-static.

2250 Series Driven Conveyor Roller



2250 Series

Poly-Vee Conveyor Roller

Product Features

- The poly-vee pulley is located at the end of the roller which separates the drive area and the conveying area making the conveying smooth, high speed and low noise.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- PJ series poly-vee. Total of 9 grooves at 2.34mm pitch.
- Various PJ belt lengths available to suit different pitch of rollers.
- Suitable for the high speed applications. Maximum speed varies with roller length and diameter. Maximum speed up to 2~3m/s.
- Standard configuration with anti-static design surface impedance $\leq 10^6\Omega$.
- Temperature range: -5℃ ~ +40℃.
- Humidity range: 30%~ 90% RH (non-condensation).
Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002

Drive Element	
Poly-vee wheel	Polyamide, black

⚙ Poly-vee belts are available.



Conveying Load

1. Conveying load refers to the maximum load capacity of the roller to be driven.
2. Conveying load is the key factor in dynamic conveying.
3. The load capacity of the roller is based on the drive method and the type of Poly-vee belt. The load rating is high when fewer rollers are driven or selecting the 3 or 4 groove Poly-vee belt.
4. The load capacity for each unit can be as high as 100kg when the 3 groove poly-vee belt is used.

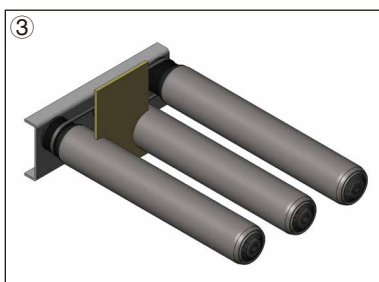
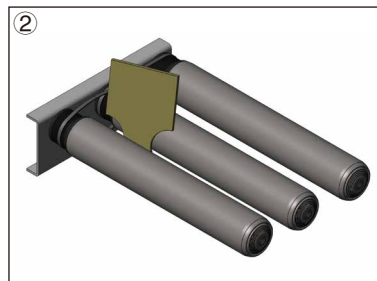
Roller Pitch

Poly-vee belt selection according to the roller pitch, please refer to the following chart:

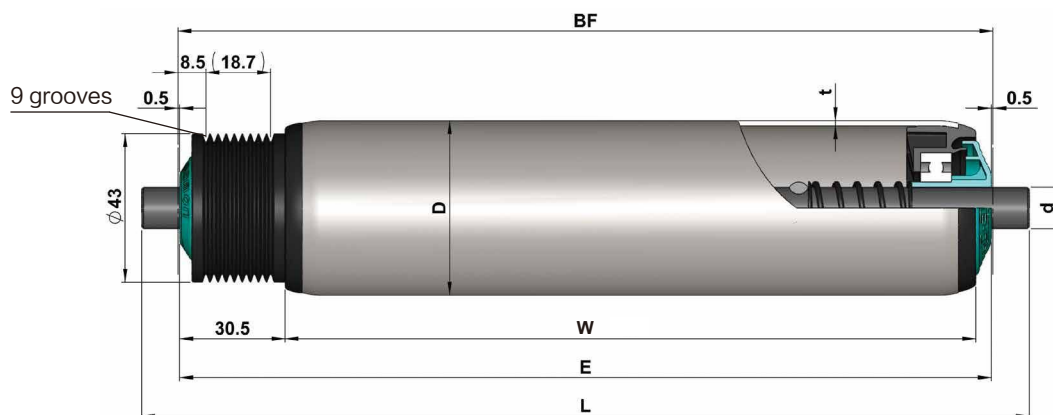
Roller pitch(mm)	Types of poly-vee belt	
	2 grooves	3 grooves
60~63	2PJ256	3PJ256
73~75	2PJ286	3PJ286
76~78	2PJ290	3PJ290
87~91	2PJ314	3PJ314
97~101	2PJ336	3PJ336
103~107	2PJ346	3PJ346
119~121	2PJ376	3PJ376
129~134	2PJ416	3PJ416
142~147	2PJ435	3PJ435
157~161	2PJ456	3PJ456

Roller Installation

To avoid incorrect installation, an appropriate method and a suitable tool is required to install poly-vee rollers.



2250 Series Driven Conveyor Roller



2250 Series Spring Loaded

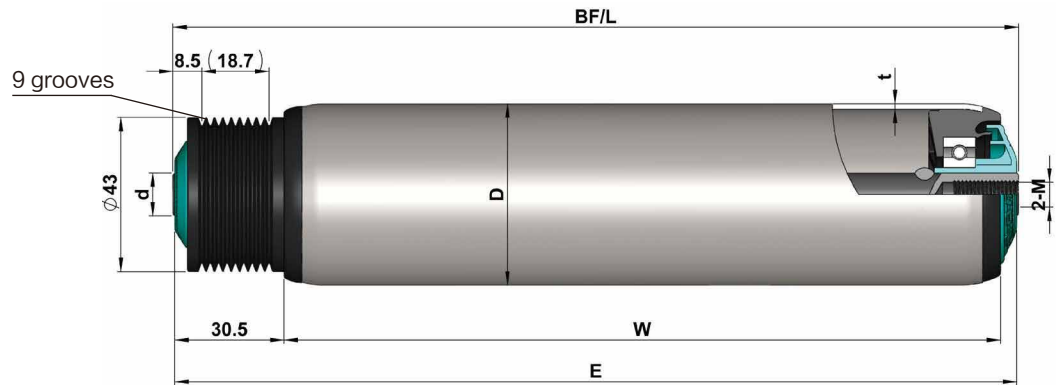
Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ10/12/11hex	BF=W+36	E=W+35	L=W+57

Tube	D*T	Shaft Dia.(d)		
		Φ10	11hex	Φ12
Steel, zinc plated	Φ50x1.5	○	2.250.SHC.BFA	2.250.SHC.ACA
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	○	2.250.SHD.BFA	2.250.SHD.ACA
Stainless steel	Φ50x1.5	○	2.250.NHC.BFA	2.250.NHC.BCA
Aluminium	Φ50x1.5		○	○

○—Available configuration

⚙️ $\phi 50$ rollers can be fitted with PU sleeve (2mm/3mm).PVC/PU sleeve is not anti-static.

 Please choose the steel Poly-Vee roller when you must use 4PJ belt.



2250 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/15	BF=W+36	E=W+35	L=W+36

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	2.250.SHC.ACC	2.250.SHC.ADC
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	2.250.SHD.ACC	2.250.SHD.ADC
Stainless steel	Φ50x1.5	2.250.NHC.BCC	2.250.NHC.BDC
Aluminium	Φ50x1.5	○	○

○—Available configuration

⚙️ Φ50 rollers can be fitted with PU sleeve (2mm/3mm).PVC/PU sleeve is not anti-static.

⚠️ Please choose the steel Poly-Vee roller when you must use 4PJ belt.

2280 Series Driven Conveyor Roller



2280 Series

Timing Belt Pulley Conveyor Roller

Products Features

- The polymer timing pulley is installed at the end of the roller, which makes the drive and conveying separate in the zone. The conveying is more stable and has the characteristics of high speed and low noise.
 - The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
 - The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
 - larger transmission capability, compact structure, tensioning-free mechanism and simple design.
 - It is more efficient without slip in conveying.
 - The T5 tooth shape design is suitable for the roller conveyor with higher versatile.
 - Its positioning is precise with the use of MDR to meet the application requirements of the load section.
 - It is suitable for clean room and other harsh environment with the use of PU synchronous belt.
 - Compared with traditional belt drive, it is waterproof (no skidding) and has the ability to work in a certain bad environment.
 - It needs no lubrication with easy maintenance.
 - Different timing belt models match the different center distance of the roller. (see the appendix)
 - Suitable for the high speed applications. Maximum speed varies with roller length and diameter. Maximum speed up to 2~3m/s.
 - Standard configuration with anti-static design surface impedance $\leq 10^6\Omega$ 。
 - Temperature range: -5℃~ +40℃.
 - Humidity range: 30%~ 90% RH (non-condensation).
- Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene,Damon green
Precision ball bearing	6002

Drive Element	
Timing pulley	Polyamide, black



About Duty

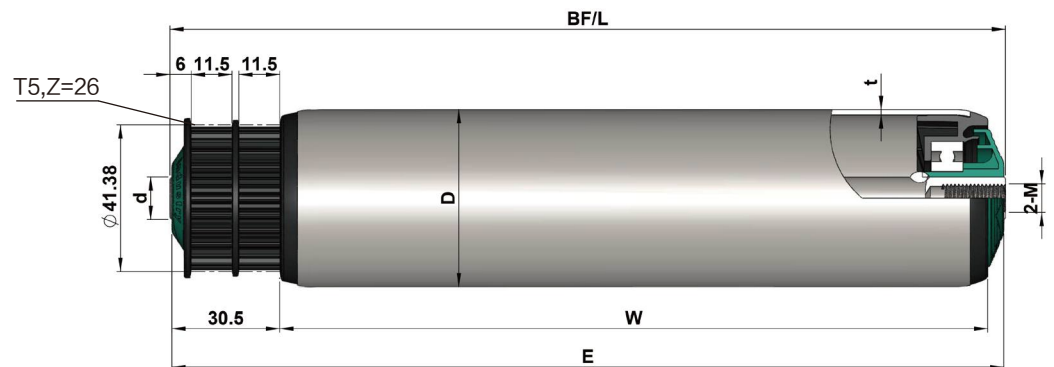
1. Duty is the maximum conveying capacity of driven roller (it is not roller's maximum load capacity) For more information about the load capacity, refer to the load capacity of 1200 series dia 50 roller on Page 27.
2. In driven conveying, duty plays a decisive role.
3. The duty capacity of the roller depends on the conveying arrangement and the mode of the timing belt. In general, the duty capacity of the single zone can achieve 100kg.

Roller Pitch

The center distance of the timing belt arrangement is strictly limited (recommended tolerance: +0.5/0mm). The common pitch and the timing belt type with it are shown in the following table:

synchronous belt wide: 10mm

Center distance(mm)	Type of timing belt	Teeth number of timing belt
60	10-T5-250	50
75	10-T5-280	56
85	10-T5-300	60
100	10-T5-330	66
105	10-T5-340	68
135	10-T5-400	80
145	10-T5-430	86
160	10-T5-450	90



2280 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/15	BF=W+36	E=W+35	L=W+36

Tube	D*T	Shaft Dia. (d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	2.280.SH.C.ACC	2.280.SH.C.ADC
Steel, zinc plated with PVC sleeve (2mm)	Φ50x1.5	2.280.SH.D.ACC	2.280.SH.D.ADC
Stainless steel	Φ50x1.5	2.280.NH.C.BCC	2.280.NH.C.BDC
Aluminium	Φ50x1.5	○	○

○—Available configuration

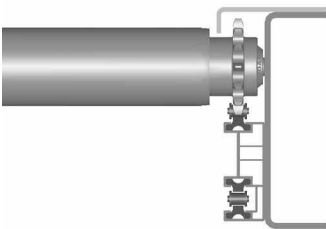
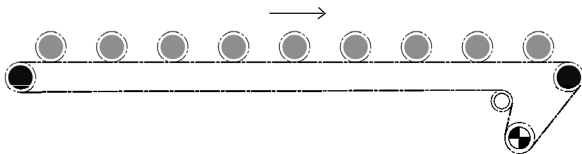
⚙️ Φ50 rollers can be fitted with PU sleeve (2mm/3mm), PVC/PU sleeve is not anti-static.

2214/2224 Series Driven Conveyor Roller

Single Chain Sprocket Drive

- 1.The compact construction is suitable for medium/low speed, continuous operation.
- 2.Typically the conveyor is equipped with a chain tensioner.
- 3.When considering the maximum duty of the single roller, you should also consider the ultimate tension of the chain under conveyor full drive conditions.
- 4.Compared with the double chain drive, the choice of roller pitch is more flexible and not determined by the chain pitch.

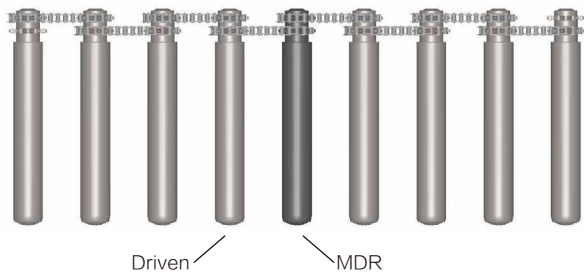
Single chain layout:



Double Chain Sprocket Drive

- 1.Suitable for heavy duty loads and frequent start/stop operation.
- 2.To obtain the best roller drive transmission, the drive should be located in the centre of the conveyor.

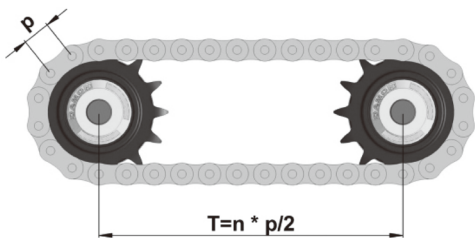
Double chain arrangement:



- 3.Compared with single sprocket drive, the conveying speed is higher. Maximum speed: 30m/min.
- 4.The roller pitch is limited, please see below.

$$T=n \times p/2$$

Note: n—Integer, 1、2、3、...
p—Chain pitch



Avoid half pitch chain. Please use the chart below for the chain pitch.

