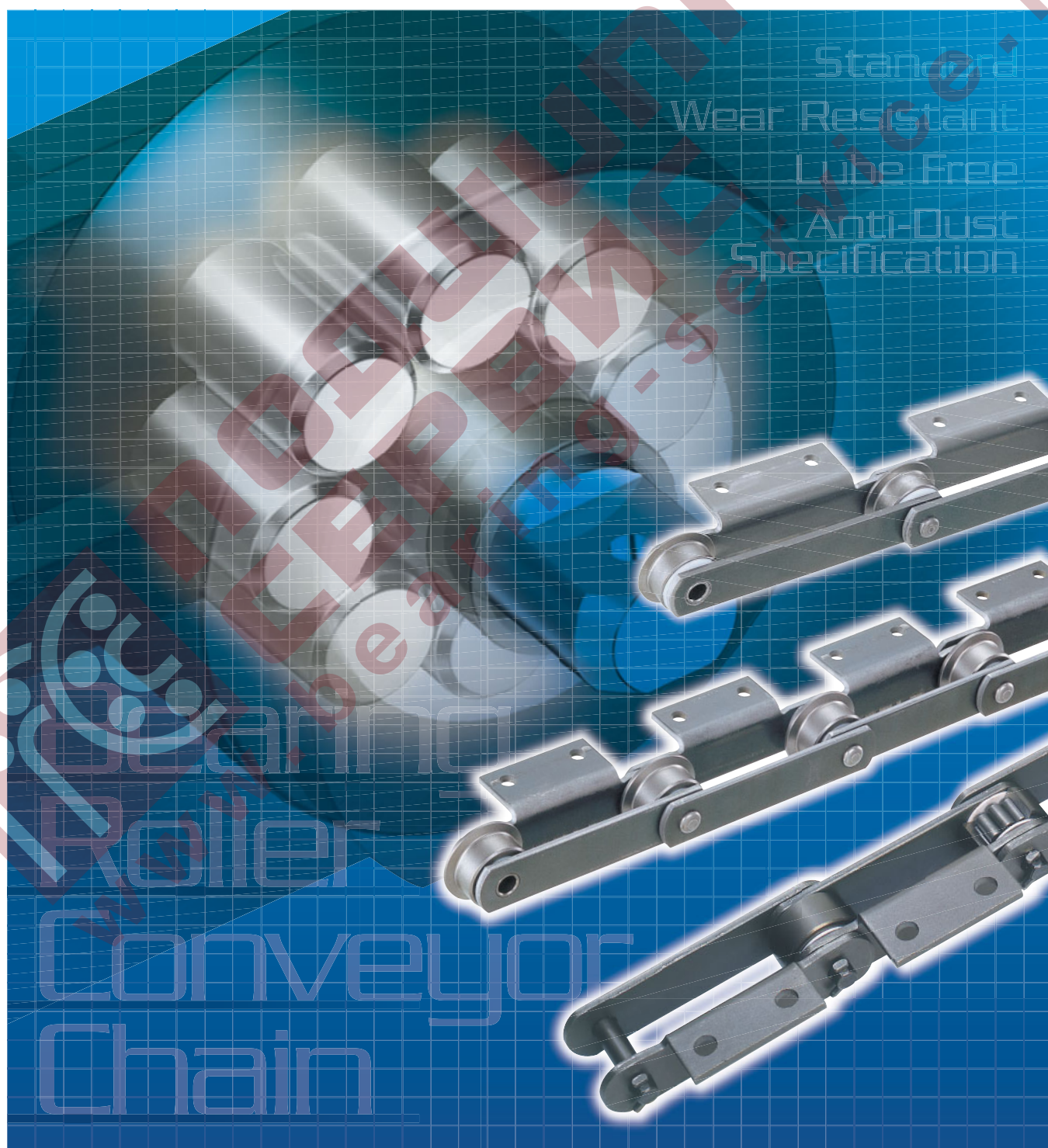


TSUBAKI

Bearing Roller Conveyor Chain



Bearing Roller Conveyor Chain – The Problem Solver!

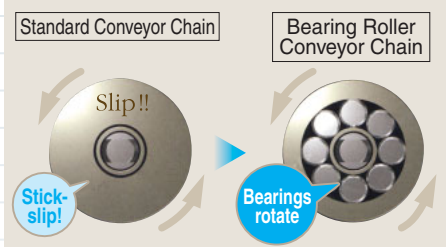
Bearing Roller Conveyor Chain features a unique construction of cylindrical bearings inside the roller, which increases efficiency, lowers costs, suppresses stick-slip phenomenon, and extends roller and rail life compared to existing conveyor chains.

Bushing
Spacer

Cylindrical Bearing

Roller

Function of Cylindrical Bearings



- 1 Reduces chain running resistance
(1/3 that of standard conveyor chain)
- 2 Greatly increases roller allowable load
- 3 Increases wear life

Product Lineup

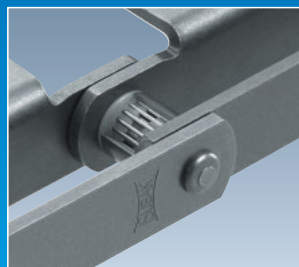
Standard Series



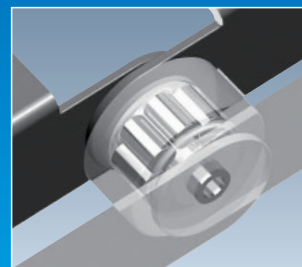
BR Type



BF Type



BS Type



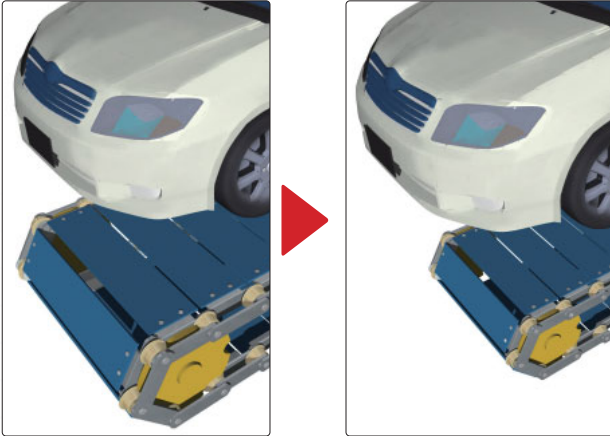
DBR Type
(Anti-dust Specifications)



Solution 1

Reduces chain tension and required drive

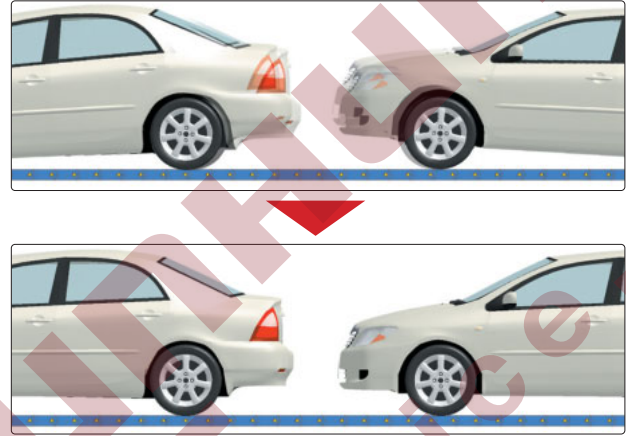
Chain tension and required drive are only 1/3 of standard conveyor chains. This allows users to choose a smaller size, as well as reduce the size of their conveyor and necessary drive power, for greater cost savings.



Solution 2

Prevents stick-slip phenomenon at low speeds

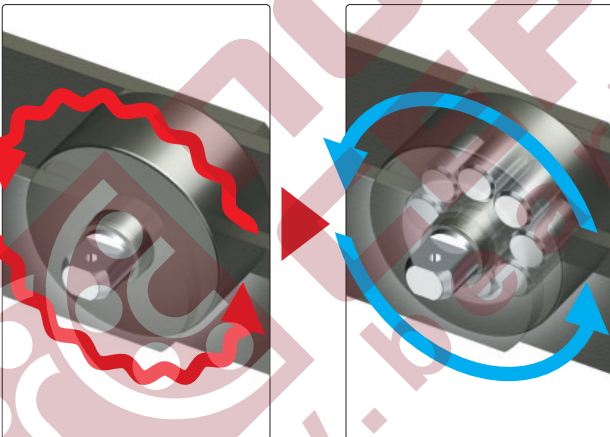
Preventing stick-slip and providing smooth movement ensures stable conveyance and eliminates motion sickness on assembly lines for higher productivity.



Solution 3

Controls poor roller rotation and decreases rail wear

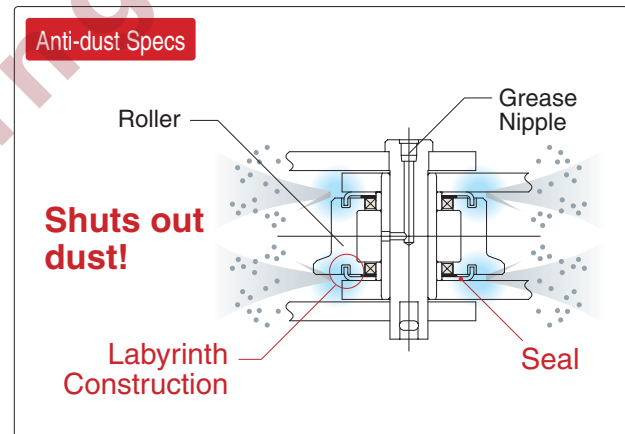
Cylindrical bearings ensure smooth roller rotation and reduce rail wear. Roller wear life is also dramatically increased.



Solution 4

Improved anti-dust capabilities

Tsubaki's Bearing Roller Conveyor Chain Anti-dust Specifications solves the problem of dust causing early wear between bushing and roller that afflicts standard conveyor chains.



Lube-free Series



EBR Type
(Standard)



EBF Type
(Standard)



WEBR Type
(Water Resistant)



WEBF Type
(Water Resistant)

Problem solved - no matter what the application!

- Suppresses stick-slip phenomenon >>>P3
- Reduces maintenance time >>>P3
- Controls sliding noise >>>P4
- Helps prevent chain failure >>>P4
- Lowers energy costs >>>P4
- Reduces corner rail wear >>>P5
- Increases operation time >>>P5
- Lube-free for longer life >>>P5

Suppresses stick-slip phenomenon, increasing work efficiency

Problem

Normally, a chain with a thin metal sleeve press-fitted between the roller and bushing is used. At speeds of 5m/min or less, the chain experiences stick-slip, causing motion sickness in workers and decreasing work efficiency.

Problem-Solved!

Normal operation with no stick-slip seen, even at 2m/min. Motion sickness in workers also eliminated, leading to a better work environment.

