Innovation in Motion

TSUBAKI

NEW

TSUBAKI TOP CHAIN

Providing Innovative Solutions for Industry Worldwide

Innovation in Motion

At Tsubaki, we know customers want the best. Indeed, we take pride in our ability to deliver an extensive product lineup that satisfies these high expectations. We are also aware that each and every one of our customers has unique requirements. Therefore, we believe that in the coming years there will be an increase in demand for products that can be readily applied to customers' global operational strategies. In other words, we foresee a rise in the need for highly customized products.

Our focus is on providing our customers around the world with concrete solutions by developing products to suit different countries, regions, and business environments.

Innovation in Motion. With an eye on future trends and lifestyles, we are committed to taking on the challenge of technical innovation. Based on our brand message, which embodies the commitment shared by all Group members around the world, the Tsubaki Group provides solid support for the global business activities of its customers. You can count on Tsubaki.

Global Network

The Tsubaki Group includes 30 production locations and 37 group companies worldwide. Our production and sales networks are more fully developed than ever.

Best Source / Best Supply

Through global development of our network, we constantly seek the best combination of regions based on product distribution and market feedback.

Tsubaki Global Business

● International Subsidiaries & Affiliates
○ Plants, Offices & Service Centers
● Distributors

Global Alliances

We continue to aggressively pursue operational alliances, mergers, and technical alliances with companies in Japan and throughout the world.

Global Marketing

With a keen grasp of the needs of customers, we use the Group's comprehensive strengths to commercialize products rapidly.

Providing a Diverse Range of Industries with Exceptional Quality and Valued Customer Service

Keeping technology on track

Cutting-edge materials analysis with an EPMA

Simulating chain movement through structural analysis

The Technical Center serves as a base for all technological development and information transmission within the worldwide Tsubaki Group. The Center carries out research and development of basic technologies, product evaluation using advanced analysis and simulation technologies, production engineering to enhance efficiency, and work involving quality assurance and intellectual property matters. By directly incorporating feedback from our customers into these R&D activities, the Center is able to provide extremely precise technological products and solutions.

A wide range of products

The Tsubaki Group combined its world-class experience in chain manufacturing with innovations in plastic to create the perfect lineup of chains. By carefully considering the problems that most chain users encounter, the Tsubaki Group has been able to develop new products and specifications that combat each of those problems individually. Our impressive lineup includes ultra low-friction, chemical-resistant, and impact-resistant chains as well as plastic pins and chains for tough, high-temperature/high-speed or anti-bacterial/ anti-mold applications.

Environmentally friendly

The Tsubaki Group understands that the preservation of the Earth's environment is one of the highest priorities for humankind. Plastic chains—the main products in the Tsubaki Group's Top Chain lineup—are environmentally friendly; they reduce power consumption and the labor hours customers must spend on waste disposal. Our aim is to consider the environment in all of our activities so as to contribute to the creation of a healthy and prosperous tomorrow.

Quality Management System

Tsubakimoto's Chain Division was certified for ISO 9001, the international quality management standard, in 1995. The Chain Division manufactures high-quality Top Chain that can be used in a variety of applications.

JQA-0911
CHAIN DIVISION

Environmental Management System

The Kyotanabe Plant and Kuki Plant were certified for ISO 14001, the international environmental management standard, in 2003 and 2008, respectively. The Kyotanabe Plant and Kuki Plant are actively involved in saving energy and resources as well as recycling.

JQA-EM3392
KYOTANABE PLANT
JQA-EM6201
KUKI PLANT

Tsubaki Top Chain Features and Lineup

Tsubaki Top Chains combine a full product lineup and innovative material technology to solve problems in your operation. With Tsubaki Top Chains, you'll reduce maintenance costs and down time, improve production performance, and contribute to environmental protection. Tsubaki's goal is to be a global solutions provider by supporting and contributing to your operations.

Plastic Chain Features

Protects conveyed goods

Proprietary soft plastic top plates are ideal for transporting products and materials that could be easily scratched.

Quiet operation

Plastic chain is 5 to 7dB quieter than stainless steel top chain, and ear-jarring noise is reduced.

Lightweight

Plastic chain is one-third the weight of stainless steel chain. In addition, using plastic pins (Plastic Pin series) provides a further 15% to 25% reduction in weight, minimizing required power and making handling easy.

Low friction

Plastic chains have a coefficient of friction 30% to 40% lower than stainless steel chains, effectively reducing required power and improving the ability to convey goods.

Sanitary

The simple construction of plastic chain makes it easy to wash and clean. Rust-free, this chain helps keep the environment clean. The engineering plastic used for the top plates is an approved material under Japan's Food Sanitation Act.

Self-lubricating

Self-lubricating engineering plastic allows dry, lube-free operation.

Stainless Steel Top Chain Features

High allowable load

Maximum allowable load is approximately double that of TTP and TP series plastic top chains.

Heat-resistant

304 stainless steel top chains can be used in temperatures ranging from –20°C to 400°C.

Corrosion and chemical resistance

When all components are made from 304 stainless steel, these chains can serve as standard corrosion-resistant chains.

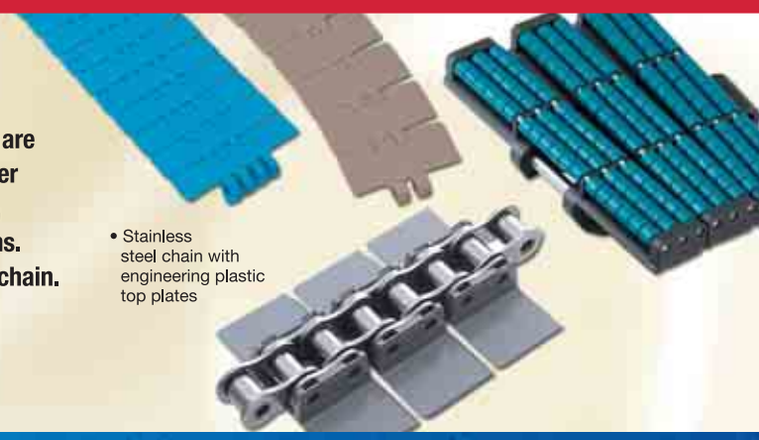
Plastic and Stainless Steel Chain Comparison Chart

Parameter	Plastic	Stainless Steel (SS)
Noise	–5 to –7dB	Taking value for SS as 0
Weight	1/3	Taking value for SS as 1
Coefficient of friction	1/1.5 to 1/2.5	Taking value for SS as 1
Operating temperature	–20° to 80°C (with some exceptions)	–20° to 400°C
Allowable tension	1/2	Taking value for SS as 1

Top Chain Lineup

Plastic Top Chain

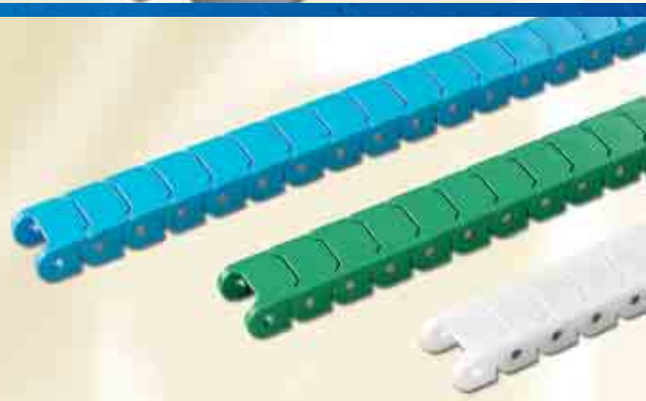
Top plates and chain parts are made of engineering plastic and are connected using engineering plastic or stainless steel pins. Other types feature plates of engineering plastic combined with steel, nickel-plated steel, lube-free steel, or stainless steel base chains. Yet another type includes rollers attached to a plastic top plate chain. The rollers rotate freely and reduce line pressure during accumulation. Plastic top chains are used mainly in the food processing, beverage, dairy, and packaging industries.