Unit: mm

Type	Pitch	Center distance(T)					Tolerance
08B11T	12.7	69.8	82.5	95.2	107.9	120.6	0/-0.4
08B14T	12.7	88.9	101.6	114.3	127	139.7	0/-0.4
10B15T	15.875	134.9	150.8	166.6	182.5	198.4	0/-0.7



2214



2224

2214/2224 Series

Polymer Single/Double Sprocket Roller

Product Features

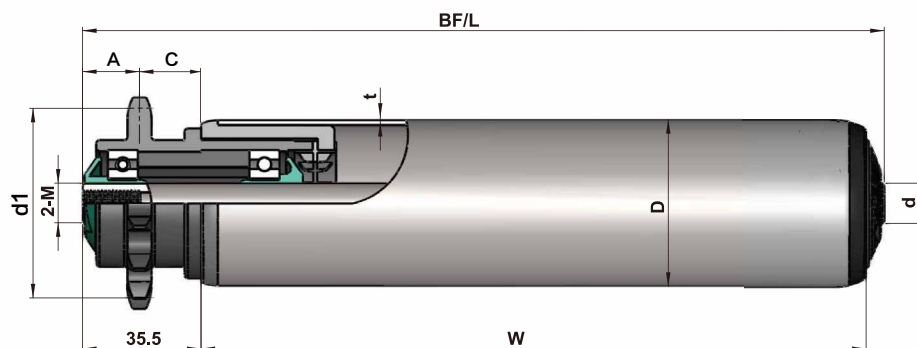
- Using the polyamide sprocket roller as the drive element greatly reduces the running noise.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- The weight of the goods to be conveyed should not exceed 150kg.
Standard configuration with anti-static design surface impedance $\leq 10^6 \Omega$.
- Temperature range: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$.
- Humidity range: 30%~ 90% RH (non-condensation).
Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002

Drive Element	
Sprocket	Polyamide, black

2214/2224 Series Driven Conveyor Roller



2214 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Spocket style	A	C	d1
Φ50	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	2.214.SHC.ACC	2.214.SHC.ADC
	Φ60x2.0	○	○
Stainless steel	Φ50x1.5	2.214.NHC.BCC	2.214.NHC.BDC
	Φ60x2.0	○	○
Aluminium	Φ50x1.5	2.214.AHC.ACC	2.214.AHC.ADC
	Φ60x2.0	○	○
PVC	Φ50x2.5	2.214.P8C.BCC	2.214.P8C.BDC

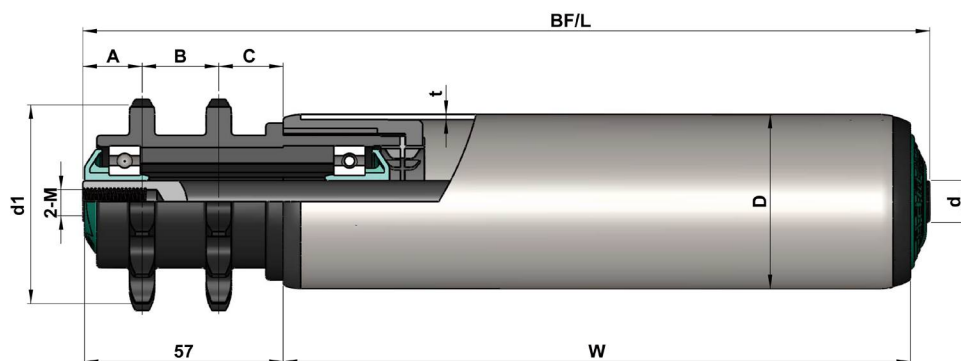
○—Available configuration



Φ50、60 rollers can be fitted with PVC sleeve (2mm)

Φ50 rollers can be fitted with PU sleeve (2mm/3mm).

PVC/PU sleeve is not anti-static.



2224 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Spocket style	A	B	C	d1
Φ50	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	2.224.SHC.ACC	2.224.SHC.ADC
	Φ60x2.0	2.224.SOC.ACC	2.224.SOC.ADC
Stainless steel	Φ50x1.5	2.224.NHC.BCC	2.224.NHC.BDC
	Φ60x2.0	2.224.NOC.BCC	2.224.NOC.BDC
Aluminium	Φ50x1.5	2.224.AHC.ACC	2.224.AHC.ADC
	Φ60x2.0	○	○
PVC	Φ50x2.5	2.224.P8C.BCC	2.224.P8C.BDC

○—Available configuration

- ⚙️ Φ50、60 rollers can be fitted with PVC sleeve (2mm)
- Φ50 rollers can be fitted with PU sleeve (2mm/3mm).
- PVC/PU sleeve is not anti-static.

2411/2421 Series Driven Conveyor Roller



2411/2421 Series

Steel Single/Double Sprocket Roller

Product Features

- Welding the steel sprocket to the steel tube gives it the capacity to transmit high torque and meet the requirements for heavy duty transportation.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- Temperature range: -5°C ~ +40°C.
Please contact us if humidity out of this scope.

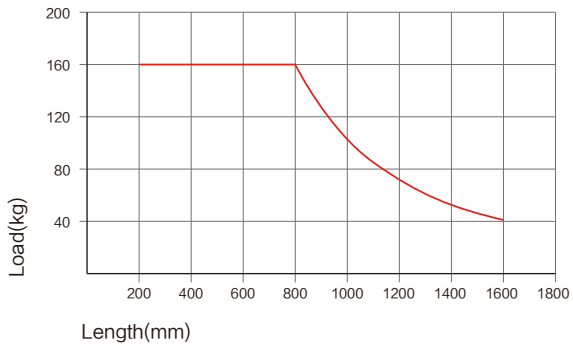
Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polyproylene, Damon green
Precision ball bearing	6002/6205

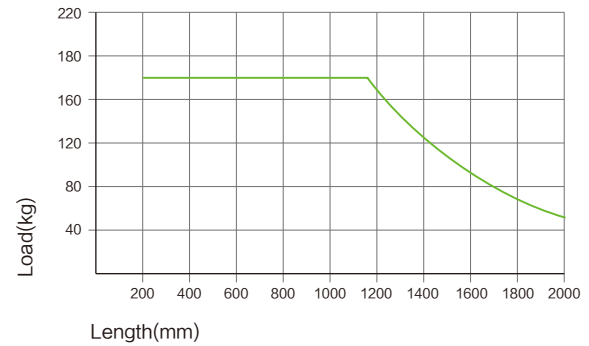
Drive Element	
Sprocket	Steel



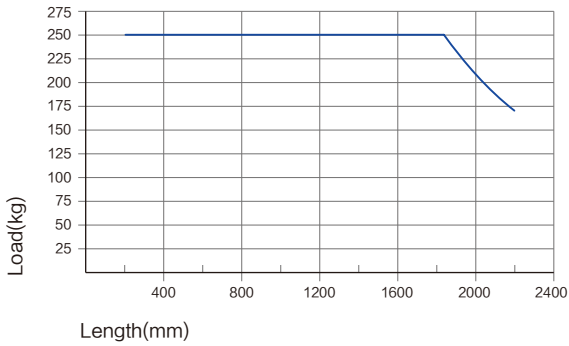
2411/2421 Series Load Capacity



■ Steel tube $\Phi 50 \times 1.5$, shaft $\Phi 12/15$, internal thread



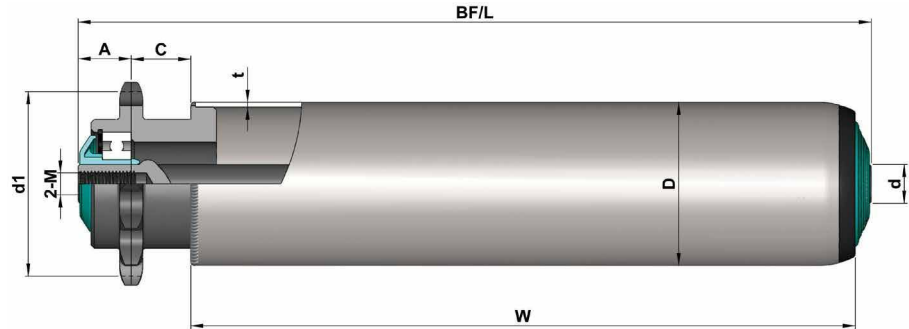
■ Steel tube $\Phi 60 \times 2.0$, shaft $\Phi 12/15$, internal thread



■ Steel tube $\Phi 80 \times 3.0$, shaft $\Phi 20$, internal thread

⚠ Above data shows the static load capacity of the roller for a uniformly distributed load.
You should also consider the chain tension, motor power drive factors, calculation based on the smallest value.

2411/2421 Series Driven Conveyor Roller



2411 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Spocket style	A	C	d1
Φ50	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07
Φ80	Φ20	BF/L=W+37	10B15T	18	13	Φ76.35

Tube	D*T	Shaft Dia.(d)		
		Φ12 (M8x15)	Φ15 (M10x20)	Φ20 (M12x25)
Steel, zinc plated	Φ50x1.5	2.411.JHA.ACC	2.411.JHA.ADC	
	Φ50x2.0	○	○	
	Φ60x2.0	2.411.JOA.ACC	2.411.JOA.ADC	
Steel, zinc plated with steel flange	Φ80x3.0			2.411.J6A.AEC
	Φ80x3.0			2.411.J6G.AEC
Stainless steel	Φ50x1.5	2.411.NHC.BCC	2.411.NHC.BDC	
	Φ60x2.0	2.411.NOC.BCC	2.411.NOC.BDC	

○—Available configuration

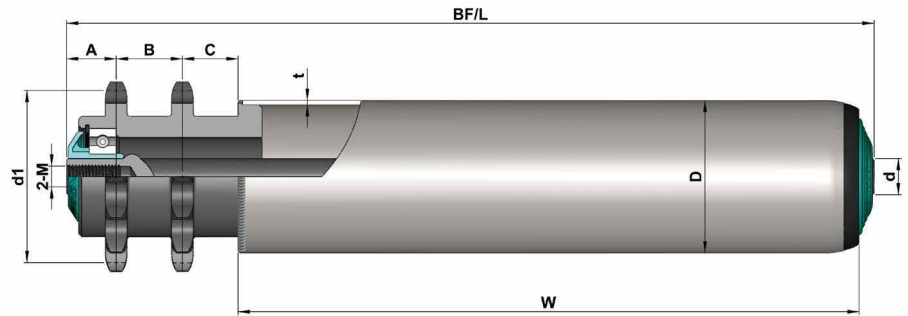


Φ50、60 rollers can be fitted with PVC sleeve (2mm)

Φ50 rollers can be fitted with PU sleeve (2mm/3mm).

PVC/PU sleeve is not anti-static.

If steel pallets are transported, the risk of wear on roller surface is higher, please contact us in advance.



2421 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Spocket style	A	B	C	d1
Φ50	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07
Φ80	Φ20	BF/L=W+63	10B15T	18	26	13	Φ76.35

Tube	D*T	Shaft Dia.(d)		
		Φ12 (M8x15)	Φ15 (M10x20)	Φ20 (M12x25)
Steel, zinc plated	Φ50x1.5	2.421.JHA.ACC	2.421.JHA.ADC	
	Φ50x2.0	○	○	
	Φ60x2.0	2.421.JOA.ACC	2.421.JOA.ADC	
Steel, zinc plated with steel flange	Φ80x3.0			2.421.J6A.AEC
	Φ80x3.0			2.421.J6G.AEC
Stainless steel	Φ50x1.5	2.421.NHC.BCC	2.421.NHC.BDC	
	Φ60x2.0	2.421.NOC.BCC	2.421.NOC.BDC	

○—Available configuration



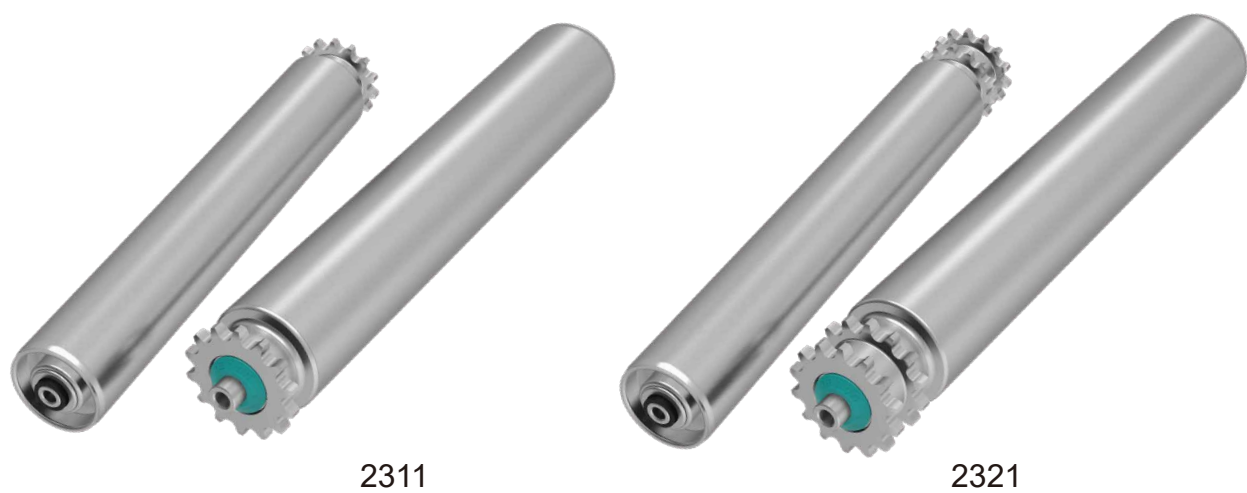
Φ50、60 rollers can be fitted with PVC sleeve (2mm)

Φ50 rollers can be fitted with PU sleeve (2mm/3mm).

