

Belt Conveyor Pulley

Products Overview

www.damonroller.com

The version number: 202405V1 (1)



Damon
Industry
德马工业

Rolling Guaranteed

About Damon Industry



ONE OF THE GLOBAL LEADING MANUFACTURER OF CONVEYOR ROLLERS

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

Zhejiang Damon Industry Equipment Co. Ltd, since its establishment in 2004, has always been committed to providing the highest quality conveyor rollers and services for a wide range of industries.

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.

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 categories products covering a variety of specifications to suit customers' different requirements.

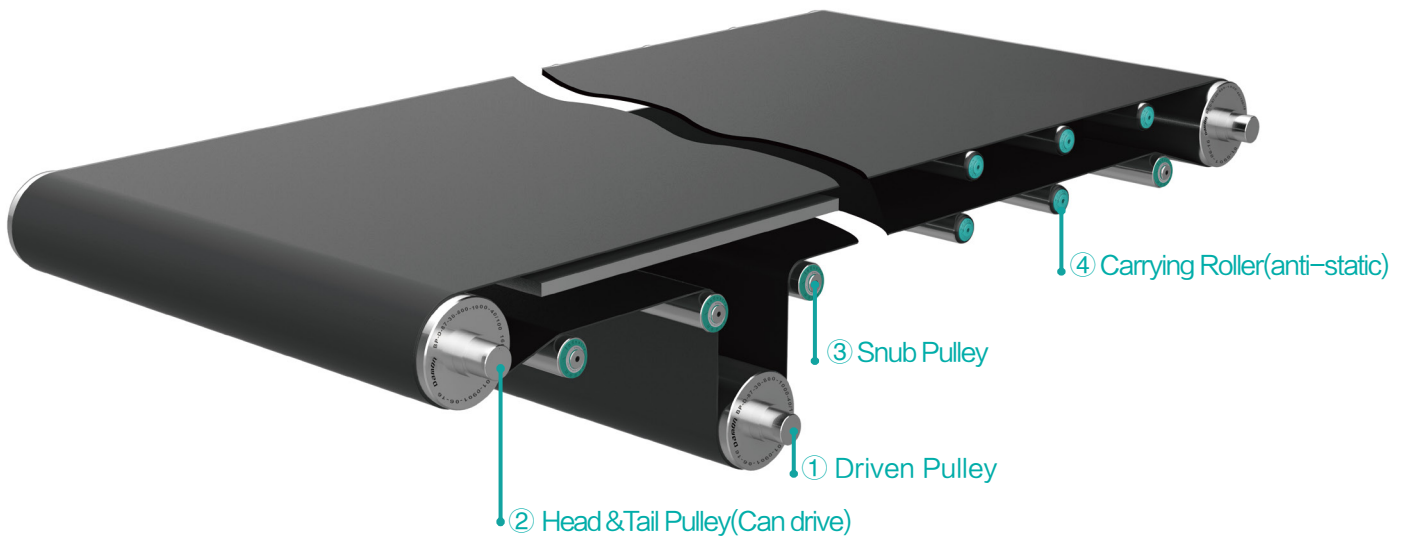
Damon Industry has manufacturing bases in Asia, Europe, America and Australia, and providing customers a wide range of services such as localized manufacturing, sales and service.

With a strong global presents, Damon Industry will continue to expand and pursue a deeper market share. From introduction of complete information based ERP management system to the independent research and development of the online roller drawing system and then launched 24 h online service, we are viewing our market from a brand new perspective and are willing to share our ideas of quality and innovation with every customer.

Damon Industry was awarded "The Most Innovative Brand" in the industry of Chinese logistics equipment. Damon Industry was also selected for the "Chinese Green Warehousing and Distribution Technology & Equipment" recommended directory. We will always focus on supplying outstanding conveyor roller solutions to local and global customers.

With the starting point of "creating competitiveness for customers' logistics systems", the company is moving towards the vision of "building Damon Industries into the most influential provider and service provider in the field of core components of global logistics equipment".