• Stainless steel chain with engineering plastic top plates

Plastic Block Chain

The small pitch of Plastic Block chain allows smaller diameter sprockets to be used, reducing the dead space between conveyors and ensuring smooth transfer of conveyed goods from one conveyor to another. Styles using D-pins are also available for applications where conveyed goods slide on the link surfaces or come in contact with the link surfaces. The main markets for Plastic Block chain come from the food processing, packaging, automobile, container, and pharmaceutical industries.



Beltop & Widetop Chain

Beltop and Widetop chain use an alternating combination of interconnected modular engineering plastic links to transport goods in large quantities on wide, belt-shaped conveyors. Chain-sprocket engagement ensures reliable drive without any slips. Three different link types are available according to application and type of goods being conveyed: closed, open, and net types. Beltop and Widetop chains are in demand in the corrugated cardboard, automobile, and food and beverage industries to replace conventional types in a variety of conveyor applications.

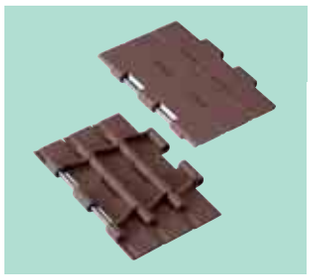
Stainless Steel Top Chain

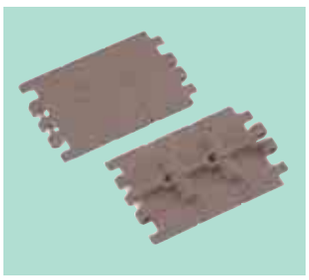
Stainless steel top chain uses highly corrosion-resistant stainless steel for key components. Two styles are available: top plates integrally formed with the chain, and a type in which the two components are separate and mechanically joined. Stainless steel top chain offers a higher maximum allowable load than standard plastic top chain and is especially suitable for transporting steel components or glass containers via direct mounting.

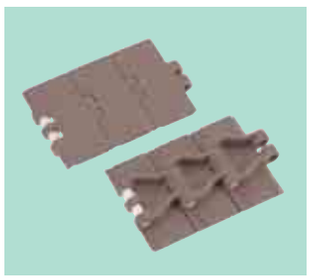
TSUBAKI Top Chain Lineup

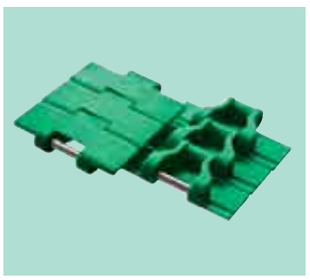
Plastic Top Chain

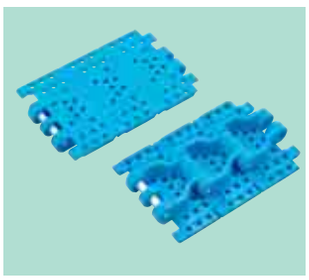
Straight Running

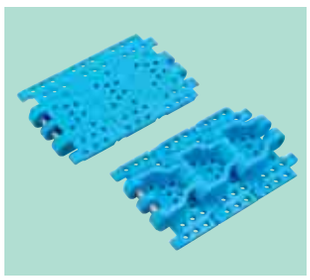


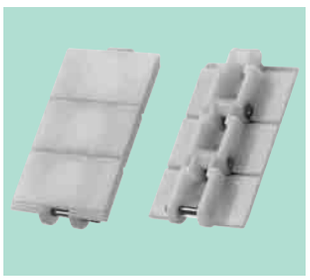


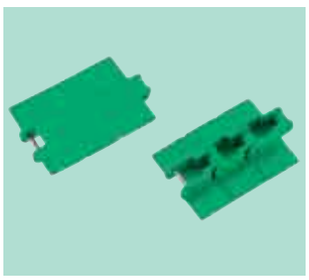






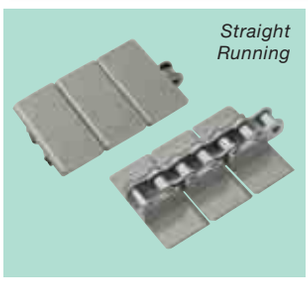






Plastic Top Chain

Snap-on Plastic Plates with Base Roller Chains



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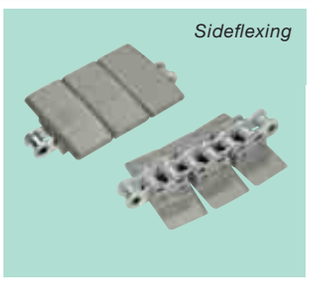

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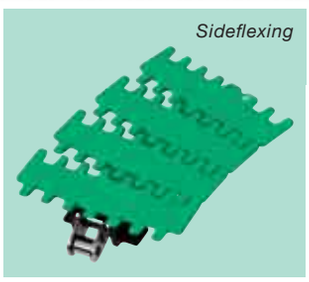

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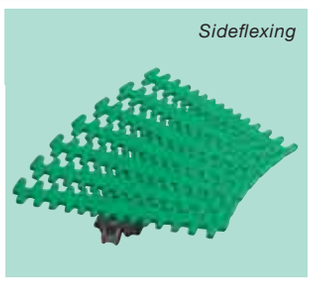
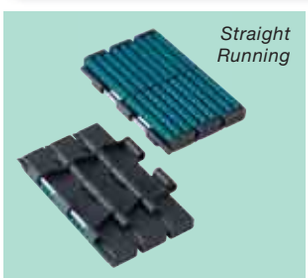