PVC/PU sleeve is not anti-static.

If steel pallets are transported, the risk of wear on roller surface is higher, please contact us in advance.

2311/2321 Series Driven Conveyor Roller



2311/2321 Series

Steel Single/Double Sprocket Roller

Product Features

- Welding the steel sprocket to the steel tube gives it the capacity to transmit high torque and meet the requirements for heavy duty transportation.
- The precision ball bearing is pressed tightly into the steel bearing housing for maximum durability.
- The environmental working conditions are broad. They can be used in both high and low temperature applications.
- Anti-static design.
- The covering on the outside of the sprocket protects the bearings by providing excellent resistance to dust and splashed water.
- Temperature range: -5°C ~ +40°C,Remove the end cap (green) and retaining ring (black), the temperature can reach -30°C ~ +80°C.

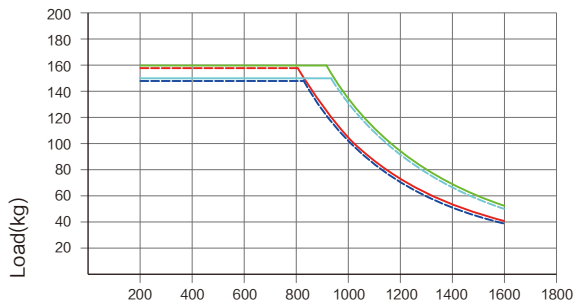
Specifications

Bearing Unit	
Bearing housing	Steel, zinc plated
Precision ball bearing	6001/6002/6202/6204
Ground sleeve	Polyamide, black

Driving element	
Sprocket	Steel, zinc plated
	Steel black (when the tube is stainless steel or hard chrome plated)

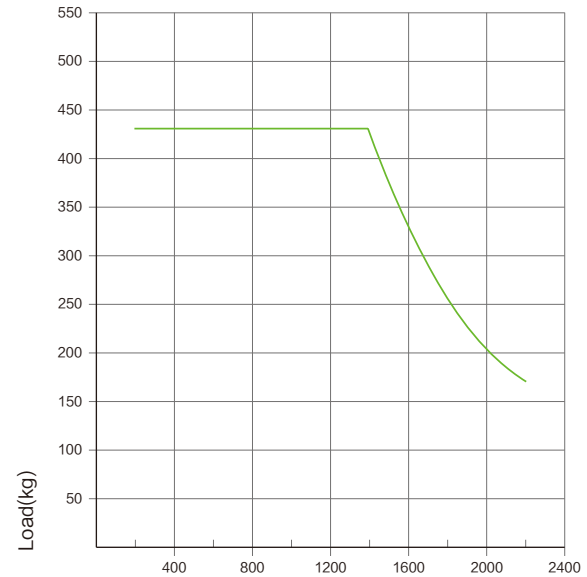


2311/2321 Series Load Capacity



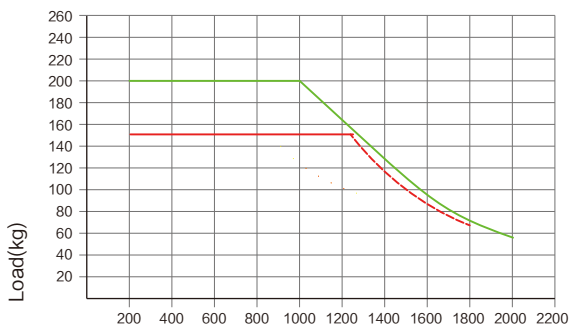
Length(mm)

- Steel tube $\Phi 50 \times 2.0$, shaft $\Phi 15$, internal thread
- Steel tube $\Phi 50 \times 1.5$, shaft $\Phi 15$, internal thread
- Steel tube $\Phi 50 \times 2.0$, shaft $\Phi 12$, internal thread
- Steel tube $\Phi 50 \times 1.5$, shaft $\Phi 12$, internal thread



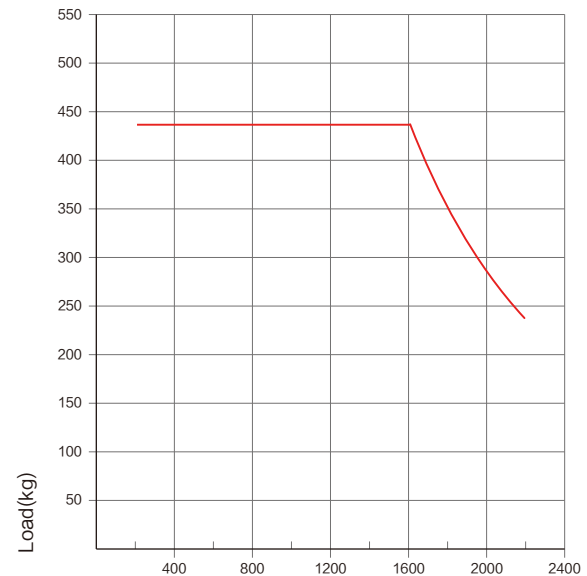
Length(mm)

- Steel tube $\Phi 80 \times 3.0$, shaft $\Phi 20$, internal thread



Length(mm)

- Steel tube $\Phi 60 \times 2.0$, shaft $\Phi 15$, internal thread
- Steel tube $\Phi 60 \times 2.0$, shaft $\Phi 12$, internal thread



Length(mm)

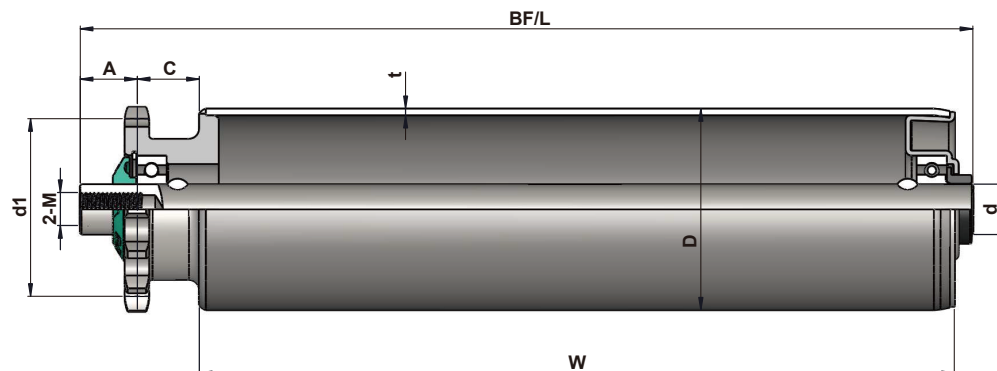
- Steel tube $\Phi 89 \times 3.0$, shaft $\Phi 20$, internal thread



Above data shows the static load capacity of the roller for a uniformly distributed load.

You should also consider the chain tension, motor power drive factors, calculation based on the smallest value.

2311/2321 Series Driven Conveyor Roller



2311 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Spocket style	A	C	d1
Φ50	Φ12	BF/L=W+40	08B11T	17	18.5	Φ45.08
Φ50	Φ15	BF/L=W+41	08B14T	17	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07
Φ80	Φ20	BF/L=W+44	10B15T	20	18.5	Φ76.35
Φ89	Φ20	BF/L=W+44	10B15T	20	18.5	Φ76.35

Tube	D*T	Shaft Dia.(d)		
		Φ12 (M8x15)	Φ15 (M10x20)	Φ20 (M12x25)
Steel, zinc plated	Φ50x1.5	2.311.JHA.ACC	○	
	Φ50x2.0	2.311.JWA.ACC	○	
	Φ60x2.0	2.311.JOA.ACC	2.311.JOA.ADC	
	Φ60x3.0		2.311.JLA.ADC	
	Φ80x3.0			2.311.J6A.AEC
	Φ89x3.0			2.311.JYA.AEC
Steel, zinc plated with steel flange	Φ60x3.0		2.311.JLG.ADC	
	Φ80x3.0			2.311.J6G.AEC
	Φ89x3.0			2.311.JYG.AEC
Stainless steel	Φ50x1.5	2.311.NHC.BCC	○	
	Φ60x2.0	2.311.NOC.BCC	2.311.NOC.BDC	

○—Available configuration

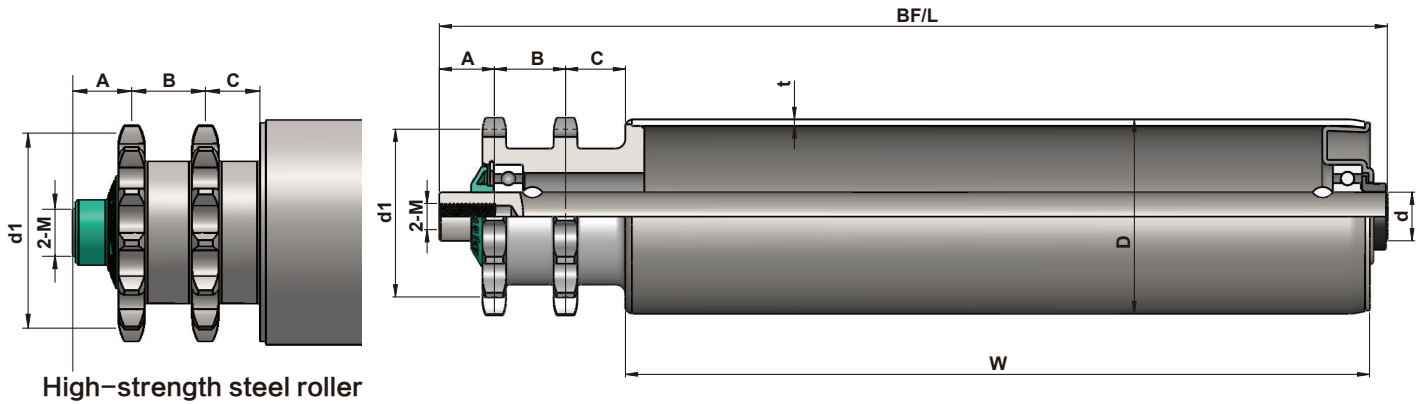


Φ50、60 rollers can be fitted with PVC sleeve (2mm)

Φ50 rollers can be fitted with PU sleeve (2mm/3mm).

PVC/PU sleeve is not anti-static.

If steel pallets are transported, the risk of wear on roller surface is higher, please contact us in advance.



High-strength steel roller

2321 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Spocket style	A	B	C	d1
Φ50	Φ12	BF/L=W+62	08B11T	17	22	18.5	Φ45.08
Φ50	Φ15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07
Φ80	Φ20	BF/L=W+69	10B15T	20	25	18.5	Φ76.35
Φ89	Φ20	BF/L=W+69	10B15T	20	25	18.5	Φ76.35

Tube	D*T	Shaft Dia.(d)		
		Φ12 (M8x15)	Φ15 (M10x20)	Φ20 (M12x25)
Steel, zinc plated	Φ50x1.5	2.321.JHA.ACC	○	
	Φ50x2.0	2.321.JWA.ACC	○	
	Φ60x2.0	2.321.JOA.ACC	2.321.JOA.ADC	
	Φ60x3.0		2.321.JLA.ADC	
	Φ80x3.0			2.321.J6A.AEC
	Φ89x3.0			2.321.JYA.AEC
Steel, zinc plated with steel flange	Φ60x3.0		2.321.JLG.ADC	
	Φ80x3.0			2.321.J6G.AEC
	Φ89x3.0			2.321.JYG.AEC
Stainless steel	Φ50x1.5	2.321.NHC.BCC	○	
	Φ60x2.0	2.321.NOC.BCC	2.321.NOC.BDC	

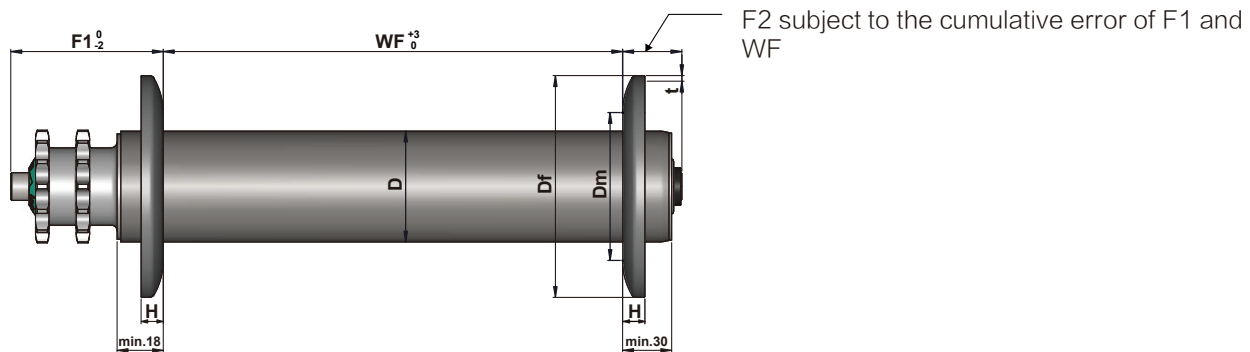
○—Available configuration

- Φ50、60 rollers can be fitted with PVC sleeve (2mm)
- Φ50 rollers can be fitted with PU sleeve (2mm/3mm).
- PVC/PU sleeve is not anti-static.