Belt Conveyor Pulley One Station Solution



Through high intensity welding and precise processing craft, Damon Industry devote itself to offer you standardized belt-conveyor roller series with high intensity and quality. We could provide you one-stop solution for belt conveyor rollers, including carrier, head to tail roller, driven roller and tension roller.

① Driven Pulley:

Main driving component for centre drive belt conveyors:

Select BP-D series pulley (rotating shaft).

② Head & Tail Pulley:

Installed at each end of a belt conveyor according to the different drive type and structure:

a、Centre drive:

Change the belt direction: Select BP-R series pulley (fixed shaft) or DP-D series pulley (rotating shaft)

b、Head or Tail drive:

Drive Pulley: Select BP-D series pulley (rotating shaft)

Idler Pulley: Select BP-R series pulley (fixed shaft) or BP-D series pulley (rotating shaft).

③ Snub Pulley:

Used to increase the belt wrap angle for the driven pulley, tension and tracking the belt.

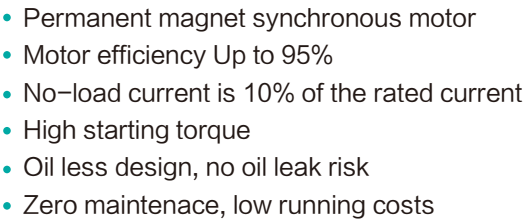
Select BP-R series pulley (fixed shaft) or 1200 series conveyor roller.

Be careful about the belt tensioning and siding force when using as redirection & tensioning.

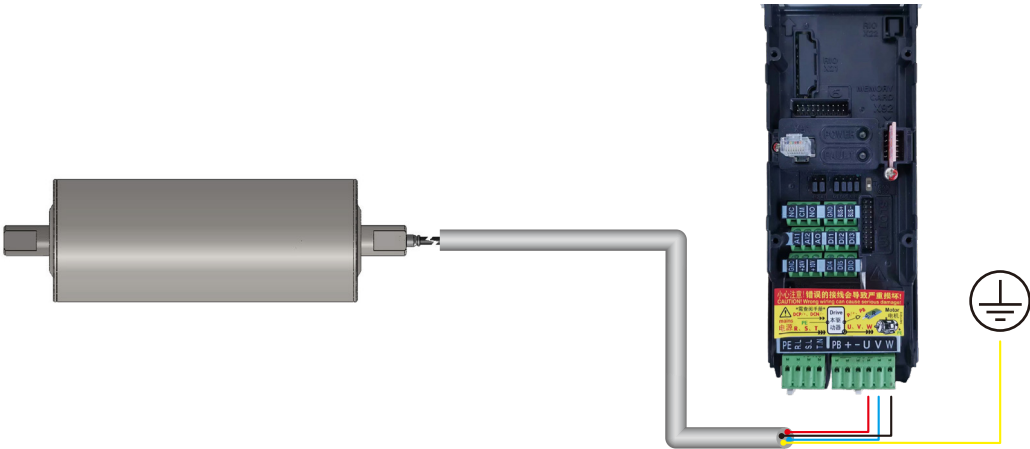
④ Carrying Roller:


Used to support the belt, simplify structure and reduce friction:

Select 1200 series conveyor roller.



Wiring Connection Diagram



 The Drum motor must be used in conjunction with a drive and should not be directly connected to a three-phase power supply. For more wiring details, please refer to the wiring instructions on the drive introduction page.

Model Example

DMR165 - A - SC - 25 60 - 1000 - SNS
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

① Basic Model: DMR

② Outer Diameter: 165: 165mm, 216: 216mm

③ Model Code: **A**: Standard Type

④ Type Of Motor: **S**: Permanent magnet synchronous motor

⑤ Voltage Level: **C**: 3X380VAC 50Hz

⑥ Power: **25**: 2.55kW

⑦ Maximum Speed: **60**: 60m/min

⑧ Length: Refer to the Dimensional Diagram (W)

⑨ Tube Material: **S**: Low carbon steel

⑩ Tube Surface: **N**: Standard: Z/P (Drum)

⑪ Cable Connector: **S**: M16 Straight Cylinder Interface (F)