Industry: Automotive
Machine: Assembly Line
Chain Size: RF17200BF-1LA2



Standard Series

Standard Specs
BF Type

Increases conveyor life while reducing maintenance time

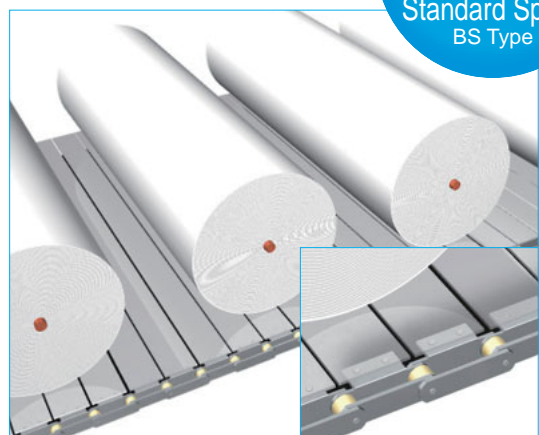
Problem

- Lubing impossible when conveying paper rolls.
- This causes poor roller rotation, leading to increased chain tension. This in turn leads to elongation of the plate holes and wear on the S roller outer diameter.

Problem Solved!

Bearing rollers provide for smooth roller rotation, resulting in less chain tension, reduced wear on the outer diameter, and much longer conveyor life.

Industry: Paper
Machine: Paper roll slat conveyor
Chain Size: RF10-BS



Standard Series

Standard Specs
BS Type



Effective against rail wear, and suppresses chain – rail sliding noise

Standard Series

Standard Specs
BR Type

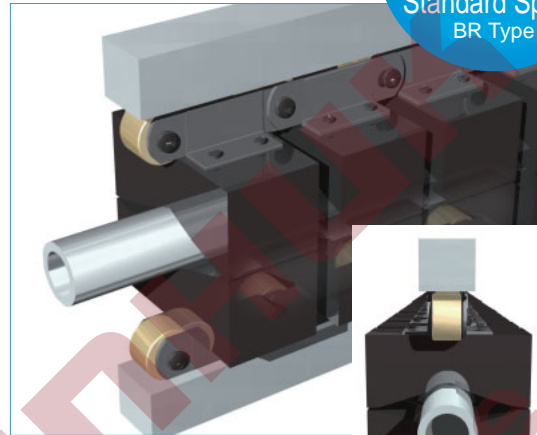
Problem

Normally, a standard chain with lubrication is used. Strong roller pressure on the conveyor pipe leads to poor roller rotation, greater rail wear, and shorter chain and rail life.

Problem Solved!

Smooth roller rotation and less rail wear means quieter running between chain and rail.

Industry: Steel
Seamless pipe conveyor
Chain Size: RF05075BR



Lowers chain tension in dusty environments and stops chain failure

Standard Series

Anti-dust Specs

Problem

Need a chain that will lower chain tension in dusty environments and stop chain failure.

Problem Solved!

Lubed once every 2 or 3 months
5 years of operation, no part problems

Industry: Recycling
Conveyed Items: Plastic, sand, stone, steel scrap, etc.
Chain Size: RF17



Lowers energy costs in dusty environments

Standard Series

Anti-dust Specs

Problem

Need a chain that can lower energy costs in dusty environments

Problem Solved!

Lubed once a year
1 year of operation with no part problems

Industry: Cement
Conveyed Items: Fly ash
Chain Size: RF26



Problem solved – no matter what the application!

Reduces corner rail wear on outdoor slanted conveyors

Lube-Free Series

Water Resistant Specs

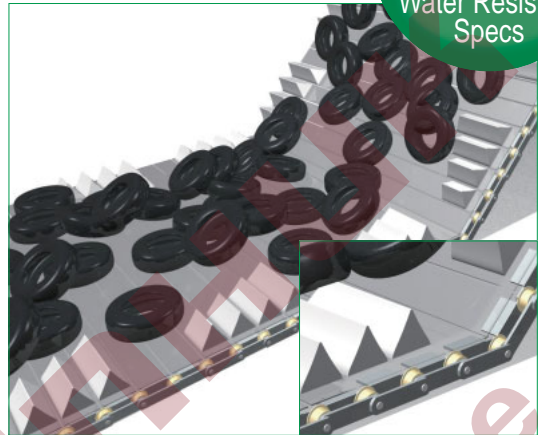
Problem

- Lube in standard conveyor chains sticks to the roller rotation surface on the rail, leading to poor roller rotation.
- This increases chain tension and roller reactive force on the corner, resulting in corner rail wear in 1 — 2 months.
- Equipment is located on the coast — lube-free would be best.

Problem Solved!

Smooth roller rotation reduces chain tension as well as the roller reactive force on the corner. This in turn helps control corner rail wear.

Industry: Cement
Used Tire Conveyor
Chain Size: RF17200WEBF



Suppresses stick-slip phenomenon and increases operation rate of production lines

Lube-Free Series

Standard Specs
Water Resistant Specs

Problem

- Stick-slip causes mis-operation of sensors during product inspection, which necessitates frequent line stops.
- Workers get motion-sick, leading to a bad working environment.
- Water from washing machine leak checks regularly get onto one side of the chain, leading to worse corrosion and shorter life than the opposite side.

Problem Solved!

No more line stops from stick-slip phenomenon interfering with sensor operation, leading to a better work environment. And switching to WEBF (Water Resistant type) on one side of the line extends chain life, even with water from leak checks contacting chain.

Industry: Home appliance
Washing Machine Conveyor
Chain Size: RF08150EBF/WEBF



No lubrication and longer life in shower testers for the automotive industry

Lube-Free Series

Water Resistant Specs

Problem

The shower tester lines are a particularly harsh process in the automotive industry. In the past, the issues of lube-free and long life were addressed with seals and grease nipples, or plastic inserts in the roller inner radius. However, none of these methods were satisfactory in terms of maintenance time and chain life.

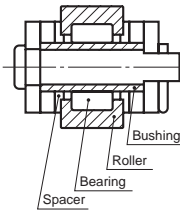
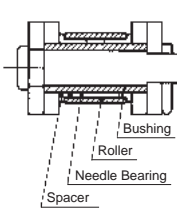
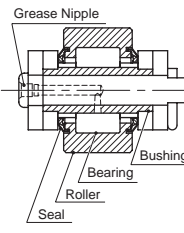
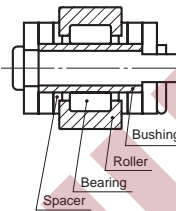
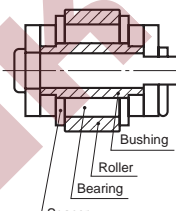
Problem Solved!

We introduced our WEBF Series chain, which combines the reduced wear of seal and grease nipple types, and lube-free features of plastic inserts. WEBF provides long life even in contact with water or in lube-free environments.

Industry: Automotive
Machine: Shower Tester Conveyor
Chain Size: RF12200WEBF-1LA2



Specification Chart

| Series Specification | | Standard Series | | | | | | Lube-Free Series | | | | |
|---|-----------------------|---|-------------------------------------|---|-------------------|---|-------------------------------------|---|-------------------------------------|--|-------------------|--|
| | | Standard Specs | | | | Anti-dust Specs | | Standard Specs | | Water Resistant Specs | | |
| Type | | BR BF | | BS | | DBR DBF | | EBR EBF | | WEBR WEBF | | |
| Roller Construction | |  | |  | |  | |  | |  | | |
| Roller Material | Roller(outer ring) | Hardened tensile steel | | Hardened tensile steel | | Hardened tensile steel | | Hardened tensile steel | | SUS400 stainless steel | | |
| | Bearing | Case hardened alloy steel bearings | | Case hardened alloy steel needle bearings | | Case hardened alloy steel bearings | | Case hardened alloy steel bearings and plastic bearings | | SUS400 stainless steel bearings and plastic bearings | | |
| | Bushing(inner ring) | Case hardened alloy steel | | Case hardened alloy steel | | Case hardened alloy steel | | Case hardened alloy steel | | SUS400 stainless steel | | |
| | Spacer | Plastic | | Plastic | | Plastic | | Plastic | | Plastic | | |
| | Seal | — | | — | | Rubber | | — | | — | | |
| | Side Plate | — | | — | | Carbon steel | | — | | — | | |
| Chain Specs | Plate | DT Series Carbon steel | AT Series Hardened tensile steel | Carbon steel | | DT Series Carbon steel | AT Series Hardened tensile steel | DT Series Carbon steel | AT Series Hardened tensile steel | Carbon steel | | |
| | Pin | DT Series Hardened tensile steel | AT Series Hardened tensile steel | Hardened tensile steel | | DT Series Hardened tensile steel | AT Series Hardened tensile steel | DT Series Hardened tensile steel | AT Series Hardened tensile steel | SUS400 stainless steel | | |
| Usage Environment | | Room temperature away from water and dust | | Room temperature away from water and dust | | Dust may be present (Cannot be used when chain will be buried in dust.) | | Room temperature away from water and dust | | Room temperature in contact with water | | |
| Roller Lubrication | | Requires regular lube | | Packaged and shipped lubed — no further lube necessary | | Requires regular lube | | Packaged and shipped lubed — no further lube necessary | | Packaged and shipped lubed — no further lube necessary (cannot be used in dusty environments) | | |
| Ambient Temperature | | -20...C to 80...C (can mfg. to withstand up to 150...C) | | -20...C to 50...C | | -10...C to 80...C | | -20...C to 50...C | | 0...C to 50...C | | |
| Roller Allowable Load | | S Roller, R Roller | Chain Size | RF03 | 1.96kN { 200kgf } | — | — | — | — | 1.96kN { 200kgf } | 1.37kN { 140kgf } | |
| | | | | RF05 | 3.04kN { 310kgf } | — | — | — | — | 3.04kN { 310kgf } | 2.13kN { 220kgf } | |
| | | | | RF08 | 4.12kN { 420kgf } | — | — | — | — | 4.12kN { 420kgf } | 2.88kN { 290kgf } | |
| | | | | RF10 | 5.49kN { 560kgf } | 2.00kN { 200kgf } | 5.49kN { 560kgf } | 5.49kN { 560kgf } | 5.49kN { 560kgf } | 3.84kN { 390kgf } | | |
| | | | | RF12 | 8.34kN { 850kgf } | 3.00kN { 310kgf } | 8.34kN { 850kgf } | 8.34kN { 850kgf } | 8.34kN { 850kgf } | 5.84kN { 600kgf } | | |
| | | | | RF17 | 14.1kN {1440kgf } | — | — | 14.1kN {1440kgf } | 14.1kN {1440kgf } | 9.87kN {1010kgf } | | |
| | | | | RF26 | 19.6kN {2000kgf } | — | — | 19.6kN {2000kgf } | 19.6kN {2000kgf } | 13.7kN {1400kgf } | | |
| | | | | RF36 | 27.5kN {2800kgf } | — | — | 27.5kN {2800kgf } | 27.5kN {2800kgf } | 19.3kN {1970kgf } | | |
| | | F Roller | | RF03 | 1.27kN { 130kgf } | — | — | — | — | 1.27kN { 130kgf } | 0.89kN { 90kgf } | |
| | | | | RF05 | 1.96kN { 200kgf } | — | — | — | — | 1.96kN { 200kgf } | 1.37kN { 140kgf } | |
| | | | | RF08 | 2.65kN { 270kgf } | — | — | — | — | 2.65kN { 270kgf } | 1.86kN { 190kgf } | |
| | | | | RF10 | 3.43kN { 350kgf } | — | — | 3.43kN { 350kgf } | 3.43kN { 350kgf } | 2.40kN { 240kgf } | | |
| | | | | RF12 | 5.49kN { 560kgf } | — | — | 5.49kN { 560kgf } | 5.49kN { 560kgf } | 3.84kN { 390kgf } | | |
| | | | | RF17 | 9.81kN {1000kgf } | — | — | 9.81kN {1000kgf } | 9.81kN {1000kgf } | 6.87kN { 700kgf } | | |
| | | | | RF26 | 13.7kN {1400kgf } | — | — | 13.7kN {1400kgf } | 13.7kN {1400kgf } | 9.59kN { 980kgf } | | |
| | | | | RF36 | 18.6kN {1900kgf } | — | — | 18.6kN {1900kgf } | 18.6kN {1900kgf } | 13.0kN {1330kgf } | | |
| Coefficient of Roller Rotation Friction | | | | 0.03 | | 0.03 | | ※ 0.05 | | 0.03 | | |
| Chain Allowable Speed | Sprocket No. of Teeth | 6 | 15m/min | | 10m/min | | 15m/min | | — | | — | |
| | | 8 | 25m/min | | 15m/min | | 25m/min | | 15m/min | | 15m/min | |
| | | 10 | 30m/min | | 20m/min | | 30m/min | | 20m/min | | 20m/min | |
| | | 12 | 30m/min | | 25m/min | | 30m/min | | 25m/min | | 25m/min | |