Tsubaki original

Chains with Accumulation Rollers

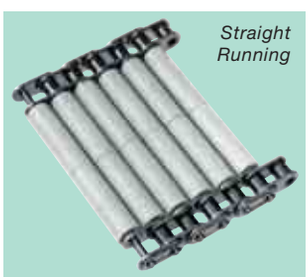


Type LBP821

Type LBP882TAB

Tsubaki original

Tsubaki original

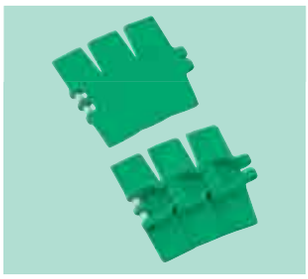


Tsubaki original

TSUBAKI Top Chain Lineup

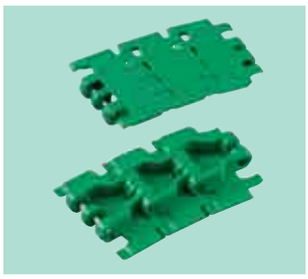
Plastic Top Chain

Sideflexing



TTUP-P·····50
Tsubaki original

TTUP·····49
Type 880

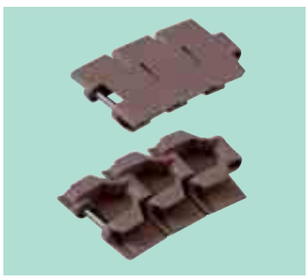


TTUPH·····51
Tsubaki original

TTUP-M & TTUPT-M
·····52
Type 880M & 879M

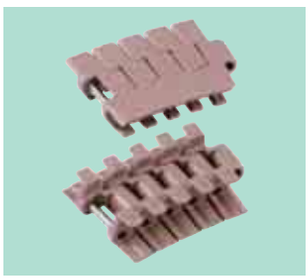
TTUPS·····53
Tsubaki original

TTUPM-P·····54
Tsubaki original



TPU-LH & TPUT-LH
·····55, 56
Type 880TAB & 879TAB

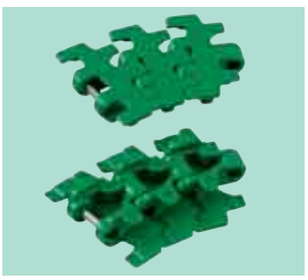
TPUS·····57
Type 882TAB



TPUM·····58
Tsubaki original

TPUH-BO·····59
Type 878TAB

TPUSR550·····61
Tsubaki original



TPUSR826·····63
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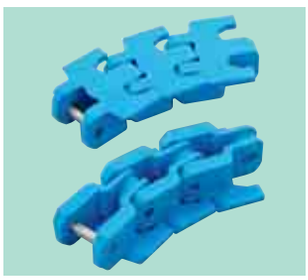


UB36·····65
Tsubaki original

TPUN555·····67
Tsubaki original

TPUN550-LH·····69
Type 1700

TPUN535-LH·····69
Type 1702

Plastic Top Chain

Sideflexing

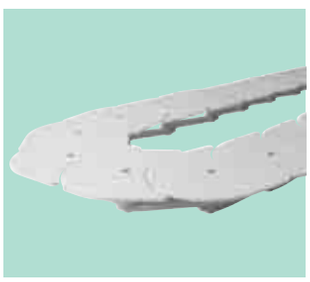
Tsubaki original

Tsubaki original

Tsubaki original

Type CC600 & CC600TAB

Tsubaki original



Tsubaki original

TSUBAKI Top Chain Lineup

Plastic Block Chain

Straight Running

RSP·····81
Tsubaki original

RSP-P·····82
Tsubaki original

RSP-SL·····83
Tsubaki original

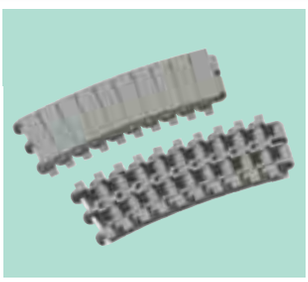
PO8PF·····84
Tsubaki original

PO8PFT·····85
Tsubaki original

RSP-2·····87
Tsubaki original

Sideflexing

RSP-CU & RSP-P-CU···86
Tsubaki original



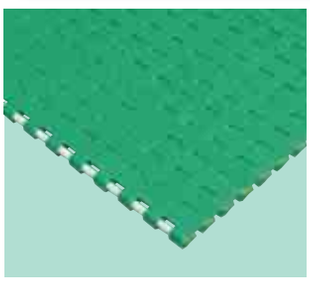
RSP-CU-2·····88
Tsubaki original

Plastic Block Chain with Base Roller Chains

Snap Cover Chain·····89
Tsubaki original

Beltop & Widetop Chain

Straight Running



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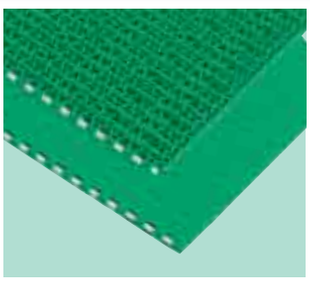

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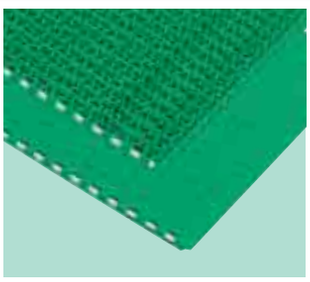

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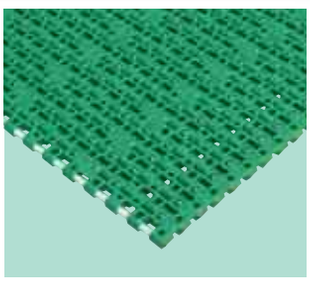

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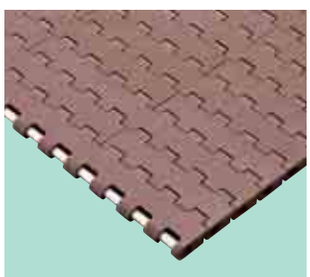
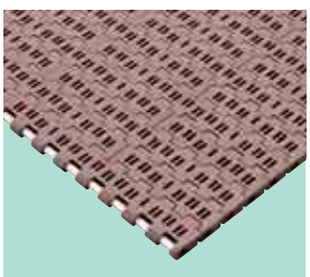


BTC6·····102
Tsubaki original



BTO6·····103
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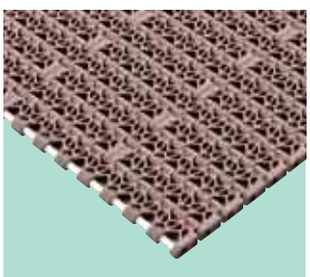

BTN6·····104
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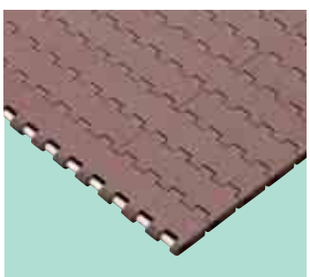
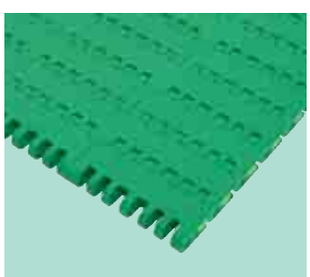


BTC8 & BTC8-A···106, 107
Tsubaki original



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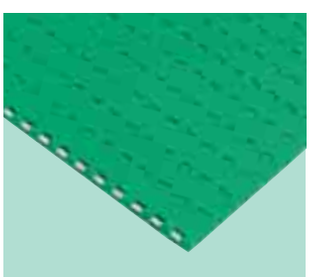
WT2506K·····112
Tsubaki original



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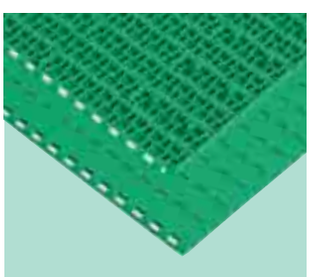