Drum Motor



- Easy setting of direction, speed, acceleration, and deceleration
- Standard equipped with an assistant-type intelligent LCD keyboard
- Comprehensive protection functions including short circuit, phase loss, overload, overheat, etc.
- Detachable LCD keyboard for flexible and convenient external use
- Digital IO, bus communication (RS485, CANOPEN)
- And other control methods

Drive Technical Data

Rated Voltage	3X380VAC 50–60Hz
Rated Power	2.2kW
Rated Current	5.6A
Noise Level	40dB

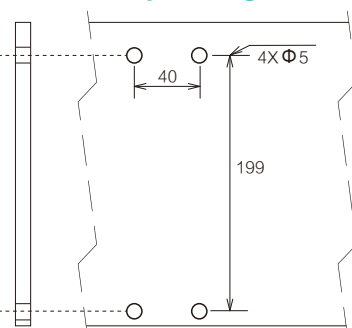
Drive Application Environment

Operating Temperature	–15~55℃
Relative Humidity	5~95%RH (non-condensation)
Vibration	Maximum 1mm (0.04in.) (5–13.2Hz), Maximum 7m/s ² (23ft/s ²) (13.2–100Hz) sinusoidal
Altitude	0–2000m (for TN, TT, IT grounding systems)
Installation Method	Thread Fixed Installation

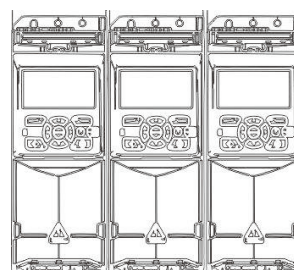
Dimensions



Electrical Mounting Board Opening Dimensions



Drive Installation Example



For optimal heat dissipation, side by side installation is preferred.

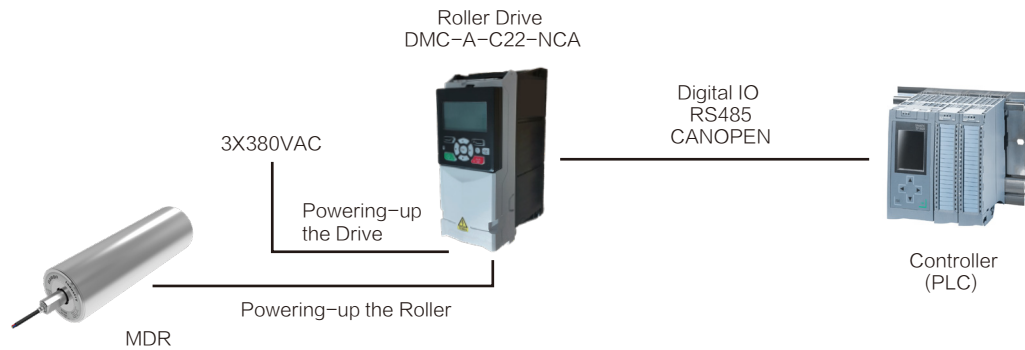
Product Model Example

DMC - A - C22 - N CA

① ② ③ ④ ⑤ ⑥

- ① Basic Model:DMC
- ② Model Code: **A** : Standard Type
- ③ Voltage Level: **C** : 3X380VAC 50Hz
- ④ Rated Power: **22** : 2.2kW
- ⑤ Braking Resistor: **N** : None
- ⑥ Bus Configuration: **CA** : CANOPEN **RS** : RS485

Examples



Wiring Instructions

①State Indicator

POWER	Power indicator
FAULT	Fault indicator

Ethernet port

③Digital IO

GND	Grounding
+24V	24VDC
+10V	10VDC
DI4	Digital input 4
DI5	Digital input 5
DI0	Digital input 0
AI1	Analog input 1
AI2	Analog input 2
AO	Analog output
DI1	Digital input 1
DI2	Digital input 2
DI3	Digital input 3

②Bus Interface: (RS485, CANOPEN)