※ As Anti-dust Specs are designed for use in dusty environments, their coefficient of friction is slightly higher. Consult a Tsubaki representative when selecting.

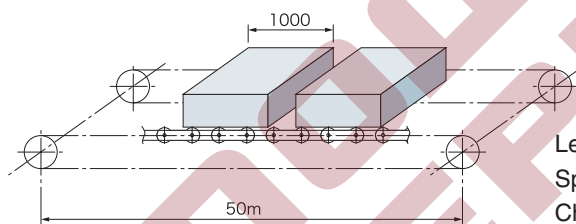
Go two sizes down –

RF Conveyor Chain (RF26250) actual size

2 Size
Down

Bearing Roller Conveyor Chain, Standard Series, BF Type RF12250 (actual size)

Specifications (Selection Example)



Length : 50m

Speed : 10m/min

Chain Pitch : 250

Conveyed Items : 40 items at 2000kgf/each

No. of Strands : 2

F Roller Type : A2 attachment

A Bearing Roller Conveyor Chain for every environment

| Usage Environment | Standard Conveyor Chain | Bearing Roller Conveyor Chain |
|-----------------------------|-------------------------|--|
| Normal | DT, GT | Standard Series/Lube-Free Series, Standard Specs |
| High wear (heavy load) | AT | Standard Series/Lube-Free Series, Standard Specs |
| High wear (foreign objects) | BT, CT | Standard Series, Anti-dust Specs |
| Slightly corrosive | PT, NEP | Lube-Free Series, Water Resistant Specs |

Selection

1. Follow RF Conveyor Chain selection guidelines when selecting size.

2. Specifications necessary when selecting:

●Roller rotation coefficient of friction: See pg. 6

●Ambient temperature: See pg. 6

●Sprocket: All series/specifications can use sprockets for RF Conveyor Chains. See pg. 6 for sprocket no. of teeth.

●Rail: The roller contact width of Lube-Free Series Water Resistant Specs and Heat-resistant Specs are different from RF Conveyor Chain. See pg. 17 for rail fitting.

●Roller allowable load: Roller allowable load is the allowable load for one roller on a load-type conveyor. Roller allowable load assumes a guide rail tensile strength of 400N/mm²(41kgf/mm²). When using A attachments, compare attachment allowable loads and use the lower of the values.

Go compact!



RF Conveyor Chain

Bearing Roller Conveyor Chain Standard Series, BF Type

Confirm roller allowable load

Chain Size: RF26250F

Roller Allowable Load: 5.3kN{540kgf}

Chain Size: RF12250BF

Roller Allowable Load: 5.49kN{560kgf}

Confirm Chain Tensile Strength

0.08
(when lubed)

~1/3

coefficient of friction

0.03

~1/3

As this is a rough selection, it ignores impact force during start-up and tensile strength from its own weight.

2000kgf/each x 40 items x 0.08 x 9.8/1000 x 1/2 strands

= 31.4kN{3200kgf}

~1/3

chain tensile strength

2000kgf/each x 40 items x 0.03 x 9.8/1000 x 1/2 strands

= 11.8kN{1200kgf}

~1/3

Allowable tensile strength with a safety factor of 7.

RF26250F-1LA2

2 sizes down

chain size

RF12250BF-1LA2

2 sizes down

Selecting Motor Capacity (kW)

Basic formula: $kW = 31.4kN \times 2 \text{ strands} \times 10m/min / 54.1 \times 1/0.85$

= 13.5kW

~1/2.5

motor capacity

Basic formula: $kW = 11.8kN \times 2 \text{ strands} \times 10m/min / 54.1 \times 1/0.85$

= 5.1kW

~1/2.5

Cost Comparison

RF26250F-1LA2

1

30% less

cost

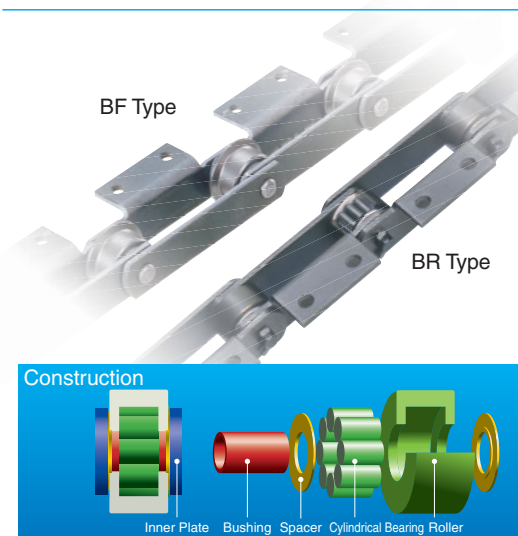
RF12250BF-1LA2

0.7

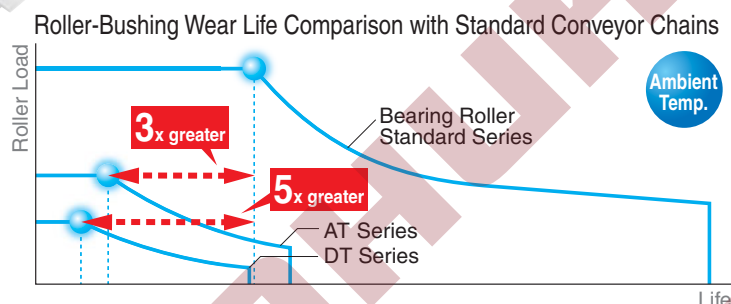
30% less

Bearing Roller Conveyor Chain **Standard Series**

Standard Specs **BR/BF Type**



- Features cylindrical bearings between rollers and bushings.
- Same dimensions as standard R and F rollers on RF Conveyor Chains.

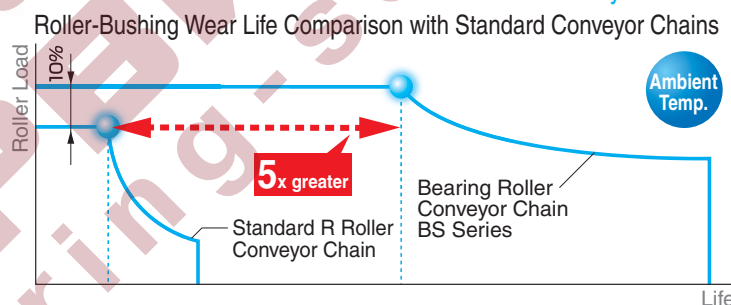


5x the wear life of DT Series and 3x the wear life of AT Series, without additional lubrication.

Standard Series **BS Type**



- Features a unique construction of needle bearings between the inner roller and outer bushing, kept in place by plastic side plates.
- Same dimensions as standard S roller on RF Conveyor Chains

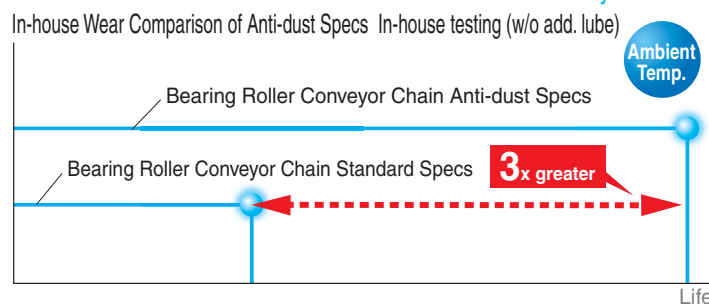


5x the wear life of DT Series without additional lubrication.
*Standard Conveyor Chain w/ S roller or R roller.

Anti-dust Specs **DBR/DBF Type**



- Exhibits the same performance and efficiency of the Bearing Roller Conveyor Chain, even in dusty environments.
- Same dimensions as standard R or F rollers on RF Conveyor Chains.



3x the wear life of Bearing Roller Conveyor Chain Standard Specs.