If steel pallets are transported, the risk of wear on roller surface is higher, please contact us in advance.

2311/2321 Series Driven Conveyor Roller

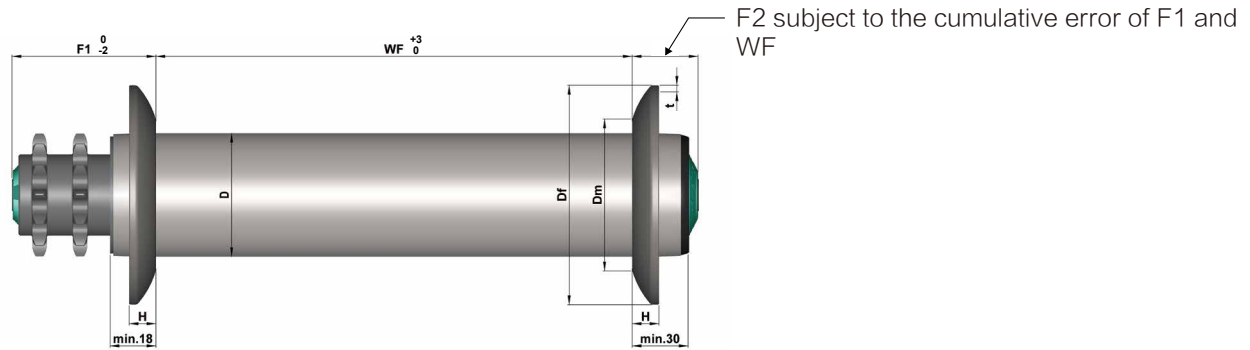
Steel Flange



Unit: mm				
D	Df	Dm	H	t
Φ60	Φ120	Φ80	12	3
Φ80	Φ150	Φ110	18	4
Φ89	Φ150	Φ110	18	4

- 1.Steel flange and tube are welded together making it strong and durable.
- 2.Steel tube only.

Stainless steel Flange(304)



Unit: mm				
D	Df	Dm	H	t
Φ60	Φ120	Φ80	12	3

- 1.Stainless Steel flange and tube are welded together making it strong and durable.
- 2.Stainless Steel tube only.





ACCUMULATION CONVEYING

Accumulation conveyors not only achieve the function of common drive conveyors but also allows goods to stop and accumulate on the conveyor line without stopping the conveyor drive and without any obvious increase to the driving resistance.

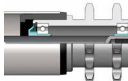
In normal conveying the accumulation device transmits the driving force. When goods stop and accumulate, the operating moment of resistance exceeds the definitive driving force. The accumulation friction sleeve slips

allowing the goods to stop the roller whilst the conveyor drive is still running. The accumulation force is determined by many factors. These factors have a large influence on the roller's operation and lifespan.

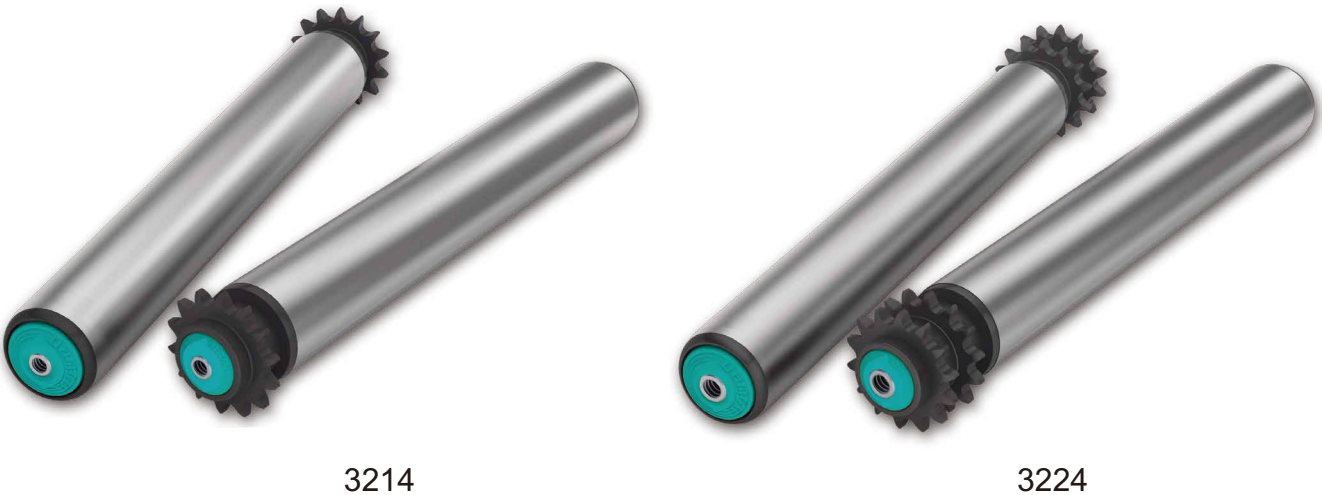
- 1.Product weight;
- 2.Friction factor between product and roller surface;
- 3.Temperature and humidity of environment;
- 4.Accumulation time;
- 5.Load position.



Rollers are listed according to their series and available features.

Product features	Series	Diameter	Driving Element	Page
Polymer sprocket, polyamide bearing housing, low running noise.	3214/3224	Φ50/60		68-69
Steel sprocket, polyamide bearing housing, attractive, durable.	3211/3221	Φ50/60		70-71
Steel sprocket, steel bearing housing, accumulation force is adjustable, suitable for medium duty accumulation.	3816/3826	Φ50/60		72-75

3214/3224 Series Accumulating Conveyor Roller



3214/3224 Series

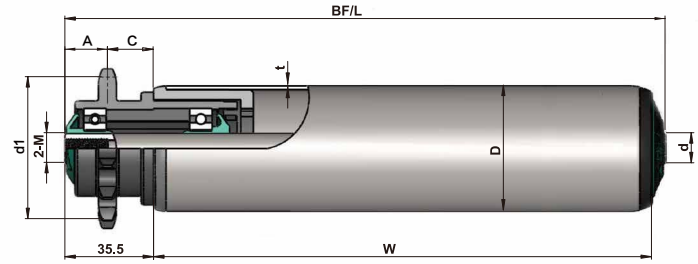
Polymer Single/Double Sprocket Accumulating Roller

Product Features

- With typical friction driven accumulation, the accumulation force is associated to duty capacity.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- Compared with steel sprockets, selecting the polyamide sprocket roller as the drive element greatly reduces the running noise.
- Standard configuration with anti-static design surface impedance $\leq 10^6 \Omega$.
- Temperature range: -5℃~ +40℃.
- Humidity range: 30%~ 90% RH (non-condensation).
Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002
Drive Element	
Sprocket	Polyamide, black

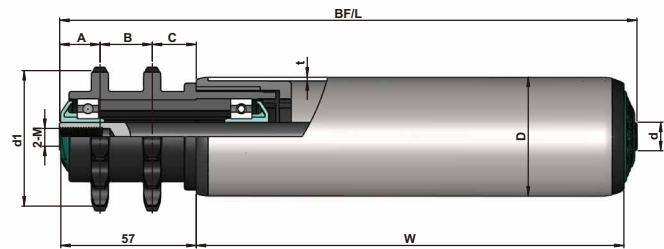


3214 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Sprocket Type	A	C	d1
Φ50	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	3.214.SHC.ACC	3.214.SHC.ADC
	Φ60x2.0	○	○
Stainless steel	Φ50x1.5	3.214.NHC.BCC	3.214.NHC.BDC
	Φ60x2.0	○	○
PVC	Φ50x2.5	3.214.P8C.BCC	3.214.P8C.BDC

○—Available configuration

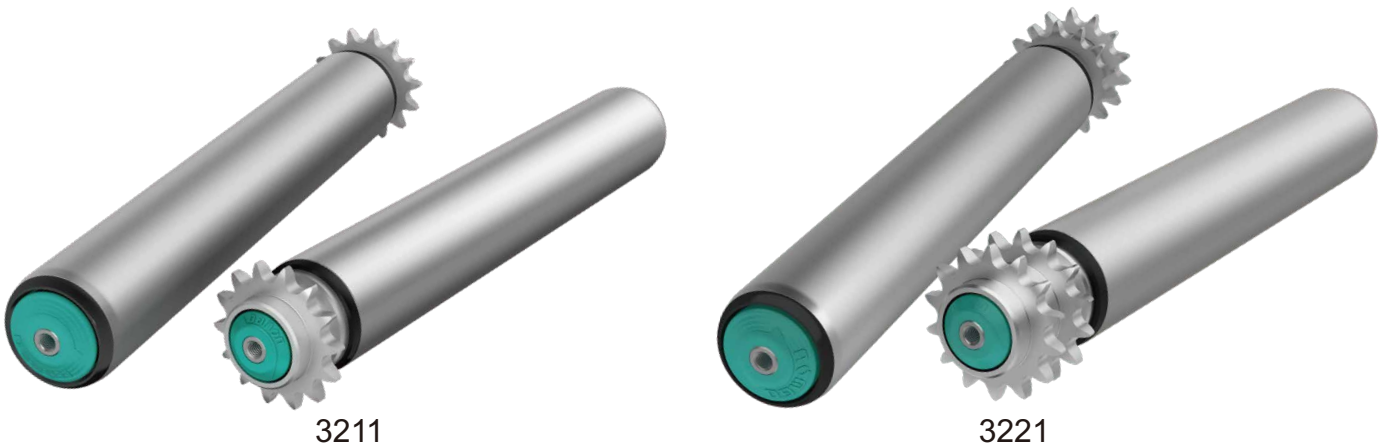


3224 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Sprocket Type	A	B	C	d1
Φ50	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	3.224.SHC.ACC	3.224.SHC.ADC
	Φ60x2.0	3.224.SOC.ACC	3.224.SOC.ADC
Stainless steel	Φ50x1.5	3.224.NHC.BCC	3.224.NHC.BDC
	Φ60x2.0	3.224.NOC.BCC	3.224.NOC.BDC
PVC	Φ50x2.5	3.224.P8C.BCC	3.224.P8C.BDC

3211/3221 Series Accumulating Conveyor Roller



3211/3221 Series

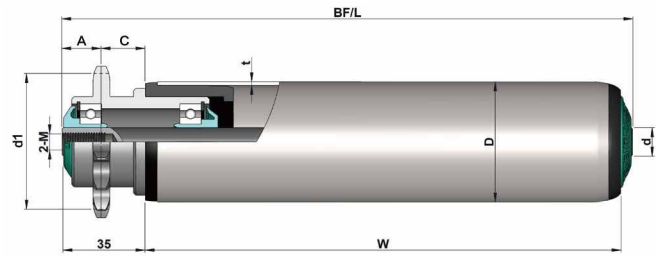
Steel Single/Double Sprocket Accumulating Roller

Product Features

- With typical friction driven accumulation, the accumulation force is associated to duty capacity.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- Utilizes durable, steel sprockets.
- Standard configuration with anti-static design surface impedance $\leq 10^6 \Omega$.
- Temperature range: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$.
- Humidity range: 30%~ 90% RH (non-condensation).
Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002
Drive Element	
Sprocket	Steel

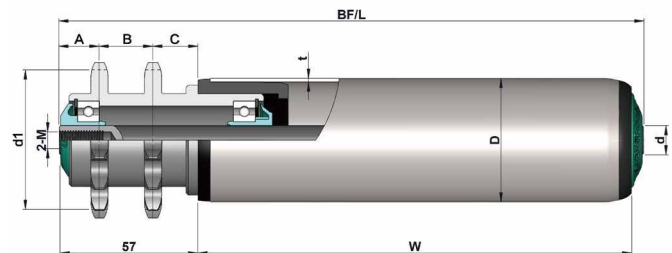


3211 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Sprocket Type	A	C	d1
Φ50	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+41	08B14T	17	18.5	Φ57.07

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	3.211.SH.C.ACC	3.211.SH.C.ADC
	Φ60x2.0	○	○
Stainless steel	Φ50x1.5	3.211.NH.C.BCC	3.211.NH.C.BDC
	Φ60x2.0	○	○

○—Available configuration

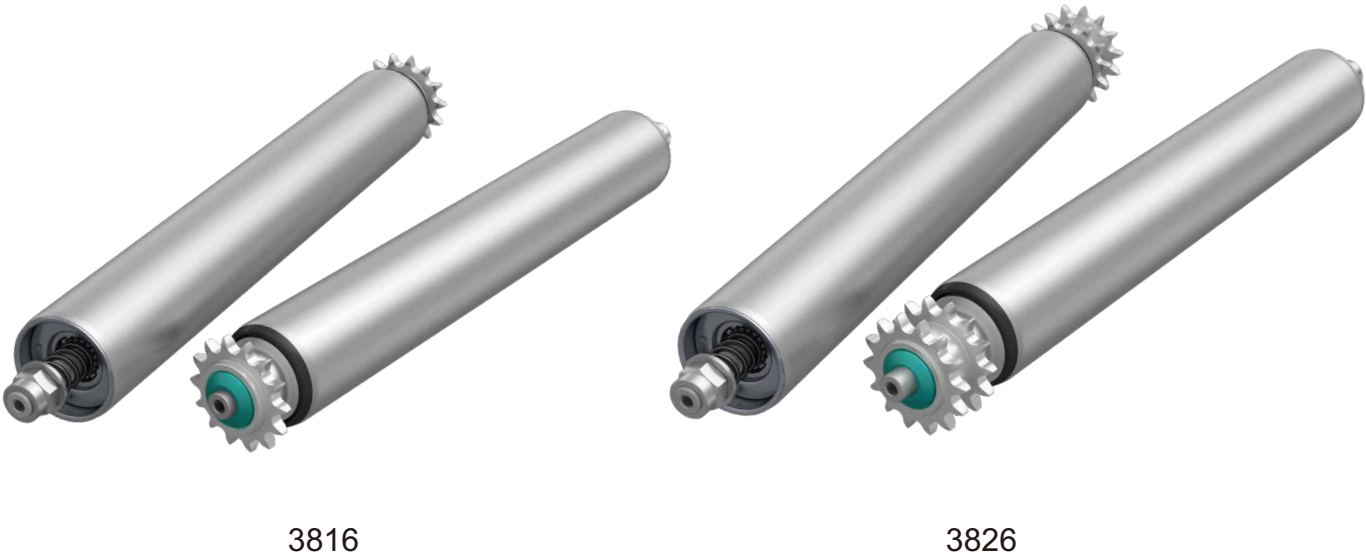


3221 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Sprocket Type	A	B	C	d1
Φ50	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07
Φ60	Φ12/15	BF/L=W+63	08B14T	17	22	18.5	Φ57.07