GND	Bus grounding
BUS+	Bus+
BUS-	Bus-

④Incoming Power Line

PE	Grounding
R.L	380VAC R Phase
S.L	380VAC S Phase
T.N	380VAC T Phase

⑤MDR Interface

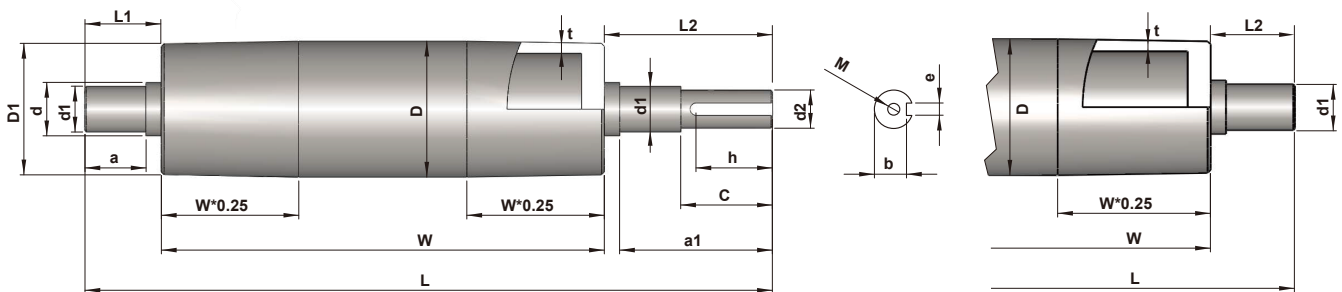
PB	Braking Resistor PB
+	Braking Unit+
-	Braking Unit-
U	MDR U Phase
V	MDR V Phase
W	MDR W Phase

BP-D Series Pulley (Rotating Shaft)



- Thermal refining shaft
- Special welding equipment and technology
- New structure, strong and reliable

Dimensions(Steel Z/P)



Specifications

Series	Standard				Optional	Length		
	Tube dia. (D)	Tube (t)	shaft dia. (d1)	Drum (D1)	Optional shaft dia.(d1)	W	L	L1/L2
06C	Φ59	(4.5)	Φ25	Φ58	Φ20	250~1300	≤1500	≤280
08K	Φ75	(4.5)	Φ30	Φ74	Φ25	250~1300	≤1500	≤280
					Φ35			≤185
08J	Φ87	(4.5)	Φ30	Φ85.6	Φ25	250~1300	≤1500	≤280
					Φ35			≤185
10B	Φ100	(6.0)	Φ30	Φ98	Φ25	250~1400	≤1600	≤280
					Φ35			≤185
11D	Φ112	(6.0)	Φ35	Φ110	Φ30	250~1400	≤1600	≤280
					Φ40			≤185, When ≥ Φ40, ≤140
12A	Φ119	(6.0)	Φ35	Φ117	Φ40	250~1400	≤1600	≤185, When ≥ Φ40, ≤140
13C	Φ130	(6.5)	Φ35	Φ127	Φ40	70~1800	≤2400	≤300
14K	Φ137	(6.5)	Φ35	Φ135	Φ40	70~1800	≤2400	≤300
15J	Φ156	(6.5)	Φ35	Φ153	Φ40	70~1800	≤2400	≤300
18K	Φ176	(8.0)	Φ40	Φ173	Φ45	70~1800	≤2400	≤300
20C	Φ200	(6.5)	Φ45	Φ196	Φ50/55	70~1800	≤2400	≤300
21J	Φ216	(8.5)	Φ50	Φ212	Φ55	70~1800	≤2400	≤300

⚙ Straight tube is available—not tapered ; “(t)” is not accurate data.

If there is dynamic balance requirement for products, please contact us.