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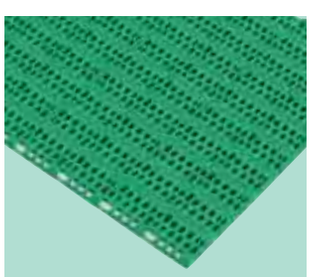
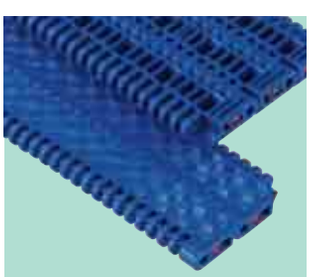


WT3086K·····119
Tsubaki original

WT3086GK·····120
Tsubaki original

WT3816K·····123
Tsubaki original



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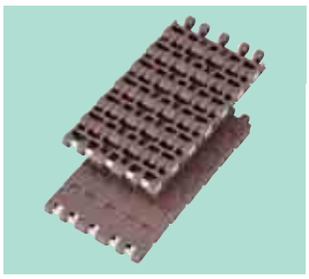
TSUBAKI Top Chain Lineup

Beltop & Widetop Chain Fixed Width Type

Straight Running



BTC4-M·····91
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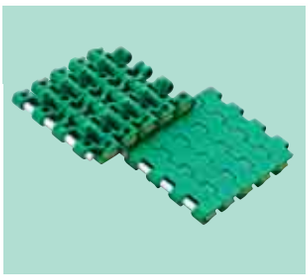

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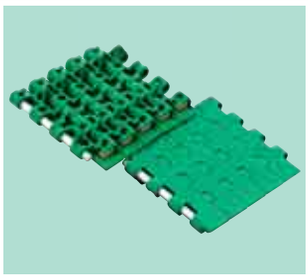

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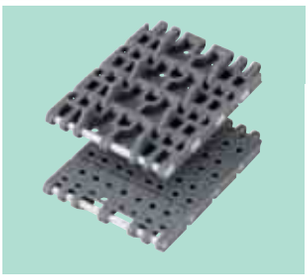
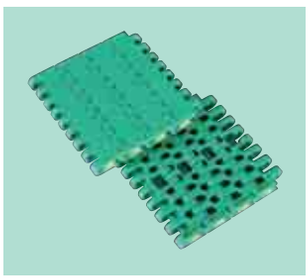
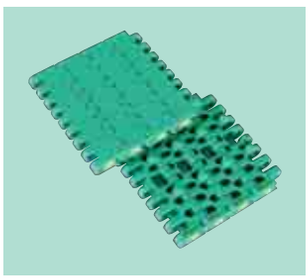


BTO8-M·····109
Tsubaki original



WT2505M·····113
Tsubaki original



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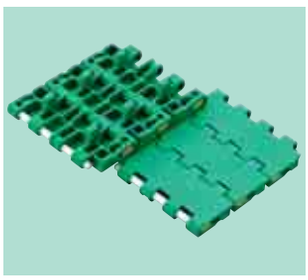
Tsubaki original



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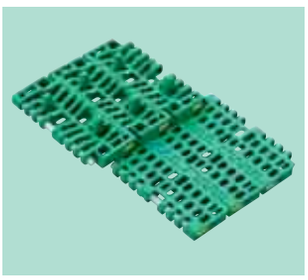
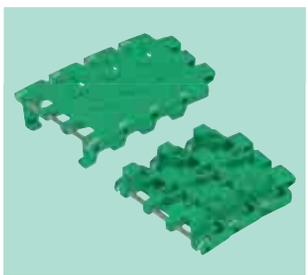