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x1.5	3.221.SH.C.ACC	3.221.SH.C.ADC
	Φ60x2.0	3.221.SOC.ACC	3.221.SOC.ADC
Stainless steel	Φ50x1.5	3.221.NH.C.BCC	3.221.NH.C.BDC
	Φ60x2.0	3.221.NOC.BCC	3.221.NOC.BDC

3816/3826 Series Accumulating Conveyor Roller



3816/3826 Series

Steel Single/Double

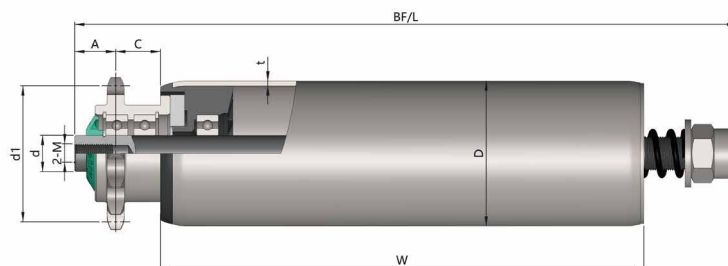
Adjustable Accumulating Roller

Product Features

- The accumulation force can be adjusted with high flexibility by the nut at the end of the roller.
- The precision ball bearing is pressed tightly into the steel bearing housing for maximum durability.
- The friction housing is made of special material which greatly improves its abrasion resistance and lifespan.
- Temperature range: -5℃ ~ +40℃.
- Humidity range: 30%~ 90% RH (non-condensation).
Please contact us if humidity out of this scope.

Specifications

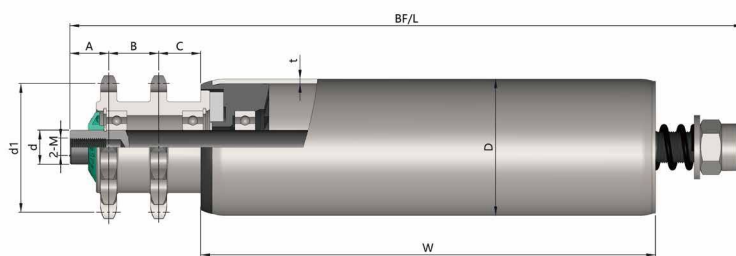
Bearing Unit	
Bearing housing	Polyamide/zinc plated
Precision ball bearing	6001/6002
Drive Element	
Sprocket	Steel



3816 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Sprocket Type	A	C	d1
Φ50	Φ12	BF/L=W+70	08B11T	17	18.5	Φ45.08
Φ60	Φ15	BF/L=W+70	08B14T	17	18.5	Φ57.07

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M8x15)
Steel, zinc plated	Φ50x1.5	3.816.SHC.ACC	
	Φ60x2.0		3.816.SOC.ADC
Stainless steel	Φ50x1.5	3.816.NHC.BCC	
	Φ60x2.0		3.816.NOC.BDC



3826 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)		Sprocket Type	A	B	C	d1
Φ50	Φ12	BF/L=W+92	08B11T	17	22	18.5	Φ45.08
Φ60	Φ15	BF/L=W+92	08B14T	17	22	18.5	Φ57.07

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M8x15)
Steel, zinc plated	Φ50x1.5	3.826.SHC.ACC	
	Φ60x2.0		3.826.SOC.ADC
Stainless steel	Φ50x1.5	3.826.NHC.BCC	
	Φ60x2.0		3.826.NOC.BDC

3816/3826 Series Accumulating Conveyor Roller

Duty Capacity Table of Accumulating Roller

3214/3224 Series Polymer Single/Double Sprocket Accumulating Roller

⚠ Duty capacity/ pc (No resistance from guardrail)

Roller material Conveying goods material	Steel tube	Rubber lagging
paper	3~20kg	2~15kg
plastic	5~25kg	2~20kg

3211/3221 Series Steel Single/Double Sprocket Accumulating Roller

⚠ Duty capacity/ pc (No resistance from guardrail)

Roller material Conveying goods material	Steel tube	Rubber lagging
paper	3~15kg	2~15kg
plastic	5~20kg	

3816/3826 Series Steel Single/Double Adjustable Accumulating Roller

⚠ Duty capacity/ pc (No resistance from guardrail)

Roller material Conveying goods material	Φ 50x1.5	Φ 60x2.0
plastic	0~55kg	0~70kg
wood		
paper	0~40kg	

Please contact us if out of above range.

Note: All duty capacity mentioned is in the status of free of guardrail resistance or roller guardrail.

⚠ Please pay attention to the effective driving force when using the accumulating roller.

It is suggested to adopt the roller guardrail to minimize the frictional resistance between the conveyed object and the guardrail.

In case of special conveyed objects or absence of experience in using it, please test the prototype first.





CURVE CONVEYING

The different diameters over the length the tapered roller i.e. small one end and large the other end, provides a linear velocity to ensure smooth conveying of goods around the curve.

The roller axis is installed at a defined angle $\theta/2$ ($\theta = 3.6^\circ$).

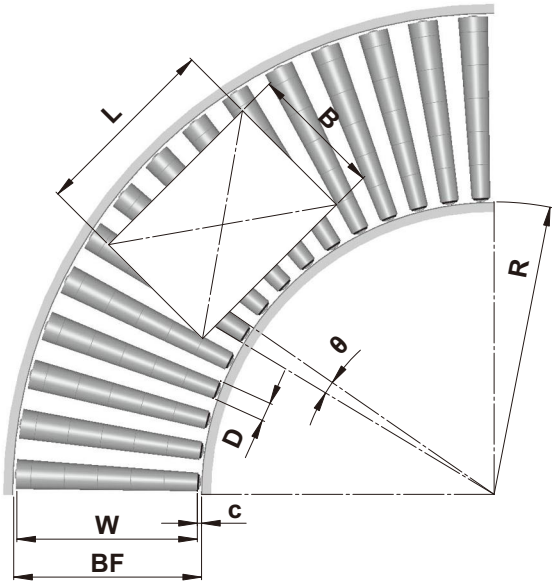




Rollers are listed according to their series and available features.

Product features	Series	Small head diameter	Driving element	Page
Tapered sleeve, attractive, low noise.	1600	Φ52.5/55.6		76-79
Tapered sleeve, O-Belt drive, light duty conveying, groove position customized.	2640	Φ52.5/55.6		80-82
Tapered sleeve, O-belt drive, light duty conveying, smooth running.	2660	Φ52.5/55.6		83-85
Tapered sleeve, poly-vee drive, Medium duty conveying, high speed, low noise.	2650	Φ52.5/55.6		86-88
Tapered sleeve, polymer sprocket, medium duty conveying, attractive, low noise.	2624	Φ52.5/55.6		89-90
All-steel tapered tube, sturdy and durable.	1500	Φ50		91-92
Steel sprocket welded steel conical cylinder, suitable for medium load conveying, sturdy and durable.	2521	Φ50		93-95

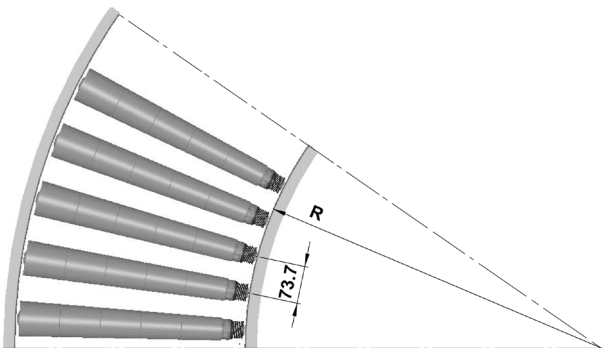
1600 Series Curve Conveyor Roller



Roller Pitch

The design of roller pitch should follow the principle of “minimum 3 rollers to support the goods at any moment” (refer to P03)

For poly-vee tapered rollers the recommended pitch of poly-vee pulleys is 73.7mm.



Turn Radius

In theory, the geometric extension line of the tapered roller should join with the centre of the radius of the curve frame. By using this method, you can achieve the ideal curve for conveying. It may be calculated using the formula below:

$$R=\frac{D}{K}-c$$

In the formula :

R — turn (inner) radius

D — diameter of the smaller head of the taper roller

K — conical degree (the conical degree is expressed by fraction, eg. 1/16, 1/30, it's reduction formula is $K=2*\tan \theta /2$

c — the space between the tapered roller's smaller head and the inner side of the frame.

Series	Taper	Small dia.(D)	Curve radius(R)
1600	3.6°	52.5	830
2624		55.6	880
2650	3.6°	52.5	800
2660		55.6	850
2640	3.6°	52.5	760
		55.6	810
1500	3.6°	50	790
2521			

Calculating Roller Length

For straight conveying, generally there is no need to consider the length of the goods but for curved conveying, the length and width of goods and the curve radius are all influencing factors. It may be calculated using the formula below:

$$BF=\sqrt{(R+B)^2+(L/2)^2}-R+(\min.125)$$

In the formula:

BF — frame inner width

R — turn (inner) radius

B — width of goods

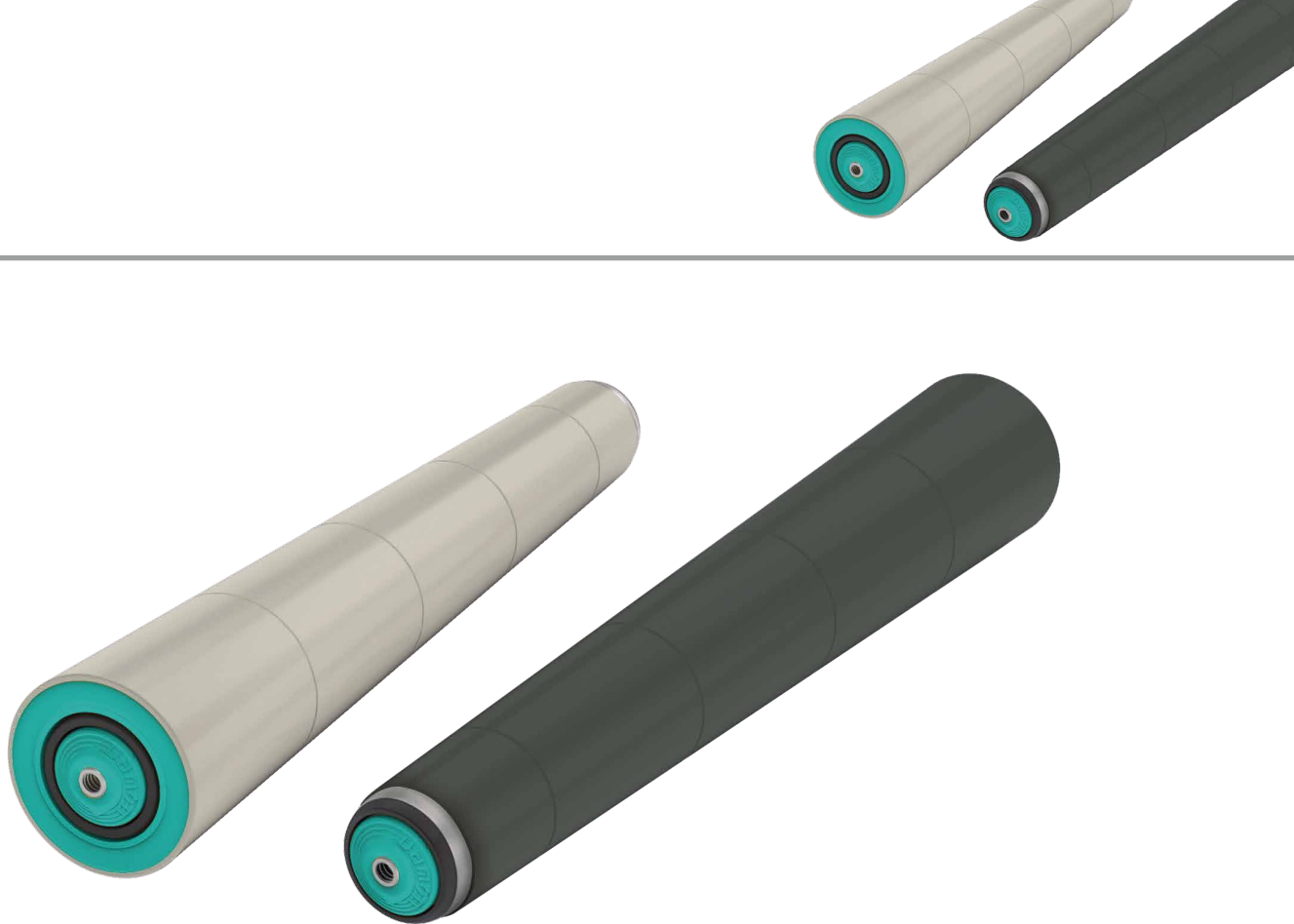
L — length of goods

After confirming BF, you can calculate the roller length W and taper sleeve length WT by the available series of tapered roller. The tapered sleeve is the working surface of the tapered roller. The tapered sleeve length WT is available in increments of 50mm. Adjust the calculation result based on the formula.