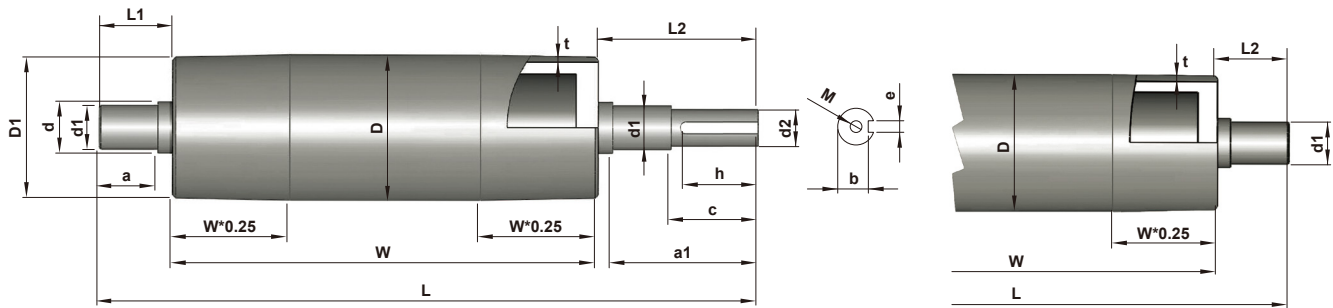
Surface treatment: zinc plated or anti-rust oil

Precaution of broken shaft: when installed by shaft through the motor, the torque that the shaft takes is quite big, please pay attention to the actual torque output and installation detail, otherwise, the shaft will break. Please contact us for details.

Precaution of abrasion of the shaft: 1, please install the bearing with frame, and make sure the screw is fastened.

2, Machine flat surfaces on both sides of the shaft, so as that the screws can reach the surfaces and thus be fastened.

Dimensions(Surface Polyurethane-PU)



Specifications

Standard configuration					Optional	Length		
Series	After PU coating (D)	PU layer thickness (t)	shaft dia. (d1)	Drum (D1)	Optional shaft dia.(d1)	W	L	L1/L2
08J	Φ87	(6.0)	Φ30	Φ85.6	Φ25	250~1400	≤1600	≤280
					Φ35			≤185
10B	Φ100	(6.5)	Φ30	Φ98	Φ25	250~1400	≤1600	≤280
					Φ35			≤185
11D	Φ112	(6.0)	Φ35	Φ110	Φ30	250~1400	≤1600	≤280
					Φ40			≤185, When ≥ Φ40, ≤140
12A	Φ122	(5.0)	Φ35	Φ120	Φ40	250~1400	≤1600	≤185, When ≥ Φ40, ≤140
13C	Φ130	(5.5)	Φ35	Φ127	Φ40	250~1400	≤1600	≤185, When ≥ Φ40, ≤140
15J	Φ156	(6.0)	Φ35	Φ153	Φ40	70~1800	≤2400	≤300
18K	Φ176	(5.0)	Φ40	Φ173	Φ45	70~1800	≤2400	≤300
20C	Φ202	(5.0)	Φ45	Φ199	Φ50/55	70~1800	≤2400	≤300
21J	Φ216	(7.5)	Φ50	Φ212	Φ55	70~1800	≤2400	≤300

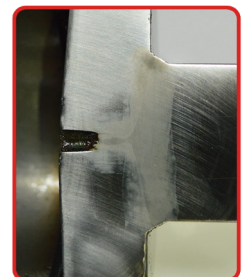
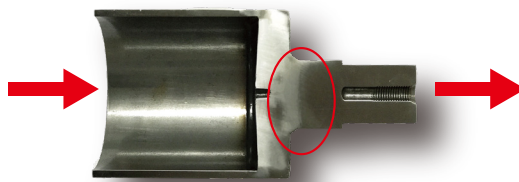
⚙ Straight tube is available—not tapered ; “(t)” is not accurate data.

Polyurethane (PU)color-yellow

(If the pulley length is out of above, please contact us.)

Precaution of broken shaft: when installed by shaft through the motor, the torque that the shaft takes is quite big, please pay attention to the actual torque output and installation detail, otherwise, the shaft will break. Please contact us for details.

Precaution of abrasion of the shaft: 1, please install the bearer with frame, and make sure the screw is fastened.
2, Machine flat surfaces on both sides of the shaft, so as that the screws can reach the surfaces and thus be fastened.