WT3086GM·····121
Tsubaki original

Sideflexing

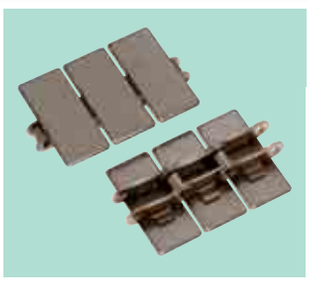


WT3085C325·····122
Tsubaki original

Stainless Steel Top Chain

Straight Running

TT·····125
Type 815

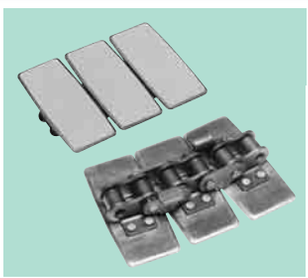


TS & TSA·····127
Tsubaki original

Sideflexing

TTU·····129
Type 8810

TTKU·····131
Tsubaki original



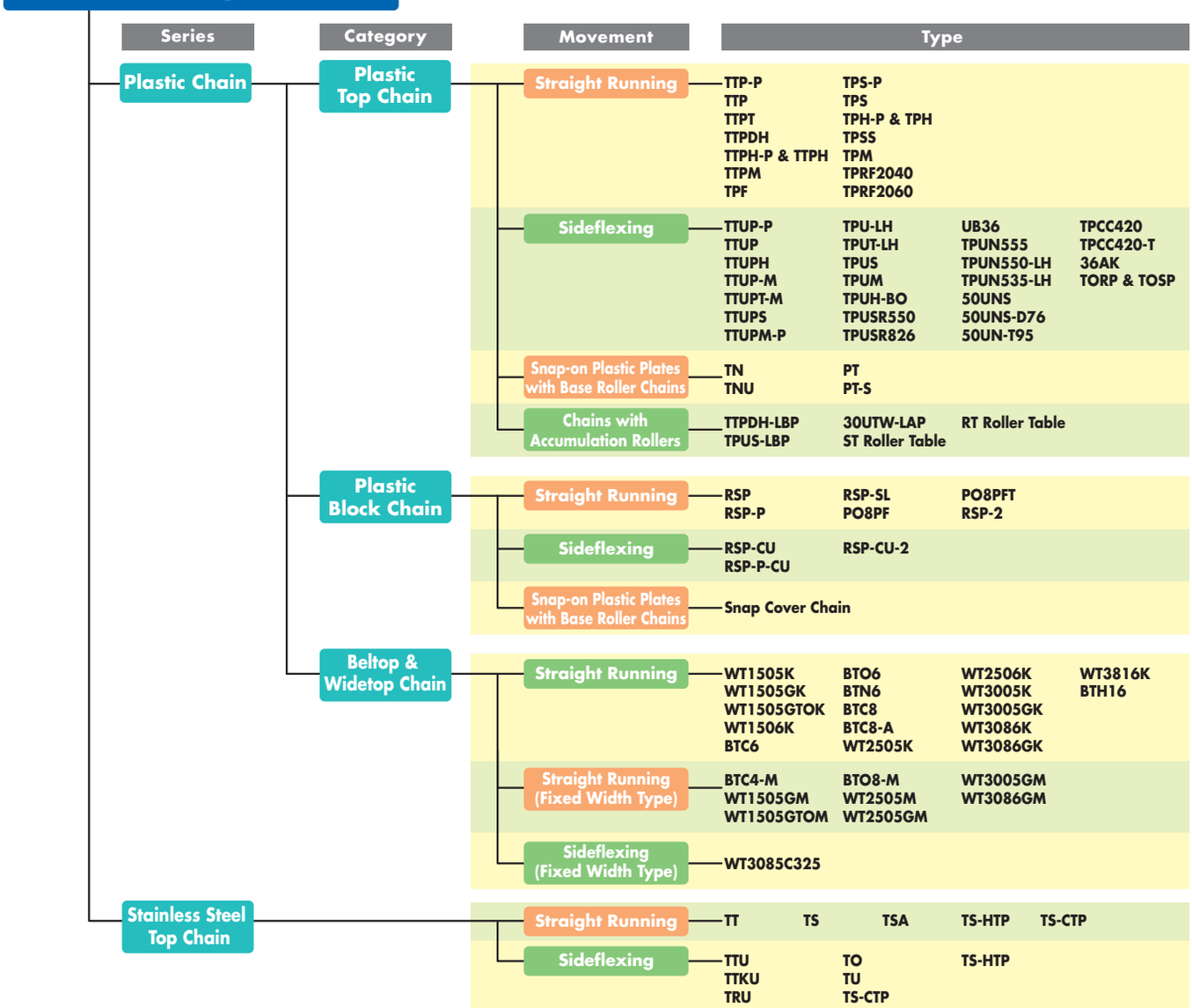
TRU·····132
Tsubaki original

TO·····133
Tsubaki original

TU·····134
Tsubaki original

Contents

Tsubaki Top Chain



Innovative Tsubaki Plastic Chain Series for Various Applications

Tsubaki Plastic Chain Series features a diverse lineup to accommodate a wide range of applications and operational needs, not only in chain design, but also in terms of materials.

Tsubaki standard chains commonly used in the beverage and other industries include Standard Series, Low Friction/Anti-Wear Series, and Ultra Low Friction Series. In addition, high-performance chains that feature outstanding performance for use in diverse industrial fields include Heat Resistant/High Speed Series, Chemical Resistant Series, Electroconductive Series, Impact Resistant Series, Antibacterial/Mold Resistant Series, and Metal Detectable Series. Features and applications of these chains follow.

Caution: Beware of using hard water as a chain lubricant.
When lubricating only with water, be cautious about using hard water. Hard water contains minerals, such as calcium and magnesium, which deposit particles that can become abrasive. These particles may accelerate the chain's wear elongation and shorten the chain's service life.

Standard Series

Made of polyacetal resin and used traditionally in general applications.
The chain link's colors can be found in each product section.
Unless otherwise indicated, the color is gray. RSP35/40/50/60 and TPRF2040 are white. TPUN555 and 50UNS are green.
Note: Some products, such as roller tables, do not use the description "Standard Series."

LF Low Friction/Anti-Wear Series

Code: LFW, LFG, LFB

Low Friction LF Series has a lower coefficient of friction combined with excellent wear resistance compared to Standard Series. Recommended for applications that have a short chain replacement cycle. Also recommended when frictional resistance tends to cause conveyed goods to tip over when moving between conveyors.

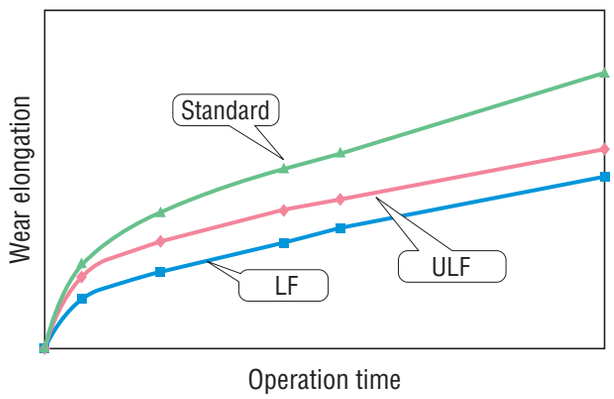
Features

- **Coefficient of friction reduced by 15% to 45% compared to Standard Series**
  Reduces line pressure when accumulation occurs, thereby minimizing damage to goods.
- **Chain life 1.2 to 2 times longer than Standard Series**
  Reduced chain load increases the chain's service life.
- **Smooth divergence and accumulation of conveyed goods**
- **Less required drive power**

Applications

- Ideal in harsh conditions (high speeds, high loads) where chain elongation is accelerated resulting in short chain replacement cycles
- Ideal in high line pressure conditions where conveyed goods may be damaged
- Ideal in situations where goods topple over upon contact with combiner and separator guides

Standard/LF/ULF Wear Resistance



LFW (color: white) LFG (color: green) LFB (color: brown)

ULF Ultra Low Friction Series

Code: ULF Color: Blue

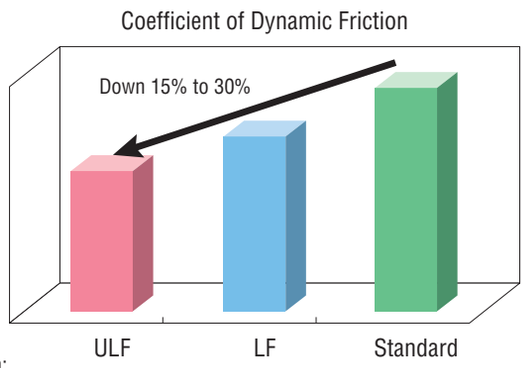
Ultra Low Friction ULF Series incorporates a silicone-based lubricant and has an even lower coefficient of friction than LF Series. Recommended for accumulating lines with a large number of conveyed goods with high line pressure, and when frictional resistance of even LF Series material would be too high.

Features

- **Ultra low friction**
  The coefficient of friction has been greatly reduced by the adoption of a special material, which contains a silicone-based lubricant. It has been reduced by 15% to 30% compared to that of LF Series (for dry conditions). Reduces line pressure when accumulation occurs, thereby minimizing damage to goods.
- **Smooth divergence and accumulation of conveyed goods**
- **Less required drive power**

Applications

- Ideal for conveying PET bottles and paper packs
- Ideal for use in accumulation areas just before casers and inspection equipment
- Ideal for combiners
- Ideal when wanting to reduce or eliminate lubricants (soapy water, etc.)



Caution:
Because a lubricant containing silicone is used, refrain from use where there is a concern of peeling in the printing processes.

KV Heat Resistant/High Speed Series

Code: KV150, KV180, KV250 Color: Black

KV Series offers dramatically higher heat resistance compared to conventional polyacetal plastic chain. It also features outstanding wear resistance, allowing it to operate at high conveying speeds under normal temperature conditions. Three types of materials are available depending on the application: KV150 for temperatures up to 150°C, KV180 for up to 180°C, and KV250 for up to 250°C.

Features

- **Heat resistant**
  KV Series withstands temperatures up to 150°C (KV150), 180°C (KV180) or 250°C (KV250). Can be used inside furnaces and heaters.
- **High conveyance speed**
  Can be used at speeds up to 200 m/min.
- **Chemical resistant**
  Possesses outstanding tolerance against chemicals used in washing and sterilization. (Except KV150)
- **Conductivity**
  Surface electrical resistance is low ($10^6\Omega$) and the chain does not generate static electricity. Suitable for preventing dust adhesion and sparks.
- **Fire resistant**
  Conforms to UL standard V-0 classification (UL's highest flame-resistant classification). (Except KV150)
- **Conforms to food sanitation regulations**
  KV series are manufactured from materials in accordance with Japan's Food Sanitation Act. (Except KV150)

Note: Noise increases by 2 to 3dB compared to standard chains.

Applications

Heat resistance
- Shrink packaging
- Drying lines

High speed
- High-speed conveyor lines for empty cans
- Conveyors for before and after drink fillers

Chemical resistance
- Where polyacetal chain links are prone to corrosion by chemicals

Note: KV150 is specifically designed for use in dry environments.