Standard Series General Specifications

| TSUBAKI Chain Number | | | Max. Allowable Tension | | | | | | Roller Allowable Load | | | | | |
|----------------------|-----------|-----------|------------------------|----------|-----------|----------|---------|----------|-----------------------|--------------|----------|--------------|----------|--------------|
| | | | BR, BF Type | | | | BS Type | | R Roller | | F Roller | | S Roller | |
| | | | DT Series | | AT Series | | | | | | | | | |
| BR Type | BF Type | BS Type | kN | { kgf } | kN | { kgf } | kN | { kgf } | kN | { kgf/each } | kN | { kgf/each } | kN | { kgf/each } |
| RF03075BR | RF03075BF | — | 4.12 | { 420 } | 7.85 | { 800 } | — | — | 1.96 | { 200 } | 1.27 | { 130 } | — | — |
| RF03100BR | RF03100BF | — | | | | | — | — | | | | | — | — |
| RF05100BR | RF05100BF | — | | | | | — | — | | | | | — | — |
| RF05125BR | RF05125BF | — | 9.81 | { 1000 } | 14.7 | { 1500 } | — | — | 3.04 | { 310 } | 1.96 | { 200 } | — | — |
| RF05150BR | RF05150BF | — | | | | | — | — | | | | | — | — |
| RF08125BR | RF08125BF | — | 10.8 | { 1100 } | 14.7 | { 1500 } | — | — | 4.12 | { 420 } | 2.65 | { 270 } | — | — |
| RF08150BR | RF08150BF | | | | | | | | | | | | | |
| RF10100BR | — | RF10100BS | | | | | | | | | | | | |
| RF10125BR | RF10125BF | RF10125BS | 15.7 | { 1620 } | 23.5 | { 2400 } | 10.8 | { 1100 } | 5.49 | { 560 } | 3.43 | { 350 } | 2.00 | { 200 } |
| RF10150BR | RF10150BF | RF10150BS | | | | | | | | | | | | |
| RF12200BR | RF12200BF | RF12200BS | 26.5 | { 2700 } | 36.3 | { 3700 } | 17.8 | { 1800 } | 8.34 | { 850 } | 5.49 | { 560 } | 3.00 | { 310 } |
| RF12250BR | RF12250BF | RF12500BS | | | | | | | | | | | | |
| RF17200BR | RF17200BF | | | | | | | | | | | | | |
| RF17250BR | RF17250BF | — | 34.3 | { 3500 } | 54.9 | { 5600 } | — | — | 14.1 | { 1440 } | 9.81 | { 1000 } | — | — |
| RF17300BR | RF17300BF | | | | | | | | | | | | | |
| RF26250BR | RF26250BF | | | | | | | | | | | | | |
| RF26300BR | RF26300BF | — | 44.1 | { 4500 } | 72.6 | { 7400 } | — | — | 19.6 | { 2000 } | 13.7 | { 1400 } | — | — |
| RF26450BR | RF26450BF | | | | | | | | | | | | | |
| RF36300BR | RF36300BF | | | | | | | | | | | | | |
| RF36450BR | RF36450BF | — | 67.7 | { 6900 } | 97.1 | { 9900 } | — | — | 27.5 | { 2800 } | 18.6 | { 1900 } | — | — |
| RF36600BR | RF36600BF | | | | | | | | | | | | | |

Note 1. DT specifications are standard for BS Type. As the max. allowable tension and roller allowable load for AT Series are determined by roller strength, they are the same as DT Series.
 2. Consult a Tsubaki representative for inch pitch sizes.

Standard Series Anti-dust Specifications

Chain Numbering Example

| TSUBAKI Chain Number | | Max. Allowable Tension | | | | Roller Allowable Load | | | |
|----------------------|------------|------------------------|-----------|-----------|-----------|-----------------------|----------|----------|----------|
| | | DBR, DBF Type | | | | R Roller | | F Roller | |
| | | DT Series | AT Series | DT Series | AT Series | | | | |
| DBR Type | DBF Type | kN | { kgf } | kN | { kgf } | kN | { kgf } | kN | { kgf } |
| RF10100DBR | — | — | — | — | — | — | — | — | — |
| RF10125DBR | RF10125DBF | 15.7 | { 1620 } | 23.5 | { 2400 } | 5.49 | { 560 } | 3.43 | { 350 } |
| RF10150DBR | RF10150DBF | — | — | — | — | — | — | — | — |
| RF12200DBR | RF12200DBF | 26.5 | { 2700 } | 36.3 | { 3700 } | 8.34 | { 850 } | 5.49 | { 560 } |
| RF12250DBR | RF12250DBF | — | — | — | — | — | — | — | — |
| RF17200DBR | RF17200DBF | — | — | — | — | — | — | — | — |
| RF17250DBR | RF17250DBF | 34.3 | { 3500 } | 54.9 | { 5600 } | 14.1 | { 1440 } | 9.81 | { 1000 } |
| RF17300DBR | RF17300DBF | — | — | — | — | — | — | — | — |
| RF26250DBR | RF26250DBF | — | — | — | — | — | — | — | — |
| RF26300DBR | RF26300DBF | 44.1 | { 4500 } | 72.6 | { 7400 } | 19.6 | { 2000 } | 13.7 | { 1400 } |
| RF26450DBR | RF26450DBF | — | — | — | — | — | — | — | — |
| RF36300DBR | RF36300DBF | — | — | — | — | — | — | — | — |
| RF36450DBR | RF36450DBF | 67.7 | { 6900 } | 97.1 | { 9900 } | 27.5 | { 2800 } | 18.6 | { 1900 } |
| RF36600DBR | RF36600DBF | — | — | — | — | — | — | — | — |

Note 1. *DT Series: General Use Conveyor Chain
 AT Series: Wear Resistant/Heavy Duty Conveyor Chain.
 2. Periodically lubricate the base chain using the grease nipple on the pin head.
 (The lubrication cycle will vary depending on the type and amount of dust. A field test using a few links is essential.)
 3. Chain cannot be used for conveyance in environments where it will be fully covered in dust. An example of such can be found on pg.4.
 4. Base chain is compatible with General Use Conveyor Chains and can use current sprockets.
 5. Do not use in corrosive environments. (Exposed to or submersed in water, etc.)
 6. Refer to our Tsubaki Large Size Conveyor Chain catalog for information on Selection and handling.
 7. Can use any attachment.

RF03075 DBR -1L A1-DT

Chain Spec. Code

DT: Standard Series
 AT: Heavy Duty Series

Attachment Type

Attachment Spacing

Bearing Roller Type

BR: R Roller
 BF: F Roller
 BS: S Roller

Anti-dust Specs

Chain Size

Ordering Example

Chain Size: RF10, Pitch: 150mm
 Bearing Roller Type: Standard Series, Standard Specs, F Roller
 Chain Spec: DT Series
 Attachment Type/Spacing: A2 every 1L
 Quantity: 400 links

Chain Number

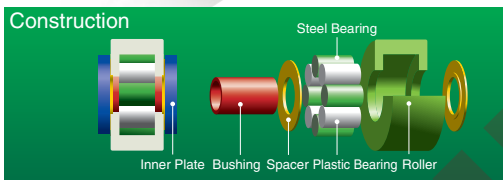
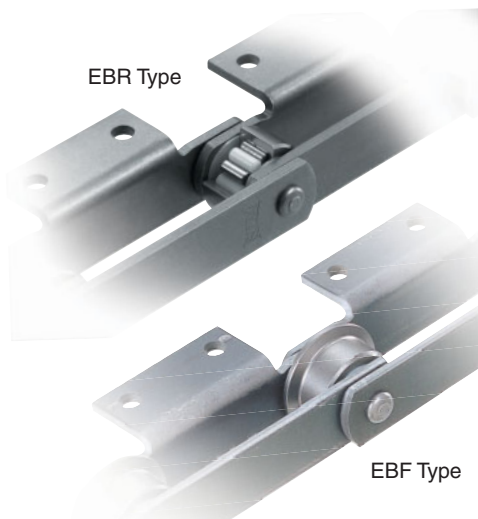
RF10150BF - DT - 1LA2

Quantity
400

Unit
L

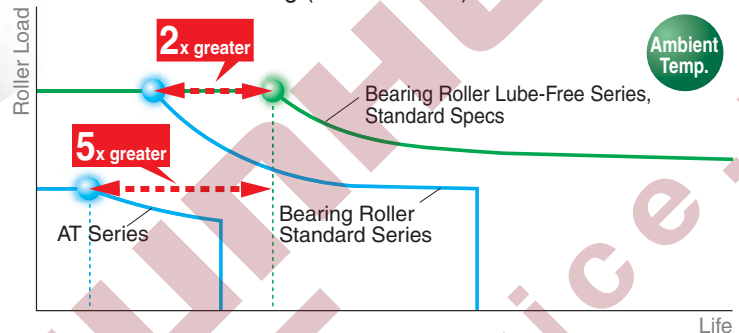
Bearing Roller Conveyor Chain **Lube-Free Series**

Standard Specs **EBR/EBF Type**



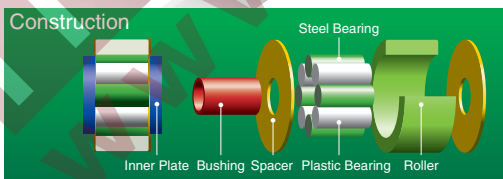
■ Tsubaki's Lube-Free Series uses special cylindrical bearings with automatic lubricating functions between the bushing and roller. Can be used without lubricating the rollers.

Roller-Bushing Wear Life Comparison with Standard Conveyor Chains In-house testing (w/o add. lube)



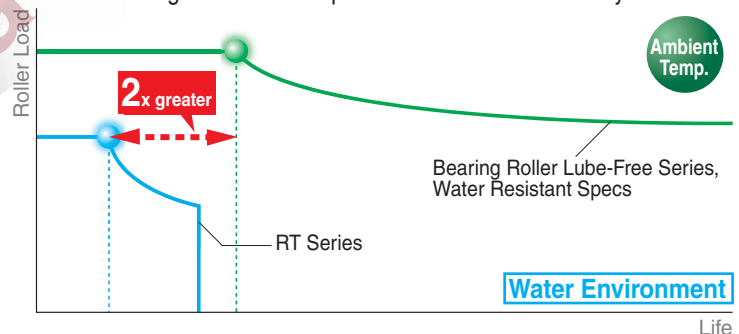
Has 5x the wear life of Standard Conveyor Chain DT Series and 2x the wear life of Bearing Roller Conveyor Chain Standard Specs without additional lubrication.

Water Resistant **WEBR/WEBF Type**



■ Tsubaki's Lube-Free Series uses special cylindrical bearings with automatic lubricating functions between the bushing and roller. Can be used without lubricating the rollers.

Roller-Bushing Wear Life Comparison with Standard Conveyor Chains



2x the wear life of Standard Conveyor Chain RT Series without additional lubrication.