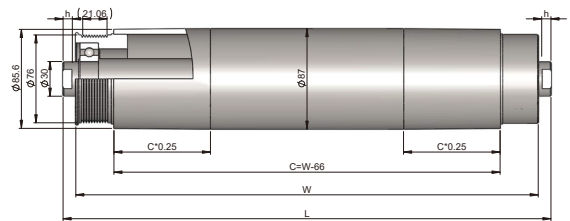
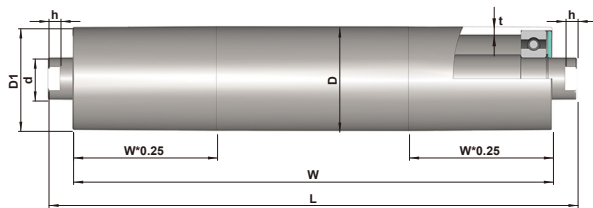


BP-R Series Pulley (Fixed Shaft)



- Configured with precision bearings
- Precision machining, smooth rotation
- High load capacity, reliable and durable.

Dimensions(Steel Z/P)



Usually used for climbing belt conveyor

Specifications

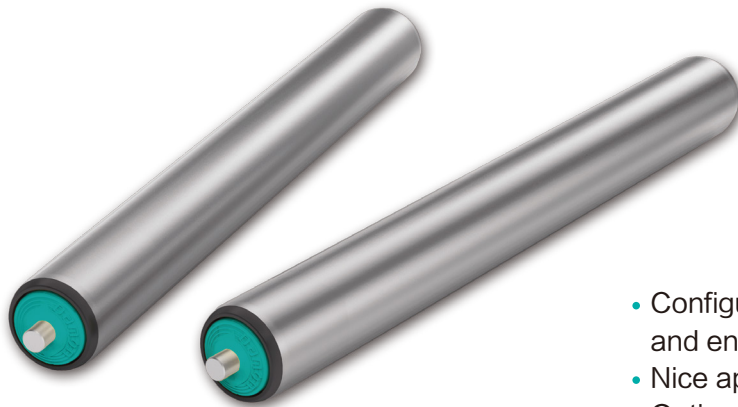
Standard						Length			Remarks
Series	Tube dia. (D)	Tube (t)	shaft dia. (d)	Bearing type	Drum (D1)	W	L	Shaft unilateral outcrop	
05D	Φ51	(3.0)	Φ20	6204	/	450~1300	≤1500	≤100	
06C	Φ59	(4.5)	Φ25	6205	Φ58	70~1300	≤1500	≤100	
07C	Φ69	(6.0)	Φ30	6206	Φ68	70~1300	≤1600	≤150	
08K	Φ75	(4.5)	Φ25	6005	Φ74	120~1300	≤1500	≤100	
08C	Φ79	(4.5)	Φ25	6005	Φ77.6	120~1300	≤1500	≤100	
08J	Φ87	(4.5)	Φ25	6205	Φ85.6	120~1300	≤1500	≤100	
10B	Φ100	(6.0)	Φ30	6306	Φ98	120~1800	≤2100	≤150	
11D	Φ112	(6.0)	Φ30	6306	Φ110	120~1800	≤2100	≤150	
			Φ35	6307					
12A	Φ119	(6.0)	Φ30	6306	Φ117	120~1800	≤2100	≤150	
08J	Φ87	(4.5)	Φ30	6206	Φ85.6	180~1300	≤1600	≤150	Steel Poly-vee

⚙ Straight tube is available—not tapered ; “(t)” is not accurate data.

If there is dynamic balance requirement for products, please contact us.