Y Chemical Resistant Series

Code: Y/SY **Color: Mat white**

Features

- **Chemically resistant**
  Y/SY Series chains are designed to resist most organic solvents, inorganic salts, acids, alkalis, and oxidizers.
- **Titanium pins**
  Plastic Chain normally uses stainless steel connecting pins (with the exception of Plastic Pin Series). However, depending on the chemical, stainless steel pins may be subject to corrosion. For these applications, we recommend the use of titanium pins, which provide even greater corrosion resistance. SY Series chains feature these titanium pins.

Applications

- Conveying products such as lithium-ion batteries, lead-acid batteries, etc., that may involve exposure to chemicals
- Cleaning in food processing plants using liquid chemicals such as chlorine-based solutions
- Chemical cleaning processes for printed circuit boards

Note:
- Do not use in areas where open flames are present, or under high-temperature conditions.
- Max. allowable load is approx. 50% of Standard Series.
- Please contact your Tsubaki representative for information regarding resistance to specific chemicals.

E Electroconductive Series

Code: E **Color: Black**

Features

- **Electroconductive**
  Superior electroconductivity compared to Standard Series, with specific volume resistivity of $10^6\Omega$·cm or less (specific volume resistivity of Standard Series is 10^{14} to $10^{15}\Omega$·cm).
- **Prevents sparking**
  Outstanding electroconductivity prevents sparking.
- **Prevents adhesion of dust and wear particles**
  Reduces electrostatic dust buildup and wear particle adhesion.

Applications

- Conveyors for printed circuit boards after soldering
- Conveyors for solar panels
- Conveyor applications for electronic components where generation of static electricity must be avoided

Note:
- An earth is necessary when sprockets, rails, etc. are made of steel.
- Max. allowable load is approx. 70% of Standard Series.

DIA

Impact Resistant Series for Dry Environments

Code: DIA **Color: Cream**

Features

- **Highly impact resistant**
  Impact-resistant polyamide resin in the link material provides an extremely durable chain that fights against foreign material contamination of food products (conforms to Japan Food Sanitation Act).
- **Ideal for dry environments**
  DIA Series is specially designed for use in dry environments.
- **Lightweight**
  15% to 20% lighter than Standard Series.
- **High friction**

Applications

- Transport of trays in bakeries (meets AIB requirements)
- Transport of products heated to high temperatures
- Applications in dry environments where chips and cracks to resin must be avoided

Note: Max. allowable load is approx. 80% of Standard/LF Series.

Impact resistance (resistance to chipping or shattering when subjected to mechanical impact)

DIA >> DIY > Standard Series
Better ◄——► Worse

Caution: This chain is specifically designed for use in dry environments. Do not use in wet conditions, such as conveyor applications involving exposure to water or with water lubrication.

DIY

Impact Resistant Series for Wet Environments

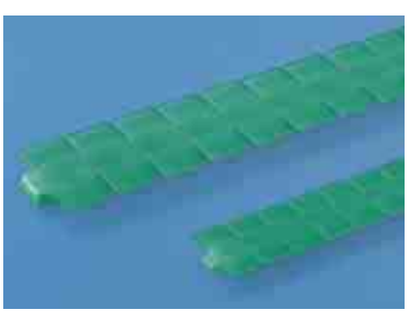
Code: DIY **Color: Green**

Features

- **Highly impact resistant**
  Impact-resistant fluorocarbon resin in the link material provides an extremely durable chain that fights against foreign material contamination of food products (conforms to Japan Food Sanitation Act).
- **Chemical resistant**
  Not affected by organic solvents, inorganic salts, acids, alkalis and oxidants
- **Non-stick**
- **Mold resistant**
- **Fire resistant**

Applications

- Transport of food items or containers in wet environments
- Situations in which equipment is frequently disinfected
- Situations that demand strength and heat resistance



Note: Max. allowable load is approx. 80% of Standard/LF Series.

Impact resistance (resistance to chipping or shattering when subjected to mechanical impact)

DIA >> DIY > Standard Series
Better ◄——► Worse

Caution: Resin fragments may shatter under certain conditions, such as use at low temperatures.

MWS Antibacterial/Mold Resistant Series

Code: MWS **Color: Cream**

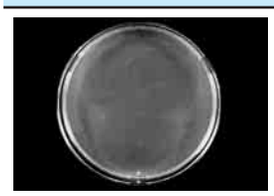
Features

- **Excellent antibacterial and mold resistant properties**
  MWS Series employs a proprietary antimicrobial agent. As well as being effective against bacteria such as colon bacillus (E.coli), staphylococcus and lactobacillus, its anti-mold properties are effective against blue and other forms of mold.
- **Long lasting**
  The antimicrobial agent is inorganic and is mixed uniformly into the plastic material during the manufacturing process. Even if wear eventually occurs on the chain surface, the antibacterial and anti-mold functions remain strong.
- **Safe**
  Worry free due to high antibacterial safety standards. Tsubaki engineering plastic products have always been in accordance with Japan's Food Sanitation Act (notification No. 20 of the Ministry of Health, Labor and Welfare).
- **Advanced functions**
  The link materials are made of low-friction/anti-wear material (equivalent to LF Series). Virtually no change in performance arises from the addition of antimicrobial agents, ensuring superb low-friction and anti-wear properties.

Applications

- Ideal for cleaning measures in bottling factories
- For food conveyors where food is placed directly on the conveyor or where cans are sealed
- Ideal in wet conditions caused by moisture and dew condensation (especially the exit and entrance of shower equipment, retort unloader, etc.)
- Ideal for mold prevention and conditions where the conveyor becomes dirty easily from the surrounding environment

Antibacterial/Anti-Mold Features

MWS	LF
	

Note: Test method
Antimicrobial Products: Test for Antimicrobial Activity and Efficacy I (1995), in accordance with film contact method

MPD/MPW Metal Detectable Series

Code: MPD, MPW **Color: Black**

Features

- **Can be detected by a metal detector**
  In the unlikely event that a conventional Plastic Chain breaks, chips or fragments of the broken chain cannot be detected by metal detectors. However, the plastic material used in these two series is metal detectable. Detection sensitivity will vary, but in tests performed by Tsubaki broken pieces measuring 2 cubic millimeters were detectable.
- **Impact resistant**
  Does not chip easily even when chain is subjected to mechanical shock.
- **Safe**
  Complies with Japan's Food Sanitation Act.

Applications

- Conveyors in the food industry in which food passes through a metal detector before being packaged.

Note:
- MPD Series is specifically designed for use in dry environments.
- Max. allowable load of MPD Series is approx. 80% of Standard Series.
- Max. allowable load of MPW Series is approx. 40% of Standard Series.