Lube-Free/Standard Specifications

| TSUBAKI Chain Number | | Max. Allowable Tension | | | | Roller Allowable Load | | | |
|----------------------|------------|------------------------|----------|-----------|----------|-----------------------|------------|----------|------------|
| | | DT Series | | AT Series | | R Roller | | F Roller | |
| EBR Type | EBF Type | kN | {kgf} | kN | {kgf} | kN | {kgf/each} | kN | {kgf/each} |
| RF03075EBR | RF03075EBF | 2.88 | { 290 } | 5.50 | { 560 } | 1.96 | { 200 } | 1.27 | { 130 } |
| RF03100EBR | RF03100EBF | | | | | | | | |
| RF05100EBR | RF05100EBF | | | | | | | | |
| RF05125EBR | RF05125EBF | 6.87 | { 700 } | 10.3 | { 1050 } | 3.04 | { 310 } | 1.96 | { 200 } |
| RF05150EBR | RF05150EBF | | | | | | | | |
| RF08125EBR | RF08125EBF | 7.56 | { 770 } | 10.3 | { 1050 } | 4.12 | { 420 } | 2.65 | { 270 } |
| RF08150EBR | RF08150EBF | | | | | | | | |
| RF10100EBR | — | | | | | | | | |
| RF10125EBR | RF10125EBF | 11.0 | { 1120 } | 16.5 | { 1680 } | 5.49 | { 560 } | 3.43 | { 350 } |
| RF10150EBR | RF10150EBF | | | | | | | | |
| RF12200EBR | RF12200EBF | 18.6 | { 1900 } | 25.4 | { 2590 } | 8.34 | { 850 } | 5.49 | { 560 } |
| RF12250EBR | RF12250EBF | | | | | | | | |
| RF17200EBR | RF17200EBF | | | | | | | | |
| RF17250EBR | RF17250EBF | 24..0 | { 2450 } | 38.4 | { 3920 } | 14.1 | { 1440 } | 9.81 | { 1000 } |
| RF17300EBR | RF17300EBF | | | | | | | | |
| RF26250EBR | RF26250EBF | 30.9 | { 3150 } | 50.8 | { 5180 } | 19.6 | { 2000 } | 13.7 | { 1400 } |
| RF26300EBR | RF26300EBF | | | | | | | | |
| RF36300EBR | RF36300EBF | 47.4 | { 4830 } | 68.0 | { 6930 } | 27.5 | { 2800 } | 18.6 | { 1900 } |

Standard BR Series, BF Type (ref.)

| Max. Allowable Tension | | Roller Allowable Load | |
|------------------------|---------------|-----------------------|---------------|
| | | | |
| DT Series | AT Series | R Roller | F Roller |
| kN {kgf} | kN {kgf} | kN {kgf/each} | kN {kgf/each} |
| 4.12 { 420 } | 7.85 { 800 } | 1.96 { 200 } | 1.27 { 130 } |
| 9.81 { 1000 } | 14.7 { 1500 } | 3.04 { 310 } | 1.96 { 200 } |
| 10.8 { 1100 } | 14.7 { 1500 } | 4.12 { 420 } | 2.65 { 270 } |
| 15.7 { 1600 } | 23.5 { 2400 } | 5.49 { 560 } | 3.43 { 350 } |
| 26.5 { 2700 } | 36.3 { 3700 } | 8.34 { 850 } | 5.49 { 560 } |
| 34.3 { 3500 } | 54.9 { 5600 } | 14.1 { 1440 } | 9.81 { 1000 } |
| 44.1 { 4500 } | 72.6 { 7400 } | 19.6 { 2000 } | 13.7 { 1400 } |
| 67.7 { 6900 } | 97.1 { 9900 } | 27.5 { 2800 } | 18.6 { 1900 } |

Lube-Free Series, Water Resistant Specifications

| TSUBAKI Chain Number | | Max. Allowable Tension | | Roller Allowable Load | |
|----------------------|-------------|------------------------|----------|-----------------------|---------------|
| | | | | | |
| WEBR Type | WEBF Type | kN | {kgf} | R Roller | F Roller |
| | | | | kN {kgf/each} | kN {kgf/each} |
| RF03075WEBR | RF03075WEBF | 2.88 | { 290 } | 1.37 { 140 } | 0.89 { 90 } |
| RF03100WEBR | RF03100WEBF | | | | |
| RF05100WEBR | RF05100WEBF | | | | |
| RF05125WEBR | RF05125WEBF | 6.87 | { 700 } | 2.13 { 220 } | 1.37 { 140 } |
| RF05150WEBR | RF05150WEBF | | | | |
| RF08125WEBR | RF08125WEBF | 7.56 | { 770 } | 2.88 { 290 } | 1.86 { 190 } |
| RF08150WEBR | RF08150WEBF | | | | |
| RF10100WEBR | — | | | | |
| RF10125WEBR | RF10125WEBF | 11.0 | { 1120 } | 3.84 { 390 } | 2.40 { 240 } |
| RF10150WEBR | RF10150WEBF | | | | |
| RF12200WEBR | RF12200WEBF | 18.6 | { 1900 } | 5.84 { 600 } | 3.84 { 390 } |
| RF12250WEBR | RF12250WEBF | | | | |
| RF17200WEBR | RF17200WEBF | | | | |
| RF17250WEBR | RF17250WEBF | 24..0 | { 2450 } | 9.87 { 1010 } | 6.87 { 700 } |
| RF17300WEBR | RF17300WEBF | | | | |
| RF26250WEBR | RF26250WEBF | 30.9 | { 3150 } | 13.7 { 1400 } | 9.59 { 980 } |
| RF26300WEBR | RF26300WEBF | | | | |
| RF36300WEBR | RF36300WEBF | 47.4 | { 4830 } | 19.3 { 1970 } | 13.0 { 1330 } |

Chain Numbering Example

RF03075 EB R -1L A2-DT

Chain Size

Bearing Roller Spec:

EB: Lube-Free Series, Standard Specs
WEB: Lube-Free Series, Water Resistant Specs

Chain Spec. Code

DT: Standard Series
AT : Heavy Duty Series
(Water Resistant: No code)

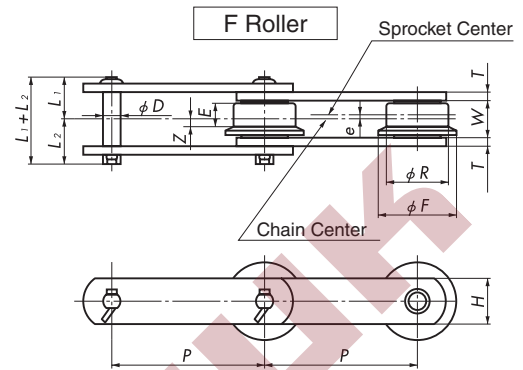
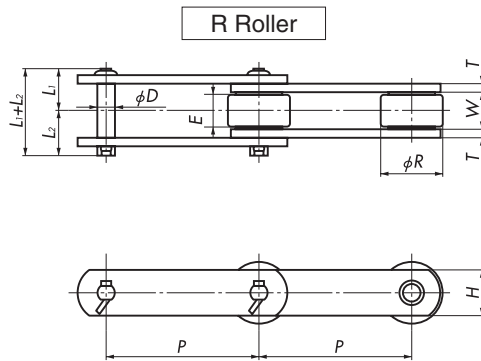
Attachment Type

Attachment Spacing

Roller Type:

R: R Roller
F: F Roller

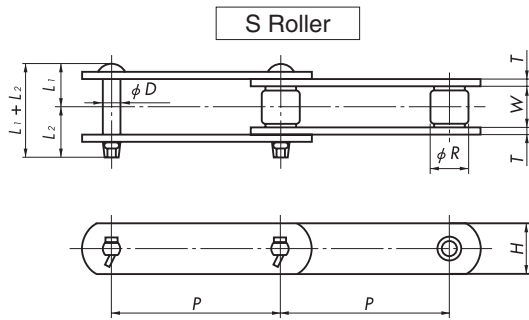
Standard Series, BR/BF Type, Lube-Free Series, Standard Specifications



| TSUBAKI Chain Number | | | | | | Pitch <i>P</i> | Roller | | | | | | |
|-------------------------|-----------|--------------------------|------------|-------------------------|------------|-------------------|----------|---------------|----------|-----------------|---------------|------------|-----|
| | | | | | | | R Roller | | F Roller | | | | |
| Standard Series | | | | Lube-free Series | | | Diameter | Contact Width | Diameter | Flange Diameter | Contact Width | Off-center | Z |
| Standard Specifications | | Anti-dust Specifications | | Standard Specifications | | | <i>R</i> | <i>E</i> | <i>R</i> | <i>F</i> | <i>E</i> | <i>e</i> | |
| RF03075BR | RF03075BF | — | — | RF03075EBR | RF03075EBF | 75 | 31.8 | 14 | 31.8 | 42 | 11 | 1.5 | 4.3 |
| RF03100BR | RF03100BF | — | — | RF03100EBR | RF03100EBF | 100 | | | | | | | |
| | | | | | | | | | | | | | |
| RF05100BR | RF05100BF | — | — | RF05100EBR | RF05100EBF | 100 | 40 | 19 | 40 | 50 | 14 | 2.5 | 4.5 |
| RF05125BR | RF05125BF | — | — | RF05125EBR | RF05125EBF | 125 | | | | | | | |
| RF05150BR | RF05150BF | — | — | RF05150EBR | RF05150EBF | 150 | | | | | | | |
| RF08125BR | RF08125BF | — | — | RF08125EBR | RF08125EBF | 125 | 44.5 | 23 | 44.5 | 55 | 18 | 2.5 | 6.5 |
| RF08150BR | RF08150BF | — | — | RF08150EBR | RF08150EBF | 150 | | | | | | | |
| | | | | | | | | | | | | | |
| RF10100BR | — | RF10100DBR | — | RF10100EBR | — | 100 | 50.8 | 26 | 50.8 | 65 | 20 | 3 | 7 |
| RF10125BR | RF10125BF | RF10125DBR | RF10125DBF | RF10125EBR | RF10125EBF | 125 | | | | | | | |
| RF10150BR | RF10150BF | RF10150DBR | RF10150DBF | RF10150EBR | RF10150EBF | 150 | | | | | | | |
| RF12200BR | RF12200BF | RF12200DBR | RF12200DBF | RF12200EBR | RF12200EBF | 200 | 65 | 32 | 65 | 80 | 24 | 4 | 8 |
| RF12250BR | RF12250BF | RF12250DBR | RF12250DBF | RF12250EBR | RF12250EBF | 250 | | | | | | | |
| | | | | | | | | | | | | | |
| RF17200BR | RF17200BF | RF17200DBR | RF17200DBF | RF17200EBR | RF17200EBF | 200 | 80 | 44 | 80 | 100 | 34 | 5 | 12 |
| RF17250BR | RF17250BF | RF17250DBR | RF17250DBF | RF17250EBR | RF17250EBF | 250 | | | | | | | |
| RF17300BR | RF17300BF | RF17300DBR | RF17300DBF | RF17300EBR | RF17300EBF | 300 | | | | | | | |
| RF26250BR | RF26250BF | RF26250DBR | RF26250DBF | RF26250EBR | RF26250EBF | 250 | 100 | 50 | 100 | 125 | 38 | 6 | 13 |
| RF26300BR | RF26300BF | RF26300DBR | RF26300DBF | RF26300EBR | RF26300EBF | 300 | | | | | | | |
| RF26450BR | RF26450BF | RF26450DBR | RF26450DBF | RF26450EBR | RF26450EBF | 450 | | | | | | | |
| RF36300BR | RF36300BF | RF36300DBR | RF36300DBF | RF36300EBR | RF36300EBF | 300 | 125 | 56 | 125 | 150 | 42 | 7 | 14 |
| RF36450BR | RF36450BF | RF36450DBR | RF36450DBF | RF36450EBR | RF36450EBF | 450 | | | | | | | |
| RF36600BR | RF36600BF | RF36600DBR | RF36600DBF | RF36600EBR | RF36600EBF | 600 | | | | | | | |