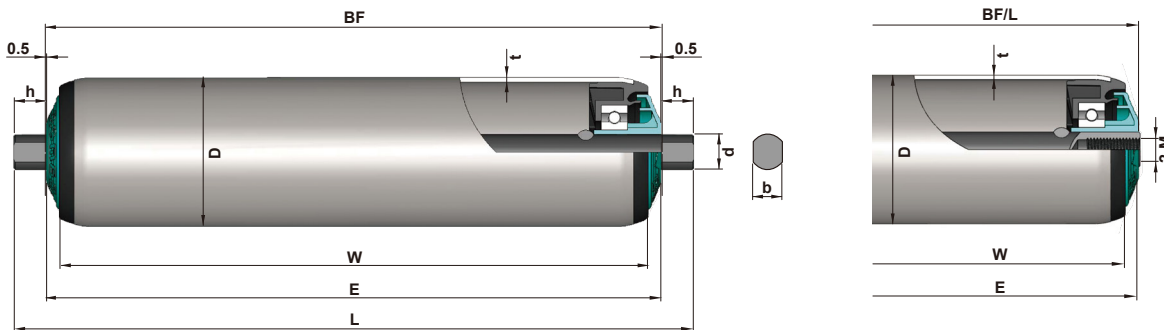
Surface treatment:zinc plated or anti-rust oil

1200 Series Conveyor Roller



- Configured with polymer bearing housing and end cap
- Nice appearance, quiet running
- Optional for tubes and installations
- Anti-static is standard

Dimensions



Specifications

Tube dia. (D)	Standard Shaft Dia(d)	Dimension relation		Surface treatment	Recommended application location
		BF	L		
Φ50	Φ12/15	$BF=W+10$	$L=W+31$	Steel Z/P	4
	Φ17	$BF=W+10$	$L=W+31$	SS	3&4
Φ60	Φ12/15	$BF=W+10$	$L=W+31$	Steel Z/P	4
	Φ17	$BF=W+10$	$L=W+31$	SS	3&4
Φ76	Φ20	$BF=W+12$	$L=W+41$	Steel Z/P	3&4
Φ80	Φ20	$BF=W+12$	$L=W+41$	Steel Z/P	3&4

⚠ Be careful about the belt tensioning and siding force when using as redirection & tensioning.



ZHEJIANG DAMON INDUSTRIAL EQUIPMENT CO., LTD

Address: Shangqiang Industrial Park, Daixi, Huzhou, China

Tel.: +86-0572-3826 065/066

Fax: +86-0572-3826 080

Email: sales@damonroller.com

Website: www.damonroller.com



LinkedIn

Romania

Damon Industrial Europe Srl

Address: Apahida, Libertatii Str., No. 21, 407035, Cluj,
Romania

Tel: +0040-769652317

Email: sales@damonroller.ro

Web: www.damonroller.com

Australia

Damon Australia Pty Ltd

Address: 30 Grasslands Avenue Craigieburn VIC
3064, Australia

Tel: +0061-393337034

Fax: +0061-393084896

E-mail: info@damon-group.com.au

Web: www.damon-group.com.au

America

DA Roller Corporation

Address: 11310 Rockfield Ct, Cincinnati, OH 45241,
USA.

Tel: +001-5138981850

Email: info@daroller.com

Web: www.daroller.com

Japan

Kyowa Manufacturing Co., Ltd.

Address: 570-10 Kubota-cho, Kasai-city, Hyogo
pref. 675-2364 JAPAN

Tel: +0081-790420601

Fax: +0081-790424895

E-mail: sales@pulseroller.com

Web: www.pulseroller.com

Singapore

Rollflex Pte. Ltd.

Address: Blk 22, Woodlands Link, #04-70, Singapore
738734

Tel: +0065-62570811

Fax: +0065-62573811

E-mail: sales.sg@rollflexmfg.com

Web: www.rollflexmfg.com

Indonesia

PT. Rollflex Manufacturing Indonesia

Address: Taman Tekno BSD, Sektor XI Blok H-11 No.
7 Serpong, Tangerang 15314

Tel: +006221-36720399

Fax: +006221-36720388

E-mail: sales.id@rollflexmfg.com

Web: www.rollflexmfg.com

Malaysia

Rollflex (M) Sdn.Bhd.

Address: Lot 58908, No. 3399, Jalan Pekeliling Tanjung
27/2 Kawasan Perindustrian Indahpura, 81000 Kulai,
Johor, Malaysia.

Tel: +006012-7272896

E-mail: sales.my@rollflexmfg.com

Web: www.rollflexmfg.com