Specifications Outline for Special Materials

Series	Features, Applications	Important Matters on Use
High Speed (HS)	• Link: Special engineering plastic (cream) • Pin: 304 stainless steel • High limiting PV value, ideal for high-speed conveyor applications	• Plastic pin type: **Not available** • Can be used in dry environments • Operating temperature range: –20° to 50°C
Middle Friction (MF)	• Link: Special polyacetal (yellow) • Pin: Plastic • Material has a moderate degree of friction; compatible with incline conveyors	• Stainless steel type: **Not available** • Operating temperature range: –20° to 80°C (upper limit is 60°C in wet environments)
High Friction (HF)	• Link: Special engineering plastic (cream) • Pin: 304 stainless steel/plastic D-pin • Ideal for incline conveyors, etc.	• Allowable load is about 50% of Standard Series • Coefficient of friction is 1.1 times that of Standard Series and 1.6 times that of LF Series • Knurled pin type: **Not available** • Plastic pin type: Available • Operating temperature range: –20° to 50°C (dry environments only)

Note: Specifications other than those listed above can be manufactured to suit various customer environments. Contact a Tsubaki representative for details.

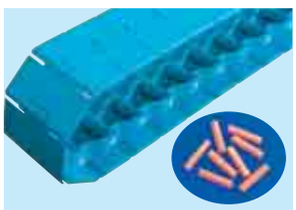
Pins Designed Exclusively by Tsubaki

Pin Materials

Plastic Pins Code: P

Features

- **Long life**
  A combination of proprietary Tsubaki materials allows the chain to exhibit outstanding wear resistance between the pin and bushes, under dry, soapy water or wet conditions. The chain works particularly well when using water as the lubricant.
- **Lightweight**
  15% to 25% lighter than stainless steel pin top chains. Easy to handle and effective in reducing noise and required power.
- **Easy disposal**
  As the entire chain is made of plastic, it can be disposed of as is.
- **Allowable load roughly equal to stainless steel pins (80% to 100%)**
  Improvements have been made to the structure of the thick plastic pins and hinges.
- **Conforms to food sanitation regulations**
  The links and chains are manufactured from materials that are in accordance with Japan's Food Sanitation Act.



Note:
- Refer also to usage cautions for plastic pin chains on page 152.
- Operating temperature up to 60°C is allowed when plastic pin chains are used in wet conditions.

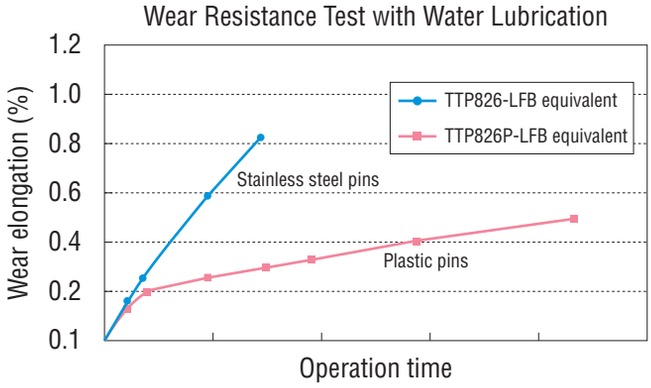
Applications

Water lubricant
- Ideal when wear life is shortened due to the use of stainless steel pins

Easy disposal
- Reduced disposal costs

Electromagnetic waves
- Metal detectors, heating equipment, others

Wear Resistance Test with Water Lubrication



Stainless Steel Pins

Features

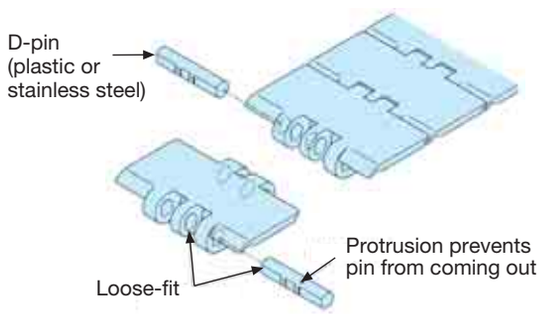
- **World-standard connecting pins**
- **Available in two shapes: D-pin and knurled pin**

Applications

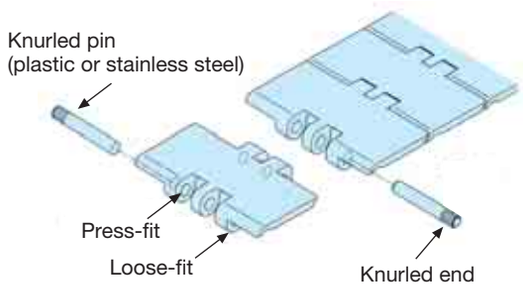
- Ideal for situations that demand heat resistance, such as exposure to ambient hot temperatures or water temperatures greater than 60°C

Pin Shapes

D-Pins



Knurled Pins



- **Chain strength and other performance factors are identical.**
- **D-pins are particularly recommended for use in the following operating environments:**
  - **Operating temperatures are either higher or lower than normal.**
  - **The chain will be exposed to potentially corrosive chemicals.**

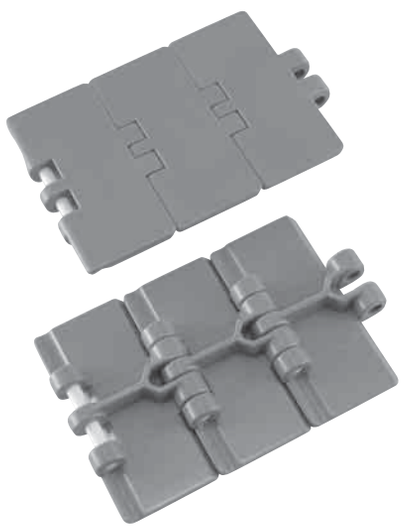
TTP-P Plastic Top Chain

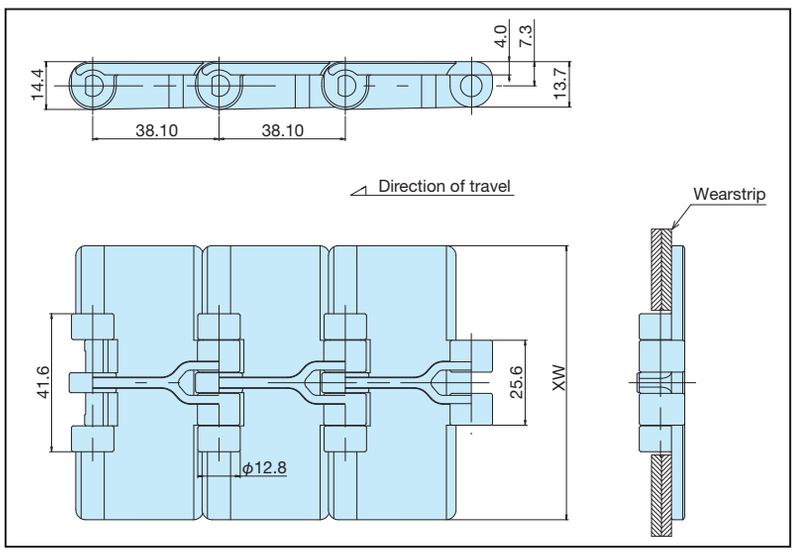
Plastic Pins

Straight Running

Features

- Worldwide standard shape. Can be used for a diverse range of applications.
- Wide range of plate widths available. Can accommodate a wide range of conveyed object sizes.
- All-plastic construction means light weight and easy handling. Longer service life under water lubrication than stainless steel pins.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTP635P	63.5	Special engineering plastic	0.55 (0.7/0.55)	3048 {10}
TTP762P	76.2		0.65 (0.8/0.6)	
TTP826P	82.6		0.65 (0.8/0.6)	
TTP1016P	101.6		0.75 (0.9/0.7)	
TTP1143P	114.3		0.80 (1.0/0.7)	
TTP1270P	127.0		0.85 (1.1/0.8)	
TTP1524P	152.4		0.95 (1.2/0.9)	
TTP1651P	165.1		1.05 (1.3/1.0)	
TTP1905P	190.5		1.20 (1.5/1.15)	