E.g.: Wit=628, WT=595

Wit=561, WT=545

⚠ Based on the width of goods, the calculated roller length for a curve is longer than that for a straight conveyor. Typically, the length of the roller for the curve would be used as the default roller length for the entire conveyor system. Where it is not convenient to utilize a uniform roller length, a transitional straight conveyor will need to be installed.



1600 Series

Gravity Tapered Sleeve Roller

Product Features

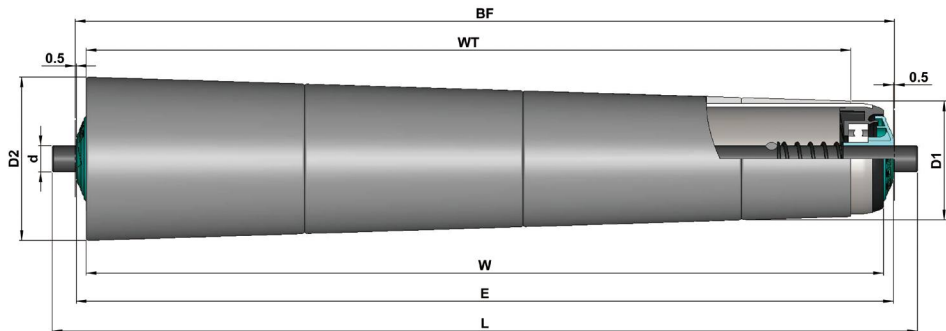
- Based on the 1200 Series, fitted with a grey polypropylene taper sleeve; abrasion resistant, low noise, shockproof.
- In the case of sensitive to static electricity, you can choose anti-static tapered sleeve (black), surface resistance value $\leq 10^6 \Omega$.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- The roller is light, easy to start-up.
- The weight of single items to be conveyed should not exceed 50kg.
- Temperature range: $-5^{\circ}\text{C} \sim 40^{\circ}\text{C}$.
- Humidity range: 30%~ 90% RH (non-condensation).

Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002

1600 Series Curve Conveyor Roller

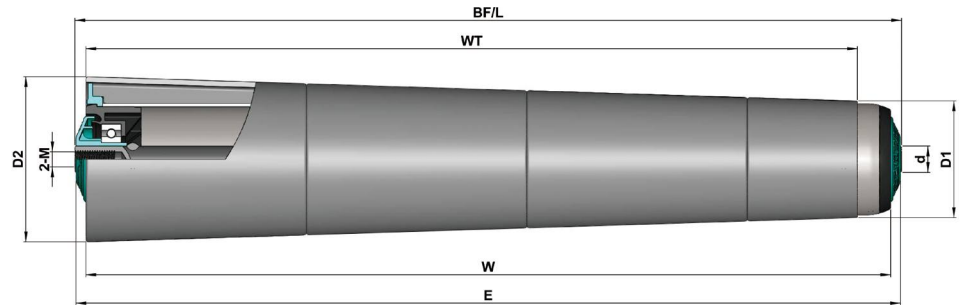


1600 Series Spring Loaded

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/11hex	BF=W+10	E=W+9	L=W+31

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					11hex	Φ12
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	1.600.SHJ.BFA	1.600.SHJ.ACA
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
		545	Φ55.6	Φ89.9		
Steel, zinc plated, tapered sleeve (Static conductive version,black)		595	Φ52.5	Φ89.9	1.600.SHK.BFA	1.600.SHK.ACA
		645	Φ55.6	Φ96.2		
		695	Φ52.5	Φ96.2		
		745	Φ55.6	Φ102.5		
		795	Φ52.5	Φ102.5		
		845	Φ55.6	Φ108.8		
	895	Φ52.5	Φ108.8			

⚙ The taper sleeve length dimension (WT) is not accurate.



1600 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/15	BF=W+10	E=W+9	L=W+10

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	1.600.SHJ.ACC	1.600.SHJ.ADC
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
		545	Φ55.6	Φ89.9		
Steel, zinc plated, tapered sleeve (Static conductive version,black)		595	Φ52.5	Φ89.9	1.600.SHK.ACC	1.600.SHK.ADC
		645	Φ55.6	Φ96.2		
		695	Φ52.5	Φ96.2		
		745	Φ55.6	Φ102.5		
		795	Φ52.5	Φ102.5		
		845	Φ55.6	Φ108.8		
	895	Φ52.5	Φ108.8			

⚙ The taper sleeve length dimension (WT) is not accurate.

2640 Series Curve Conveyor Roller



2640 Series

Double Grooved Tapered Sleeve Roller

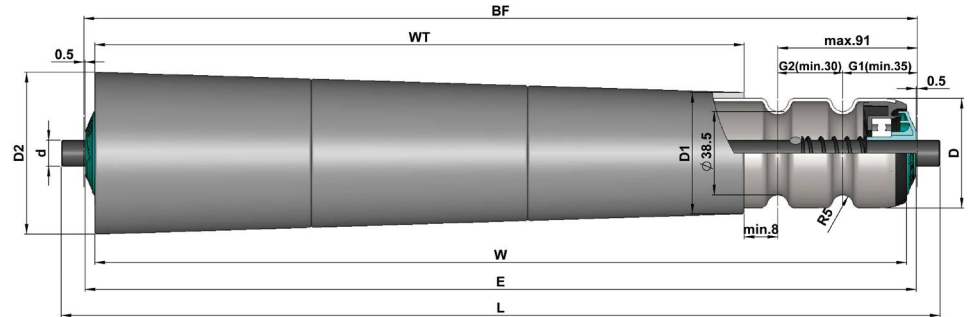
Product Features

- Based on the 2240 Series, cover ed with grey polypropylene taper sleeve; abrasion resistant, low noise, shockproof.
- In the case of sensitive to static electricity, you can choose anti-static tapered sleeve (black), surface resistance value $\leq 10^6\Omega$.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- The roller is light, easy to start-up.
- The position of the grooves can be customized.
- The duty capacity of the roller depends on the drive capacity of the O-belt. The weight of single items to be conveyed should not exceed 30kg.
- Temperature range: -5℃ ~ 40℃.
- Humidity range: 30%~ 90% RH (non-condensation).

Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002



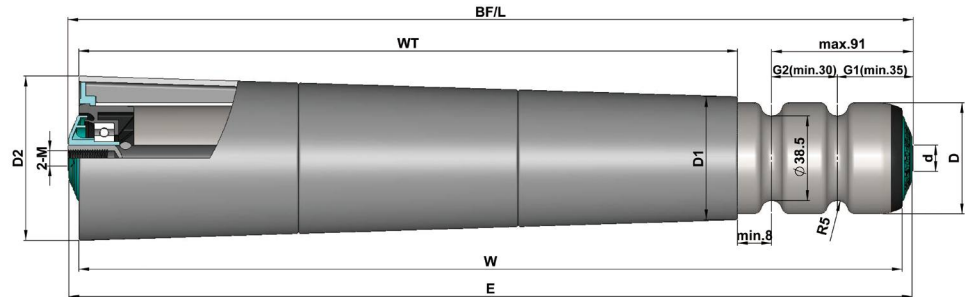
2640 Series Spring Loaded

Tube Dia.(D)	Shaft Dia.(d)				G1	G2
Φ50	Φ12/11hex	BF=W+10	E=W+9	L=W+31	35	30

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					11hex	Φ12
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	2.640.SHJ.BFA	2.640.SHJ.ACA
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
545		Φ55.6	Φ89.9	2.640.SHK.BFA	2.640.SHK.ACA	
595		Φ52.5	Φ89.9			
645		Φ55.6	Φ96.2			
695		Φ52.5	Φ96.2			
745		Φ55.6	Φ102.5			
795		Φ52.5	Φ102.5			
Steel, zinc plated, tapered sleeve (Static conductive version,black)	845	Φ55.6	Φ108.8			
	895	Φ52.5	Φ108.8			

⚙ The taper sleeve length dimension (WT) is not accurate.

2640 Series Curve Conveyor Roller

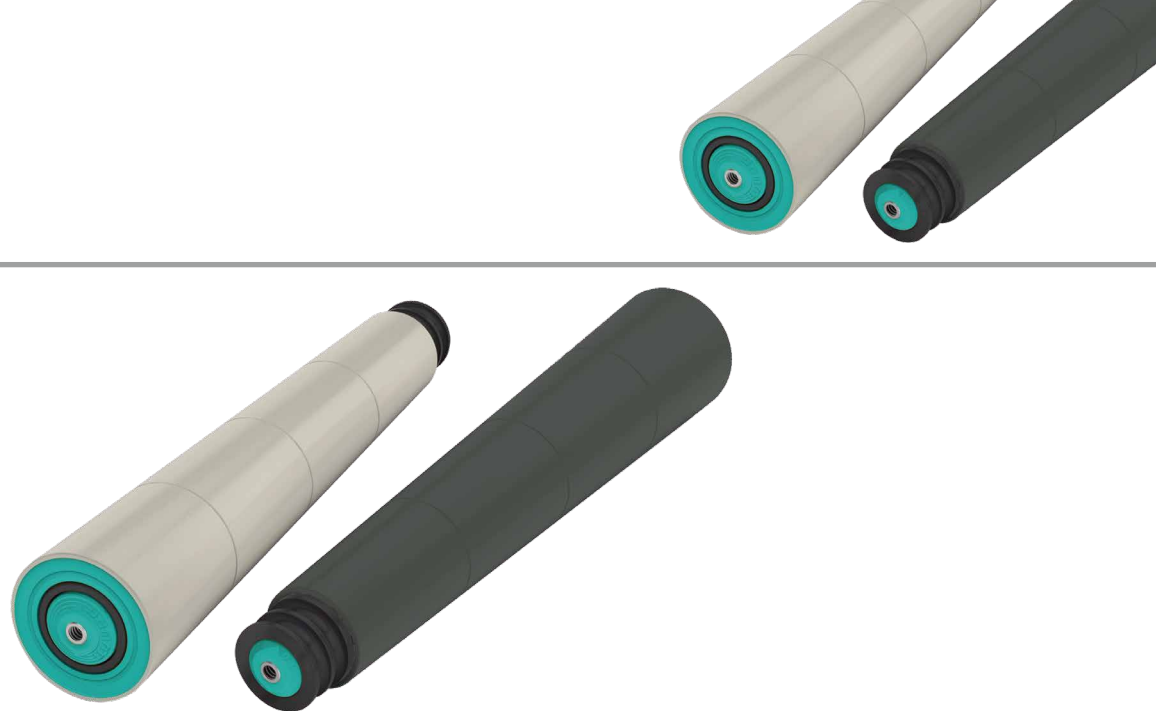


2640 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)				G1	G2
Φ50	Φ12/15	BF=W+10	E=W+9	L=W+10	35	30

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	2.640.SHJ.ACC	2.640.SHJ.ADC
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
545		Φ55.6	Φ89.9	2.640.SHK.ACC	2.640.SHK.ADC	
595		Φ52.5	Φ89.9			
645		Φ55.6	Φ96.2			
695		Φ52.5	Φ96.2			
745		Φ55.6	Φ102.5			
795		Φ52.5	Φ102.5			
Steel, zinc plated, tapered sleeve (Static conductive version,black)	845	Φ55.6	Φ108.8	2.640.SHK.ACC	2.640.SHK.ADC	
	895	Φ52.5	Φ108.8			

⚙ The taper sleeve length dimension (WT) is not accurate.



2660 Series

Double Groove O-Belt Pulley Tapered Sleeve Roller

Product Features

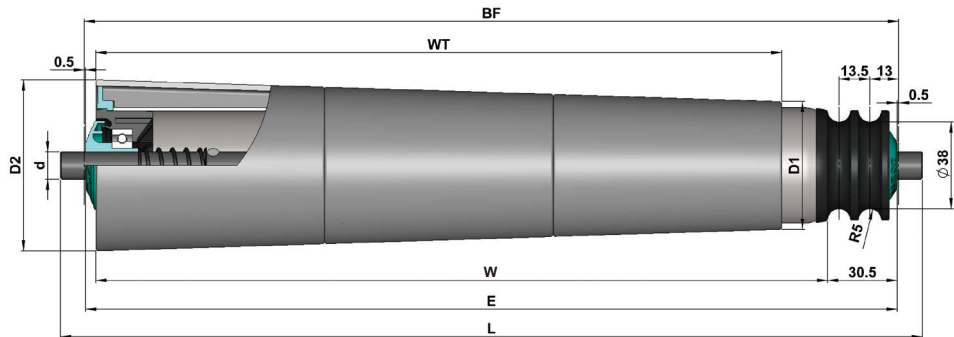
- Based on the 2260 Series, covered with grey polypropylene taper sleeve; abrasion resistant, low noise, shockproof.
- In the case of sensitive to static electricity, you can choose anti-static tapered sleeve (black), surface resistance value $\leq 10^6 \Omega$.
- The O-belt pulley is located on the head end of the roller which separates the drive area and the conveying area avoiding interference between the O-belt and the conveyed goods.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- Because there is no grooving on the tube, the tube will not have any distortion and the roller will run more smoothly.
- The duty capacity of the roller depends on the drive capacity of the O-belt. The weight of single items to be conveyed should not exceed 30kg.
- Temperature range: $-5^{\circ}\text{C} \sim 40^{\circ}\text{C}$.
- Humidity range: 30%~ 90% RH (non-condensation).

Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002
Drive Element	
O-belt pulley	Polyamide, black

2660 Series Curve Conveyor Roller



2660 Series

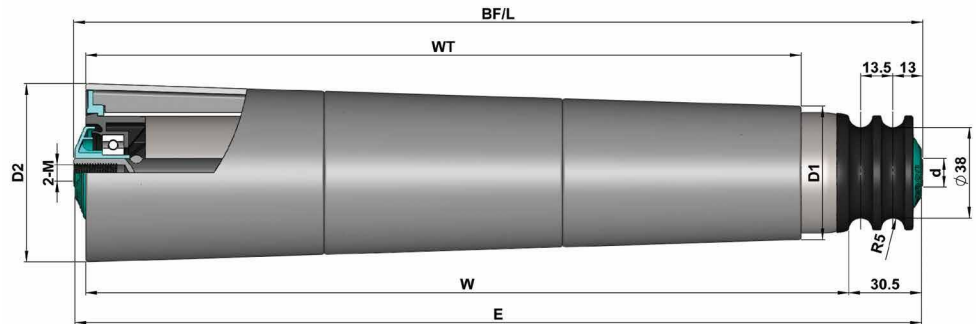
Spring Loaded

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/11hex	BF=W+36	E=W+35	L=W+57

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					11hex	Φ12
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	2.660.SHJ.BFA	2.660.SHJ.ACA
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
		545	Φ55.6	Φ89.9		
Steel, zinc plated, tapered sleeve (Static conductive version,black)		595	Φ52.5	Φ89.9	2.660.SHK.BFA	2.660.SHK.ACA
		645	Φ55.6	Φ96.2		
		695	Φ52.5	Φ96.2		
		745	Φ55.6	Φ102.5		
		795	Φ52.5	Φ102.5		
		845	Φ55.6	Φ108.8		
	895	Φ52.5	Φ108.8			



The taper sleeve length dimension (WT) is not accurate.



2660 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/15	BF=W+36	E=W+35	L=W+36

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	2.660.SHJ.ACC	2.660.SHJ.ADC
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
		545	Φ55.6	Φ89.9		
Steel, zinc plated, tapered sleeve (Static conductive version,black)		595	Φ52.5	Φ89.9	2.660.SHK.ACC	2.660.SHK.ADC
		645	Φ55.6	Φ96.2		
		695	Φ52.5	Φ96.2		
		745	Φ55.6	Φ102.5		
		795	Φ52.5	Φ102.5		
		845	Φ55.6	Φ108.8		
		895	Φ52.5	Φ108.8		

⚙ The taper sleeve length dimension (WT) is not accurate.

2650 Series Curve Conveyor Roller



2650 Series

Poly-Vee Tapered Sleeve Roller

Product Features

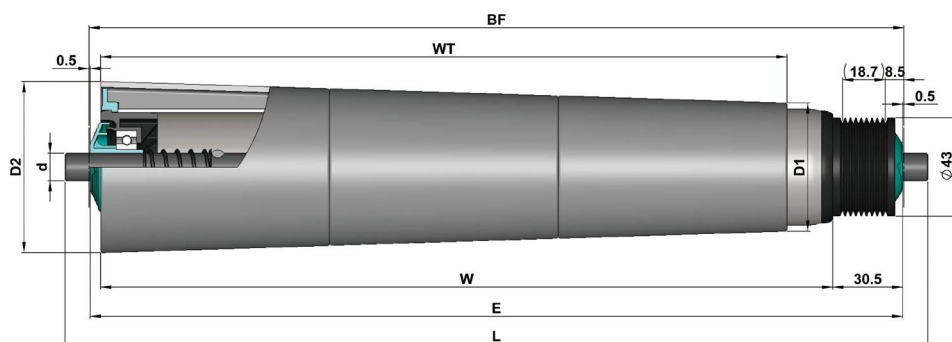
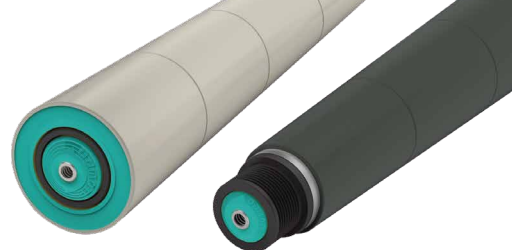
- Based on the 2250 Series, covered with grey polypropylene taper sleeve; abrasion resistant, low noise, shockproof.
 - In the case of sensitive to static electricity, you can choose anti-static tapered sleeve (black), surface resistance value $\leq 10^6 \Omega$.
 - The poly-vee pulley is located on the head end of the roller which separates the drive area and the conveying area avoiding interference between the poly-vee belt and the conveyed goods.
 - The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
 - The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
 - ISO9982 PJ series poly-vee. Total of 9 grooves at 2.34mm pitch.
 - The duty capacity of the roller depends on the type of poly-vee belt and transmission layout. The weight of single items to be conveyed should not exceed 50kg.
 - The roller is light, easy start-up.
 - Temperature range: $-5^{\circ}\text{C} \sim 40^{\circ}\text{C}$.
 - Humidity range: 30%~ 90% RH (non-condensation).
- Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002

Drive Element	
Poly-vee pulley	Polyamide, black

 Optional Poly-vee belt



2650 Series Spring Loaded

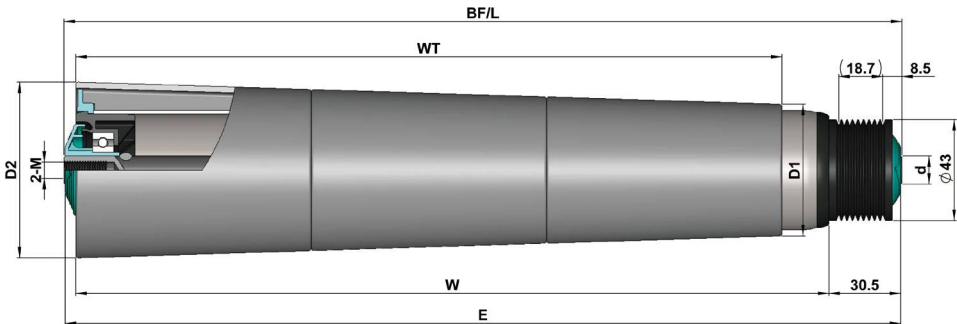
Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/11hex	BF=W+36	E=W+35	L=W+57

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					11hex	Φ12
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	2.650.SHJ.BFA	2.650.SHJ.ACA
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
		545	Φ55.6	Φ89.9		
Steel, zinc plated, tapered sleeve (Static conductive version,black)		595	Φ52.5	Φ89.9	2.650.SHK.BFA	2.650.SHK.ACA
		645	Φ55.6	Φ96.2		
		695	Φ52.5	Φ96.2		
		745	Φ55.6	Φ102.5		
		795	Φ52.5	Φ102.5		
		845	Φ55.6	Φ108.8		
	895	Φ52.5	Φ108.8			

⚙ The taper sleeve length dimension (WT) is not accurate.

⚠ Please choose the steel Poly-Vee roller when you must use 4PJ belt.

2650 Series Curve Conveyor Roller



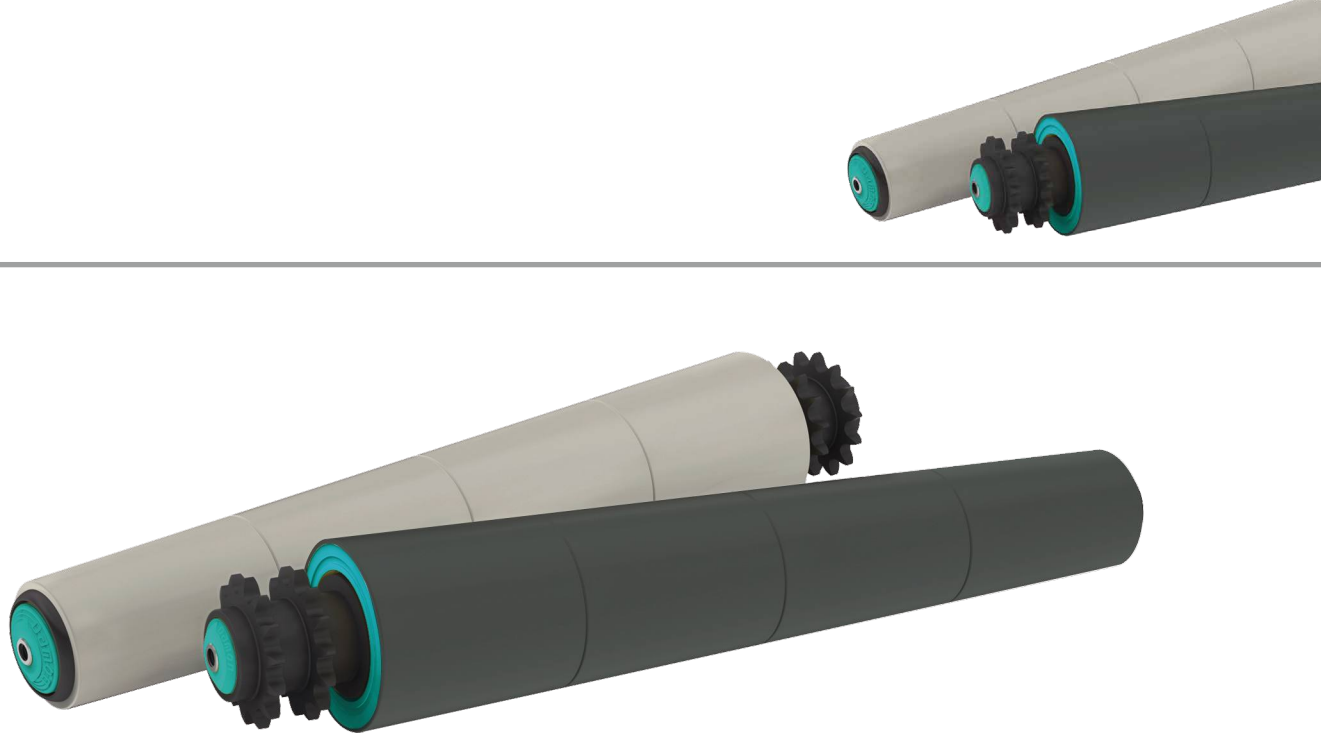
2650 Series Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/15	BF=W+36	E=W+35	L=W+36

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	2.650.SHJ.ACC	2.650.SHJ.ADC
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
		545	Φ55.6	Φ89.9		
Steel, zinc plated, tapered sleeve (Static conductive version,black)		595	Φ52.5	Φ89.9	2.650.SHK.ACC	2.650.SHK.ADC
		645	Φ55.6	Φ96.2		
		695	Φ52.5	Φ96.2		
		745	Φ55.6	Φ102.5		
		795	Φ52.5	Φ102.5		
		845	Φ55.6	Φ108.8		
	895	Φ52.5	Φ108.8			

The taper sleeve length dimension (WT) is not accurate.

Please choose the steel Poly-Vee roller when you must use 4PJ belt.



2624 Series

Polymer Sprocket Tapered Sleeve Roller

Product Features

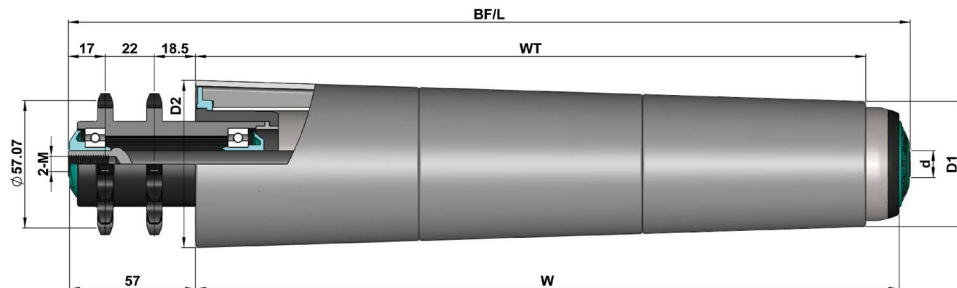
- Based on the 2224 Series, covered with grey polypropylene taper sleeve; abrasion resistant, low noise, shockproof.
- In the case of sensitive to static electricity, you can choose anti-static tapered sleeve (black), surface resistance value $\leq 10^6 \Omega$.
- Using the polyamide sprocket roller as the drive element reduces the running noise.
- The bearing end cap consists of a precision ball bearing, a polymer housing and end cap seal. Combined they provide an attractive, smooth and quite running roller.
- The design of the end cap protects the bearings by providing excellent resistance to dust and splashed water.
- To avoid abrasion between the sprocket and chain, the angle between tapered rollers should not exceed 5° .
- The weight of single items to be conveyed should not exceed 50kg.
- Temperature range: $-5^\circ\text{C} \sim 40^\circ\text{C}$.
- Humidity range: 30%~ 90% RH (non-condensation).

Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide, black
End cap	Polypropylene, Damon green
Precision ball bearing	6002
Drive Element	
Sprocket	Polyamide, black

2624 Series Curve Conveyor Roller

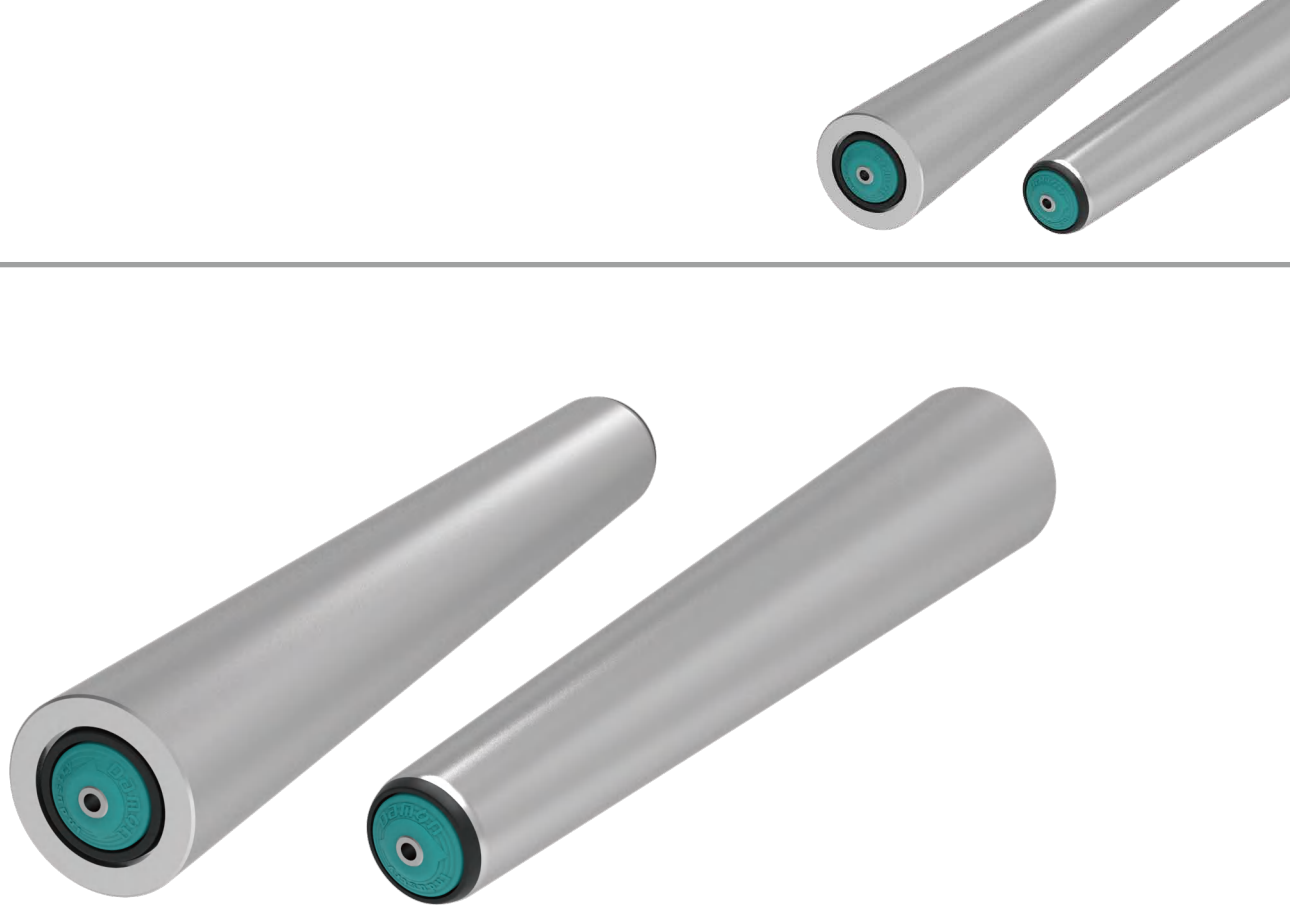


2624 Series Female Thread

Tube Dia.(D)	Shaft Dia.(d)			Sprocket type
Φ50	Φ12/15	BF=W+63	L=W+63	08B14T

Tube	D*T	WT	D1	D2	Shaft Dia.(d)	
					Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated, tapered sleeve	Φ50x1.5	295	Φ52.5	Φ71	2.624.SHJ.ACC	2.624.SHJ.ADC
		345	Φ55.6	Φ77.3		
		395	Φ52.5	Φ77.3		
		445	Φ55.6	Φ83.6		
		495	Φ52.5	Φ83.6		
		545	Φ55.6	Φ89.9		
Steel, zinc plated, tapered sleeve (Static conductive version,black)		595	Φ52.5	Φ89.9	2.624.SHK.ACC	2.624.SHK.ADC
		645	Φ55.6	Φ96.2		
		695	Φ52.5	Φ96.2		
		745	Φ55.6	Φ102.5		
		795	Φ52.5	Φ102.5		
		845	Φ55.6	Φ108.8		
	895	Φ52.5	Φ108.8			


The taper sleeve length dimension (WT) is not accurate.



1500 Series

Gravity Steel Tapered Roller

Products Features

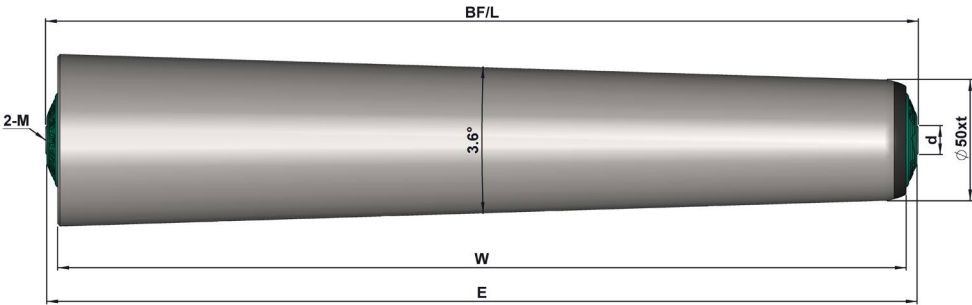
- All steel tube, more sturdy and durable.
- Precision ball bearings and polyamide bearing housing interior and outside design make up the key bearing assembly, which is not only beautiful, more importantly, the roller runs more quietly.
- The design of the polyamide end cap of the roller can prevent the damage of dust and splashing water to the bearing to a certain extent.
- Tube standard taper 3.6° (taper can be customized).
- Usually, the weight of the goods suitable for transportation is not more than 200kg.
- Temperature range: -5°C~+40°C.
- Humidity range: 30% ~ 90% RH (non-condensation).

Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide black
End cap	Polypropylene, Damon green
Precision ball bearing	6002

1500 Gravity steel tapered roller

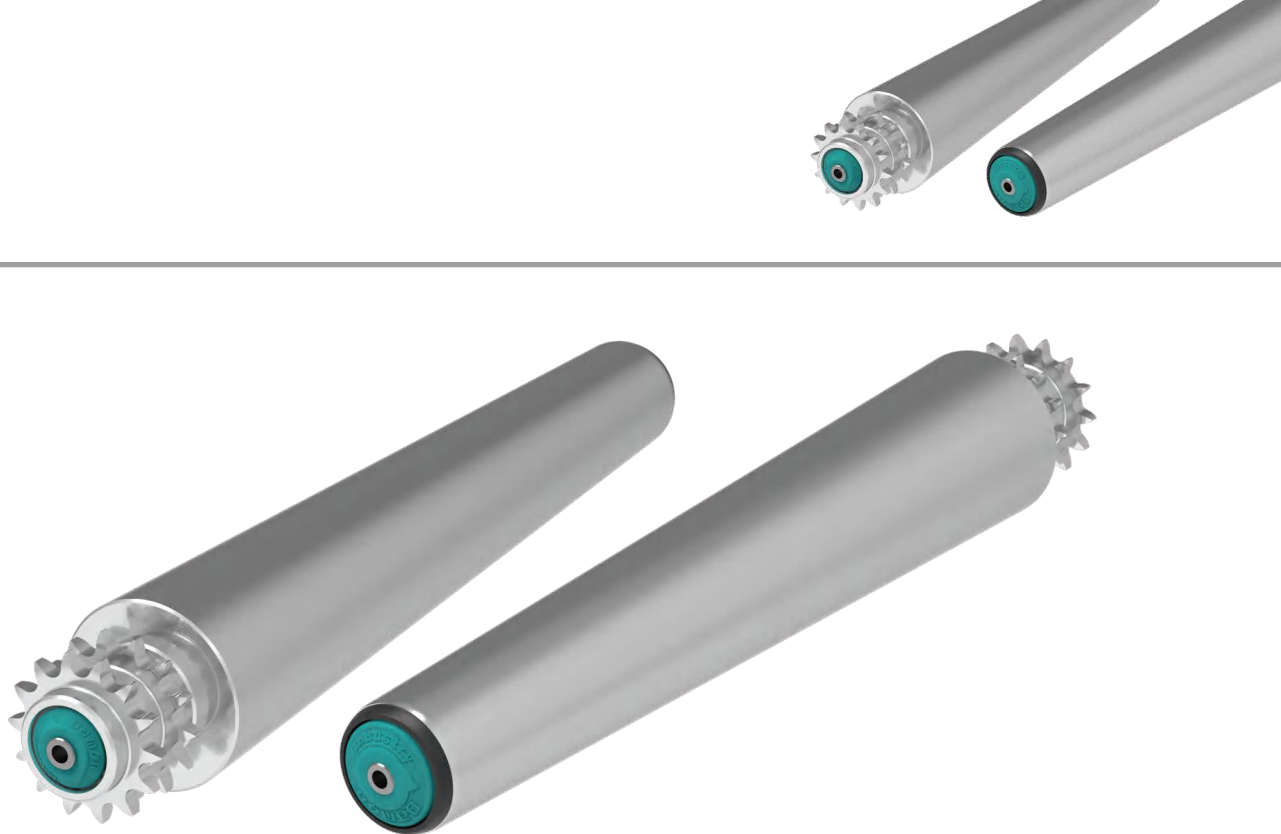


1500 Series
Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			
Φ50	Φ12/15	BF=W+10	E=W+9	L=W+10

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x2.0	1.500.JWB.ACC	1.500.JWB.ADC
SS		1.500.NWC.BCC	1.500.NWC.BCC

 If used in high and low temperature or special environment, please specify clearly.



2521 Series

Sprocket Steel Tapered Roller

Product Features

- All steel cylinder, more sturdy and durable.
- The steel sprocket is welded with the tube, so that it can deliver higher torque and meet the requirements of medium and heavy load transmission.
- The design of the polyamide end cap of the roller can prevent the damage of dust and splashing water to the bearing to a certain extent.
- Tube standard taper 3.6° (taper can be customized).
- In order to achieve more rational turning performance, sprocket tooth thickness is slightly smaller than the conventional.
- Usually, the weight of the goods suitable for transportation is not more than 200kg.
- Temperature range: -5°C~+40°C.
- Humidity range: 30%~ 90% RH (non-condensation).

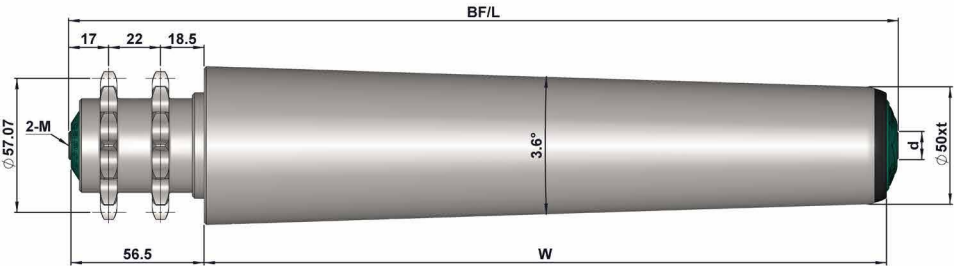
Please contact us if humidity out of this scope.

Specifications

Bearing Unit	
Bearing housing	Polyamide black
End cap	Polypropylene, Damon green
Precision ball bearing	6002

Drive Element	
Sprocket	Steel

2521 Sprocket steel steel tapered roller

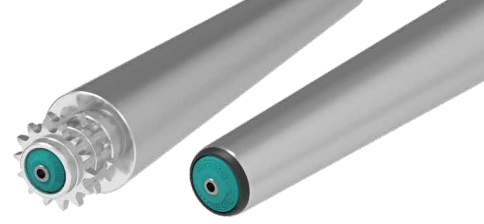


2521 Series
Internal Thread

Tube Dia.(D)	Shaft Dia.(d)			Sprocket type
Φ50	Φ12/15	BF=W+62	L=W+62	08B14T

Tube	D*T	Shaft Dia.(d)	
		Φ12 (M8x15)	Φ15 (M10x20)
Steel, zinc plated	Φ50x2.0	2.521.JWB.ACC	2.521.JWB.ADC
SS		2.521.NWC.BCC	2.521.NWC.BCC


If used in high and low temperature or special environment, please specify clearly.



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