| TSUBAKI Chain Number | | | | | | Inner Link Inner Width W | Plate | | Pin | | | | Approximate Mass kg/m | |
|-------------------------|-----------|--------------------------|-------------------------|------------|------------|------------------------------------|-------------|----------------|---------------|--------------------------------|----------------|----------------|--------------------------|----------|
| Standard Series | | | Lube-free Series | | | | Height H | Thickness T | Diameter D | L ₁ +L ₂ | L ₁ | L ₂ | R Roller | F Roller |
| Standard Specifications | | Anti-dust Specifications | Standard Specifications | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| RF03075BR | RF03075BF | — | — | RF03075EBR | RF03075EBF | 16.1 | 22 | 3.2 | 8.0 | 38 | 18 | 20 | 2.8 | 2.9 |
| RF03100BR | RF03100BF | — | — | RF03100EBR | RF03100EBF | | | | | | | | 2.4 | 2.5 |
| RF05100BR | RF05100BF | — | — | RF05100EBR | RF05100EBF | 22 | 32 | 4.5 | 11.3 | 53.5 | 25 | 28.5 | 5.2 | 5.4 |
| RF05125BR | RF05125BF | — | — | RF05125EBR | RF05125EBF | | | | | | | | 4.5 | 4.6 |
| RF05150BR | RF05150BF | — | — | RF05150EBR | RF05150EBF | | | | | | | | 4.2 | 4.4 |
| RF08125BR | RF08125BF | — | — | RF08125EBR | RF08125EBF | 27 | 28.6 | 6.3 | 11.3 | 65.5 | 31 | 34.5 | 5.9 | 6.2 |
| RF08150BR | RF08150BF | — | — | RF08150EBR | RF08150EBF | | | | | | | | 5.6 | 5.8 |
| RF10100BR | — | RF10100DBR | — | RF10100EBR | — | 30 | 38.1 | 6.3 | 14.5 | 69 | 33 | 36 | 10.0 | — |
| RF10125BR | RF10125BF | RF10125DBR | RF10125DBF | RF10125EBR | RF10125EBF | | | | | | | | 8.7 | 9.0 |
| RF10150BR | RF10150BF | RF10150DBR | RF10150DBF | RF10150EBR | RF10150EBF | | | | | | | | 8.0 | 8.3 |
| RF12200BR | RF12200BF | RF12200DBR | RF12200DBF | RF12200EBR | RF12200EBF | 37.1 | 44.5 | 7.9 | 15.9 | 83.5 | 40.5 | 43 | 11.6 | 12.1 |
| RF12250BR | RF12250BF | RF12250DBR | RF12250DBF | RF12250EBR | RF12250EBF | | | | | | | | 10.4 | 10.8 |
| RF17200BR | RF17200BF | RF17200DBR | RF17200DBF | RF17200EBR | RF17200EBF | 51.4 | 50.8 | 9.5 | 19.1 | 109.5 | 51.5 | 58 | 20.0 | 21.0 |
| RF17250BR | RF17250BF | RF17250DBR | RF17250DBF | RF17250EBR | RF17250EBF | | | | | | | | 17.0 | 18.0 |
| RF17300BR | RF17300BF | RF17300DBR | RF17300DBF | RF17300EBR | RF17300EBF | | | | | | | | 16.0 | 16.0 |
| RF26250BR | RF26250BF | RF26250DBR | RF26250DBF | RF26250EBR | RF26250EBF | 57.2 | 63.5 | 9.5 | 22.2 | 116.5 | 55.5 | 61 | 26.0 | 27.0 |
| RF26300BR | RF26300BF | RF26300DBR | RF26300DBF | RF26300EBR | RF26300EBF | | | | | | | | 23.0 | 24.0 |
| RF26450BR | RF26450BF | RF26450DBR | RF26450DBF | RF26450EBR | RF26450EBF | | | | | | | | 19.0 | 19.0 |
| RF36300BR | RF36300BF | RF36300DBR | RF36300DBF | RF36300EBR | RF36300EBF | 66.7 | 76.2 | 12.7 | 25.4 | 146 | 68 | 78 | 40.0 | 42.0 |
| RF36450BR | RF36450BF | RF36450DBR | RF36450DBF | RF36450EBR | RF36450EBF | | | | | | | | 32.0 | 33.0 |
| RF36600BR | RF36600BF | RF36600DBR | RF36600DBF | RF36600EBR | RF36600EBF | | | | | | | | 28.0 | 29.0 |

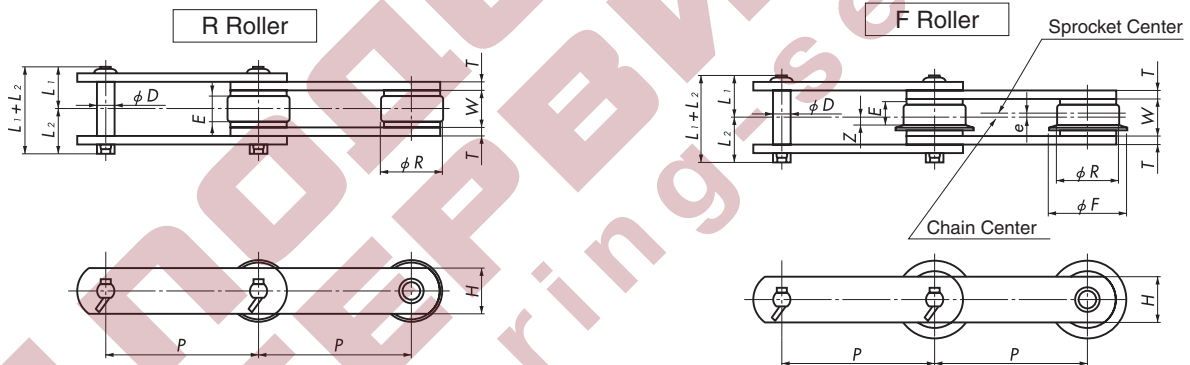
Standard Series, BS Type



| TSUBAKI Chain Number | Pitch P | Roller Diameter R | Inner Link Inner Width W | Plate | | Pin | | | | Approximate Mass kg/m |
|----------------------|--------------|---------------------------|----------------------------------|---------------|------------------|-----------------|-------------|-------|-------|--------------------------|
| | | | | Height H | Thickness T | Diameter D | $L_1 + L_2$ | L_1 | L_2 | |
| RF10100BS | 100 | 29 | 30 | 38.1 | 6.3 | 14.5 | 69 | 33 | 36 | 6.8 |
| RF10125BS | 125 | | | | | | | | | 6.2 |
| RF10150BS | 150 | | | | | | | | | 5.8 |
| RF12200BS | 200 | 34.9 | 37.1 | 44.5 | 7.9 | 15.9 | 83.5 | 40.5 | 43 | 8.2 |
| RF12250BS | 250 | | | | | | | | | 7.7 |

Note: See pgs. 15 and 16 for combining standard attachments with different roller types.

Lube-Free Series, Water Resistant Specifications (WEBR, WEBF)



| TSUBAKI Chain Number | | Pitch <i>P</i> | Roller | | | | | | | Inner Link Inner Width <i>W</i> | Plate | | Pin | | | | Approximate Mass kg/m | |
|----------------------|-------------|-------------------|----------------------|-----------------------------|----------------------|-----------------------------|---------------------------|------------------------|----------|---------------------------------------|--------------------|-----------------------|----------------------|---|-----------------------|-----------------------|--------------------------|----------|
| | | | R Roller | | F Roller | | | | | | Height <i>H</i> | Thickness <i>T</i> | Diameter <i>D</i> | <i>L</i> ₁ + <i>L</i> ₂ | <i>L</i> ₁ | <i>L</i> ₂ | R Roller | F Roller |
| | | | Diameter <i>R</i> | Contact Width <i>E</i> ※ | Diameter <i>R</i> | Flange Diameter <i>F</i> | Contact Width <i>E</i> | Off-center <i>e</i> | <i>Z</i> | | | | | | | | | |
| RF03075WEBR | RF03075WEBF | 75 | 31.8 | 12.3 | 31.8 | 42 | 9.1 | 1.6 | 3 | 16.1 | 22 | 3.2 | 8.0 | 38 | 18 | 20 | 2.8 | 2.9 |
| RF03100WEBR | RF03100WEBF | 100 | | | | | | | | | | | | | | | 2.4 | 2.5 |
| RF05100WEBR | RF05100WEBF | 100 | | | | | | | | | | | | | | | 5.2 | 5.4 |
| RF05125WEBR | RF05125WEBF | 125 | 40 | 17 | 40 | 50 | 13 | 2 | 4.5 | 22 | 32 | 4.5 | 11.3 | 53.5 | 25 | 28.5 | 4.5 | 4.6 |
| RF05150WEBR | RF05150WEBF | 150 | | | | | | | | | | | | | | | 4.2 | 4.4 |
| RF08125WEBR | RF08125WEBF | 125 | | | | | | | | | | | | | | | 5.9 | 6.2 |
| RF08150WEBR | RF08150WEBF | 150 | 44.5 | 21 | 44.5 | 55 | 17 | 2 | 6.5 | 27 | 28.6 | 6.3 | 11.3 | 65.5 | 31 | 34.5 | 5.6 | 5.8 |
| RF10100WEBR | — | 100 | | | | | | | | | | | | | | | 10.0 | — |
| RF10125WEBR | RF10125WEBF | 125 | | | | | | | | 50.8 | 23 | 50.8 | 65 | 18.5 | 2.3 | 7 | 30 | 38.1 |
| RF10150WEBR | RF10150WEBF | 150 | 8.0 | 8.3 | | | | | | | | | | | | | | |
| RF12200WEBR | RF12200WEBF | 200 | 65 | 28 | 65 | 80 | 22 | 3 | 8 | 37.1 | 44.5 | 7.9 | 15.9 | 83.5 | 40.5 | 43 | 11.6 | 12.1 |
| RF12250WEBR | RF12250WEBF | 250 | | | | | | | | | | | | | | | 10.4 | 10.8 |
| RF17200WEBR | RF17200WEBF | 200 | | | | | | | | | | | | | | | 20 | 21 |
| RF17250WEBR | RF17250WEBF | 250 | 80 | 40 | 80 | 100 | 32 | 4 | 12 | 51.4 | 50.8 | 9.5 | 19.1 | 51.5 | 58 | — | 17 | 18 |
| RF17300WEBR | RF17300WEBF | 300 | | | | | | | | | | | | | | | 16 | 16 |
| RF26250WEBR | RF26250WEBF | 250 | 100 | 46 | 100 | 125 | 36 | 5 | 13 | 57.2 | 63.5 | 9.5 | 22.2 | 116.5 | 55.5 | 61 | 26 | 27 |
| RF26300WEBR | RF26300WEBF | 300 | | | | | | | | | | | | | | | 23 | 24 |
| RF36300WEBR | RF36300WEBF | 300 | | | | | | | | | | | | | | | 40 | 42 |

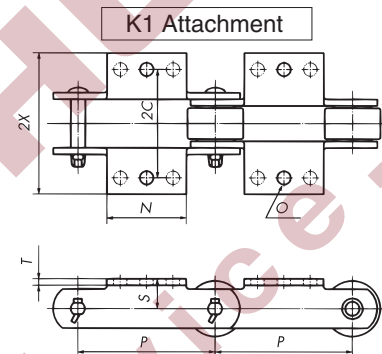
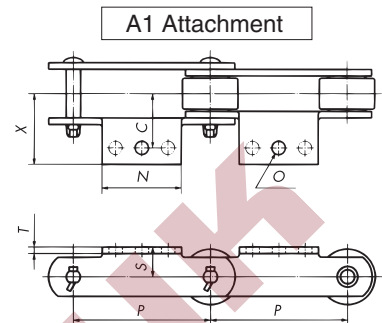
Note: See pgs. 15 and 16 for combining standard attachments with different roller types. Also, See pgs. 17 for connection.

Attachment Chart

A1/K1 Attachments

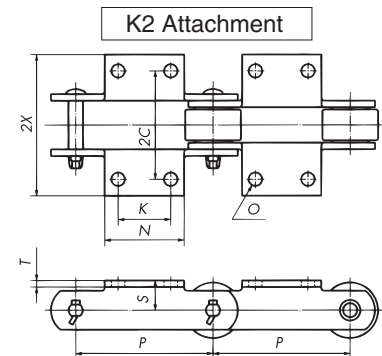
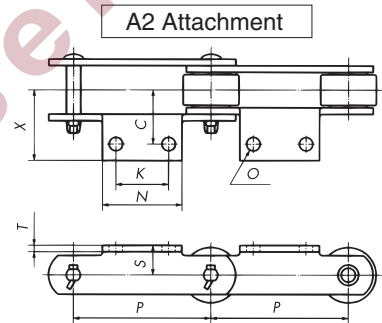
| TSUBAKI Chain Number | Bearing Roller Type | | | Pitch P | S | C | 2C | X | 2X | N | T | O | Bolt Used | Additional Mass/Each kg |
|----------------------|---------------------|-------------|-------------|------------|----|----|-----|-----|-----|-----|-----|----|-----------|-------------------------|
| | R Roller | F Roller | S Roller | | | | | | | | | | | |
| RF03075 | ○ | ○ | — | 75 | 20 | 30 | 60 | 46 | 92 | 55 | 3.2 | 10 | M8 | 0.06 |
| RF03100 | ○ | ○ | — | 100 | | | | | | 65 | | | | 0.07 |
| RF05100 | ○ | ○ | — | 100 | | | | | | 65 | | | | 0.07 |
| RF05125 | ○ | ○ | — | 125 | 22 | 35 | 70 | 47 | 94 | 75 | 4.5 | 10 | M8 | 0.08 |
| RF05150 | ○ | ○ | — | 150 | | | | | | 85 | | | | 0.10 |
| RF08125 | ○ | ○ | — | 125 | 28 | 50 | 100 | 64 | 128 | 80 | 6.3 | 12 | M10 | 0.19 |
| RF08150 | ○ | ○ | — | 150 | | | | | | 90 | | | | 0.23 |
| RF10100 | ○ | — | ○ | 100 | | | | | | 70 | | | | 0.16 |
| RF10125 | ○ | ○ | ○ | 125 | 28 | 50 | 100 | 67 | 134 | 80 | 6.3 | 12 | M10 | 0.18 |
| RF10150 | ○ | ○ | ○ | 150 | | | | | | 90 | | | | 0.20 |
| RF12200 | ○ | ○ | ○ | 200 | 38 | 60 | 120 | 79 | 158 | 120 | 7.9 | 15 | M12 | 0.44 |
| RF12250 | ○ | ○ | ○ | 250 | | | | | | 170 | | | | 0.61 |
| RF17200 | ○ | ○ | — | 200 | | | | | | 120 | | | | 0.64 |
| RF17250 | ○ | ○ | — | 250 | 45 | 75 | 150 | 100 | 200 | 170 | 9.5 | 15 | M12 | 0.88 |
| RF17300 | ○ | ○ | — | 300 | | | | | | 220 | | | | 1.26 |
| RF26250 | ○ | ○ | — | 250 | 55 | 80 | 160 | 108 | 216 | 170 | 9.5 | 15 | M12 | 1.01 |
| RF26300 | ○ | ○ | — | 300 | | | | | | 220 | | | | 1.34 |

Note Three-hole attachments may be sent for some attachment orders. If you receive a three-hole attachment, use the center hole.



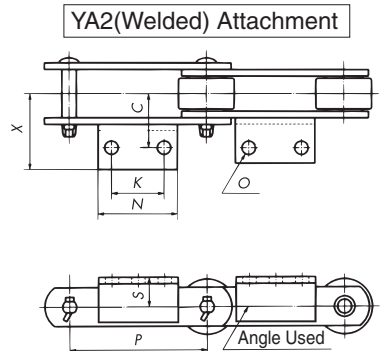
A2/K2 Attachments

| TSUBAKI Chain Number | Bearing Roller Type | | | Pitch P | S | C | 2C | X | 2X | N | K | T | O | Bolt Used | Additional Mass/Each kg |
|----------------------|---------------------|-------------|-------------|------------|----|----|-----|-----|-----|-----|-----|-----|----|-----------|-------------------------|
| | R Roller | F Roller | S Roller | | | | | | | | | | | | |
| RF03075 | ○ | ○ | — | 75 | 20 | 30 | 60 | 46 | 92 | 55 | 30 | 3.2 | 10 | M8 | 0.06 |
| RF03100 | ○ | ○ | — | 100 | | | | | | 65 | 40 | | | | 0.07 |
| RF05100 | ○ | ○ | — | 100 | | | | | | 65 | 40 | | | | 0.07 |
| RF05125 | ○ | ○ | — | 125 | 22 | 35 | 70 | 47 | 94 | 75 | 50 | 4.5 | 10 | M8 | 0.08 |
| RF05150 | ○ | ○ | — | 150 | | | | | | 85 | 60 | | | | 0.10 |
| RF08125 | ○ | ○ | — | 125 | 28 | 50 | 100 | 64 | 128 | 80 | 50 | 6.3 | 12 | M10 | 0.19 |
| RF08150 | ○ | ○ | — | 150 | | | | | | 90 | 60 | | | | 0.23 |
| RF10100 | ○ | — | ○ | 100 | | | | | | 70 | 40 | | | | 0.16 |
| RF10125 | ○ | ○ | ○ | 125 | 28 | 50 | 100 | 67 | 134 | 80 | 50 | 6.3 | 12 | M10 | 0.18 |
| RF10150 | ○ | ○ | ○ | 150 | | | | | | 90 | 60 | | | | 0.20 |
| RF12200 | ○ | ○ | ○ | 200 | 38 | 60 | 120 | 79 | 158 | 120 | 80 | 7.9 | 15 | M12 | 0.44 |
| RF12250 | ○ | ○ | ○ | 250 | | | | | | 170 | 125 | | | | 0.61 |
| RF17200 | ○ | ○ | — | 200 | | | | | | 120 | 80 | | | | 0.64 |
| RF17250 | ○ | ○ | — | 250 | 45 | 75 | 150 | 100 | 200 | 170 | 125 | 9.5 | 15 | M12 | 0.88 |
| RF17300 | ○ | ○ | — | 300 | | | | | | 220 | 180 | | | | 1.26 |
| RF26250 | ○ | ○ | — | 250 | 55 | 80 | 160 | 108 | 216 | 170 | 125 | 9.5 | 15 | M12 | 1.01 |
| RF26300 | ○ | ○ | — | 300 | | | | | | 220 | 180 | | | | 1.34 |



YA2(Welded) Attachments

| TSUBAKI Chain Number | Bearing Roller Type | | | Pitch P | S | C | 2C | X | 2X | N | K | O | Angle Used | Bolt Used | Additional Mass/Each kg |
|----------------------|---------------------|-------------|-------------|------------|----|-----|-----|-------|-----|-----|-----|----|-------------|-----------|-------------------------|
| | R Roller | F Roller | S Roller | | | | | | | | | | | | |
| RF26450 | ○ | ○ | — | 450 | 55 | 80 | 160 | 123.5 | 247 | 320 | 280 | 15 | L75×75×9 | M12 | 3.19 |
| RF36300 | ○ | ○ | — | 300 | | | | | | 160 | 100 | | | | 2.40 |
| RF36450 | ○ | ○ | — | 450 | 70 | 100 | 200 | 160 | 320 | 330 | 280 | 19 | L100×100×10 | M16 | 4.90 |
| RF36600 | ○ | ○ | — | 600 | | | | | | 410 | 360 | | | | 6.10 |

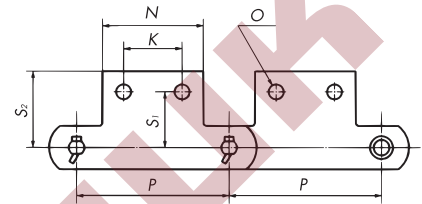
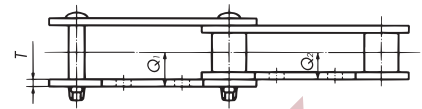




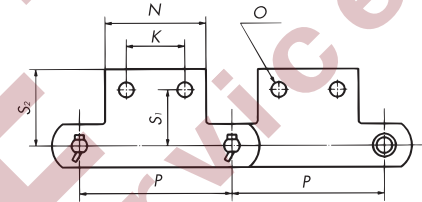
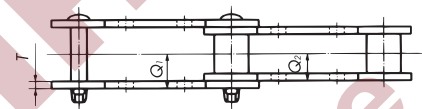
SA2/SK2 Attachments

| TSUBAKI Chain Number | Bearing Roller Type | | | Pitch <i>P</i> | <i>S</i> ₁ | <i>S</i> ₂ | <i>Q</i> ₁ | <i>Q</i> ₂ | <i>N</i> | <i>K</i> | <i>T</i> | <i>O</i> | Bolt Used | Additional Mass/Each kg |
|----------------------|---------------------|----------|----------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|----------|----------|----------|-----------|-------------------------|
| | R Roller | F Roller | S Roller | | | | | | | | | | | |
| RF03075 | ○ | — | — | 75 | 33 | 49 | 15.5 | 11.5 | 55 | 30 | 3.2 | 10 | M8 | 0.06 |
| RF03100 | ○ | — | — | 100 | | | | | 65 | 40 | | | | 0.07 |
| RF05100 | ○ | — | — | 100 | | | | | 65 | 40 | | | | 0.07 |
| RF05125 | ○ | — | — | 125 | 33.4 | 50.7 | 21 | 15.5 | 75 | 50 | 4.5 | 10 | M8 | 0.08 |
| RF05150 | ○ | — | — | 150 | | | | | 85 | 60 | | | | 0.10 |
| RF08125 | ○ | — | — | 125 | 46.1 | 60.7 | 27 | 20 | 80 | 50 | 6.3 | 12 | M10 | 0.19 |
| RF08150 | ○ | — | — | 150 | | | | | 90 | 60 | | | | 0.23 |
| RF10100 | ○ | — | ○ | 100 | | | | | 70 | 40 | | | | 0.16 |
| RF10125 | ○ | — | ○ | 125 | 46.1 | 63 | 28.5 | 21.5 | 80 | 50 | 6.3 | 12 | M10 | 0.18 |
| RF10150 | ○ | — | ○ | 150 | | | | | 90 | 60 | | | | 0.20 |
| RF12200 | ○ | — | ○ | 200 | | | | | 120 | 80 | 7.9 | 15 | M12 | 0.44 |
| RF12250 | ○ | — | ○ | 250 | 55 | 75.7 | 35.5 | 26.5 | 170 | 125 | | | | 0.61 |

SA2 Attachment



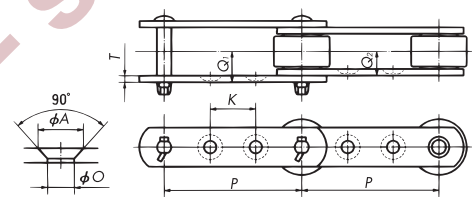
SK2 Attachment



GA2 Attachments

| TSUBAKI Chain Number | Bearing Roller Type | | | Pitch <i>P</i> | <i>K</i> | <i>T</i> | <i>Q</i> ₁ | <i>Q</i> ₂ | <i>A</i> | <i>O</i> | Max. Length of Attached Bolt | | Bolt Used |
|----------------------|---------------------|----------|----------|-------------------|----------|----------|-----------------------|-----------------------|----------|----------|------------------------------|------------|-----------|
| | R Roller | F Roller | S Roller | | | | | | | | Outer Link | Inner Link | |
| RF03075 | ○ | — | — | 75 | 30 | 3.2 | 15.5 | 11.5 | 13.5 | 8 | 26 | 19 | M8 |
| RF03100 | ○ | — | — | 100 | 50 | | | | | | | | |
| RF05100 | ○ | — | — | 100 | 40 | | | | | | | | |
| RF05125 | ○ | ○ | — | 125 | 50 | 4.5 | 21 | 15.5 | 15 | 10 | 36 | 26 | M8 |
| RF05150 | ○ | ○ | — | 150 | 60 | | | | | | | | |
| RF08150 | ○ | ○ | — | 150 | 60 | 6.3 | 27 | 20 | 20 | 12 | 45 | 31 | M10 |
| RF10100 | — | — | ○ | 100 | 30 | | | | | | | | |
| RF10125 | ○ | — | ○ | 125 | 40 | 6.3 | 28.5 | 21.5 | 20 | 12 | 49 | 35 | M10 |
| RF10150 | ○ | ○ | ○ | 150 | 60 | | | | | | | | |
| RF12200 | ○ | ○ | ○ | 200 | 80 | | | | | | | | |
| RF12250 | ○ | ○ | ○ | 250 | 125 | 7.9 | 35.5 | 26.5 | 26 | 15 | 63 | 45 | M12 |
| RF17200 | ○ | ○ | — | 200 | 70 | | | | | | | | |
| RF17250 | ○ | ○ | — | 250 | 110 | 9.5 | 45.5 | 35 | 26 | 15 | 81 | 61 | M12 |
| RF17300 | ○ | ○ | — | 300 | 150 | | | | | | | | |
| RF26300 | ○ | ○ | — | 300 | 140 | 9.5 | 48.5 | 38 | 26 | 15 | 88 | 67 | M12 |
| RF26450 | ○ | ○ | — | 450 | 220 | | | | | | | | |
| RF36450 | ○ | ○ | — | 450 | 220 | 12.7 | 60 | 46 | 32 | 19 | 105 | 75 | M16 |
| RF36600 | ○ | ○ | — | 600 | 300 | | | | | | | | |

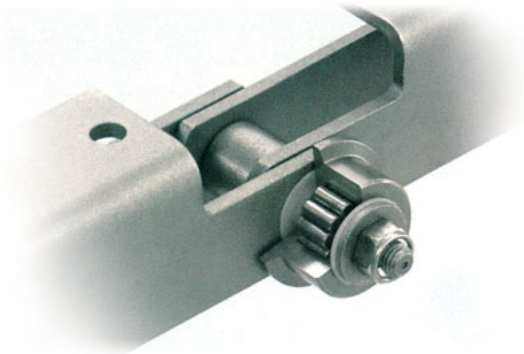
GA2 Attachment



Note:

1. A attachment mass in the chart refers to additional mass per attachment. Multiply that number by two for K attachments.
2. GA2 attachment mass is the same as that of the base chain.
3. Three-hole attachments may be sent for A1 or K1 attachment orders. If you receive a three-hole attachment, use the center hole.
4. Consult a Tsubaki representative if using a guide on A/K attachment sides.
5. When using slats attached to two strands of chain, be sure that slats are attached to either outer link-outer link or inner link-inner link.
6. Inch sizes also available. (Consult a Tsubaki representative for further details.)

Single Side Outboard Bearing Roller Conveyor Chain



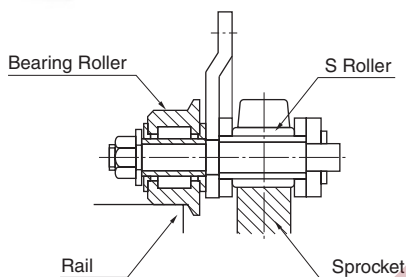
■ Assembly lines are often long. As workers work on top of the conveyor, stable conveyor running has a huge impact on work efficiency. Single Side Bearing Roller Conveyor Chain is designed with special features for such assembly lines.

Long Life

Single Side Bearing Roller Conveyor Chain supports conveyor load while running smoothly. The chain's S roller is specifically designed to engage the sprocket, reducing the load on the chain and extending chain life.

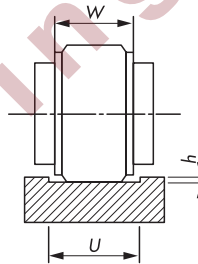
Changing Rollers is Easy

Outboard rollers can be changed while the chain is still on the conveyor. And because the outboard roller has a bushing, there is no damage to the chain pin.



⚠ Rail Fitting

When using a groove rail such as the one pictured on the right with Lube-Free Series Water Resistant Specifications, there is not much clearance between the roller and the spacer. Ensure the groove dimensions (U) are larger than the inner link inner width's (W). Tsubaki's recommended rail dimensions can be found to the right.



| Chain Size | Rail Groove Depth h |
|------------|-----------------------|
| RF03 | 1.6 |
| RF05 | 1.6 |
| RF08 | 1.6 |
| RF10 | 2.1 |
| RF12 | 2.1 |
| RF17 | 2.1 |
| RF26 | 2.1 |
| RF36 | 2.6 |



For Safe Use



WARNING

Obey the following points in order to prevent hazardous situations.

- Do not use chains and accessories (accessories and parts) for anything other than their original purpose.
- Never perform additional processing on the chain.
 - Do not anneal the various parts of the chain.
 - Do not clean the chain with either acid or alkali, as they may cause cracking.
 - Do not electroplate the chain or its parts, as it may cause cracking due to hydrogen embrittlement.
 - Do not weld the chain, as the heat may cause cracking or a reduction in strength.
 - When heating or cutting the chain with a torch, remove the links immediately adjacent and do not use them again.
- When there is need to replace a lost or damaged portion of a chain, always replace the whole chain with a new product rather than replacing only the lost or damaged portion.
- When using a chain on suspension equipment, establish a safety perimeter and strictly prevent entry to the area directly below the suspended object.
- Always employ hazard protection devices for the chain and sprocket (safety cover, etc.).
- If a substance that can cause embrittlement cracking (acid, strong alkali, battery fluid, etc.) adheres to the chain, stop using the chain immediately and replace it with a new one.
- During installation, removal, maintenance inspection and lubrication of the chain:
 - Perform the operation according to the instruction manual or this catalog.
 - Always turn off the power switch to the device and make sure that it cannot be turned on accidentally.
 - Anchor the chain and parts so that they cannot move freely.
 - Perform cutting and connecting procedures properly using a press or other special tool.
 - Wear clothing and employ protective devices that are appropriate to the job (safety glasses, gloves, safety shoes, etc.).
 - Only allow experienced personnel to perform chain replacement procedures.
- A fail safe back up system is suggested whenever using Leaf Chain to safely support the load in the event of a chain failure.



CAUTION

Obey the following points in order to prevent accidents.

- Only handle the chain after thoroughly understanding its structure and specifications.
- When installing a chain, inspect it in advance to confirm that it has not been damaged in transport.
- Be sure to perform regular maintenance inspections on the chain and sprocket.
- Chain strength varies according to manufacturer. When selecting a chain based on a Tsubaki catalog, always use the corresponding Tsubaki product.
- Minimum tensile strength refers to the failure point when the corresponding load is applied to the chain once and does not refer to the allowable operational load.

Warranty

1.LIMITED WARRANTY

Products manufactured by Seller: (a) conform to the design and specifications, if any, expressly agreed to in writing by Seller; and (b) are free of defects in workmanship and materials at the time of shipment. The warranties set forth in the preceding sentence are exclusive of all other warranties, express or implied, and extend only to Buyer and to no other person. ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED.

2.NON-RELIANCE

Buyer is not relying upon any advice, representations or warranties (except the warranties expressly set forth above) of Seller, or upon Seller's skill or judgment regarding the Seller's products.

Buyer is solely responsible for the design and specifications of the products, including without limitation, the determination of suitability for Buyer's application of the products.

3.CLAIMS

- (a) Any claim relating to quantity or type shall be made to Seller in writing within 7 days after receipt of the products; any such claim made thereafter shall be barred.
- (b) Any claim under the above-stated Limited Warranty shall be made to Seller in writing within three (3) months after receipt of the products; any such claim made thereafter shall be barred.
- (c) Seller's liability for breach of warranty or otherwise is limited to repair or replacement, at Seller's option, of non-conforming or defective products. Buyer waives all other remedies, including, but not limited to, all rights to consequential, special or

incidental damages, including, but not limited to, damages resulting from personal injury, death or damage to or loss of use of property.

- (d) Repair, alteration, neglect or misuse of the products shall void all applicable warranties.

4.INDEMNIFICATION

Buyer will indemnify, defend and hold Seller harmless from all loss, liability, damage and expense, including attorneys' fees, arising out of any claim (a) for infringement of any patent, trademark, copyright, misappropriation of trade secrets, unfair competition or similar charge by any products supplied by Seller in accordance with the design or specifications furnished by Buyer, or (b) arising out of or connected with the products or any items into which the products are incorporated, including, but not limited to, any claim for product liability (whether or not based on negligence or strict liability of Seller), breach of warranty, breach of contract or otherwise.

5.ENTIRE AGREEMENT

These terms and conditions constitute the entire agreement between Buyer and Seller and supersede any inconsistent terms and conditions, whether contained in Buyer's purchase order or otherwise, and whether made heretofore or hereafter.

No statement or writing subsequent to the date hereof which purports to modify or add to the terms and conditions hereof shall be binding unless consented to in writing, which makes specific reference hereto, and which has been signed by the party against which enforcement thereof is sought. Seller reserves the right to change these terms and conditions without prior notice.



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