Note: 1. Mass shown in ( ) is for DIY/MPW.
2. The connecting pin is colored orange so as to distinguish it from base-chain pins (colored white).
3. Standard chain length is 80 links.
4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	Plastic pin	–	Chain material
TTP	**826**	**P**	**–**	**LFB**

826 = 82.6mm

Material

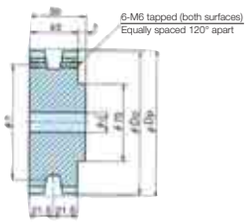
	Material	Material mark	Link color	Top plate width *XW* mm	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	63.5 to 190.5	0.83 {85}	-20 to 60 (80)	100	50
●	Low Friction	LFB	Brown	63.5 to 190.5				
●		LFG	Green	63.5 to 190.5				
●		UL	Green	63.5 to 190.5				
●	Ultra Low Friction	ULF	Blue	63.5 to 190.5				
★	Low Friction	LFW	White	63.5 to 190.5	0.83 {85}	-20 to 60 (80)	100	50
★	Electroconductive	E	Black	63.5 to 190.5	0.58 {59}			
★	Impact Resistant	DIY	Green	82.6 to 114.3	0.69 {70}			
★	Antibacterial/Mold Resistant	MWS	Cream	82.6 to 114.3	0.83 {85}			
★	Metal Detectable	MPW	Black	82.6 to 114.3	0.34 {35}	-20 to 60	50	50
★	Middle Friction	MF	Yellow	63.5 to 190.5	0.62 {63}	-20 to 60 (80)	100	50

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● = Standard material ★ = Made-to-order material

● Steel Sprockets and Guide Rings

• Sprockets (with Plain Bore)

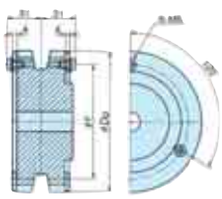
Applicable chain: TTP, TTPH, TTPT



Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter *Dp*	Outside diameter *Do*	*P*	Bore diameter *d*		Approx. mass kg	Material
						Plain bore	Max.		
TTP912T	19	9½	117.34	117	92	18	40	2.5	Carbon steel
TTP1012T	21	10½	129.26	129	104			3.2	
TTP1112T	23	11½	141.22	141	116			3.7	
TTP1212T	25	12½	153.20	153	128			4.4	

Note: Teeth on all sprockets have not been hardened.

• Guide Rings

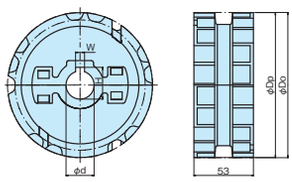


Tsubaki ring no.	Applicable sprocket no.	Outside diameter *Do*	Installed pitch diameter *P*	Approx. mass kg
TT912G	TTP912T TT912T	116	92	0.17
TT1012G	TTP1012T TT1012T	128	104	0.19
TT1112G	TTP1112T TT1112T	140	116	0.21
TT1212G	TTP1212T TT1212T	152	128	0.23

Note: One set consists of two (2) guide rings and six (6) mounting bolts.

● Engineering Plastic Sprockets

Applicable chain: TTP, TTPH, TTPT

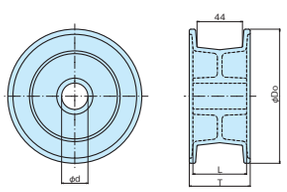


Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter *Dp*	Outside diameter *Do*	Shaft diameter *d*	Keyway W	Keyway H	Approx. mass kg	Material	Type
TP-C12057NT-SPR	21	10½	129.26	129.0	25	8	28.3	0.45	Bolt & nut: Brass + nickel plating Body: Reinforced polyamide (color: black)	Split type. Keyway specifications: DIN 6885 key seat
TP-C12058NT-SPR					30	8	33.3	0.44		
TP-C12059NT-SPR					35	10	38.3	0.42		
TP-C12060NT-SPR					40	12	43.3	0.42		
TP-C12104NT-SPR	23	11½	141.22	142.0	25	8	28.3	0.48		
TP-C12105NT-SPR					30	8	33.3	0.45		
TP-C12106NT-SPR					35	10	38.3	0.45		
TP-C12107NT-SPR					40	12	43.3	0.42		
TP-C12069NT-SPR	25	12½	153.20	154.0	25	8	28.3	0.60		
TP-C12070NT-SPR					30	8	33.3	0.59		
TP-C12071NT-SPR					35	10	38.3	0.57		
TP-C12072NT-SPR					40	12	43.3	0.55		

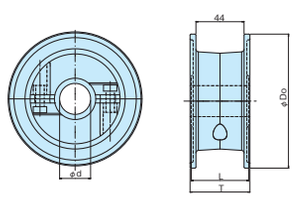
● Engineering Plastic Idler Wheels

Applicable chain: TTP, TTPH, TTPT, TPF, TPS, TPH, TTUP, TTUPH, TT, TTU

Solid type



Split type



Tsubaki idler wheel no.	No. of equivalent teeth	Outside diameter *Do*	Shaft diameter *d*	Hub length *L*	Width *T*	Approx. mass kg	Material	Type
TP-C12200BT-IW	21	129.8	25	52	58	0.21	Polyamide (color: black)	Solid
TP-C12201BT-IW			30			0.21		
TP-C12203BT-IW			40			0.19		
TP-C12204BT-IW	25	154.7	25	52	58	0.23		
TP-C12205BT-IW			30			0.23		
TP-C12207BT-IW			40			0.25		
TP-C12077BT-IW	21	129.8	25	61	58	0.26	Bolt & nut: Stainless steel Body: Polyamide (color: black)	Split
TP-C12078BT-IW			30			0.25		
TP-C12079BT-IW			35			0.28		
TP-C12080BT-IW			40			0.25		
TP-C121928BT-IW	23	142.2	25	61	58	0.29		
TP-C121929BT-IW			30			0.27		
TP-C121930BT-IW			35			0.30		
TP-C121931BT-IW			40			0.27		
TP-C12081BT-IW	25	154.7	25	61	58	0.32		
TP-C12082BT-IW			30			0.30		
TP-C12083BT-IW			35			0.32		
TP-C12084BT-IW			40			0.30		

Wearstrips
See page 137

Return-Way Parts
See page 147

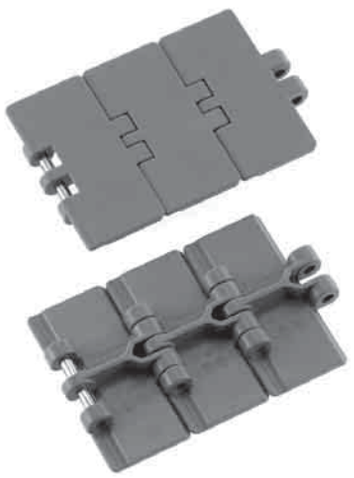
TTP Plastic Top Chain

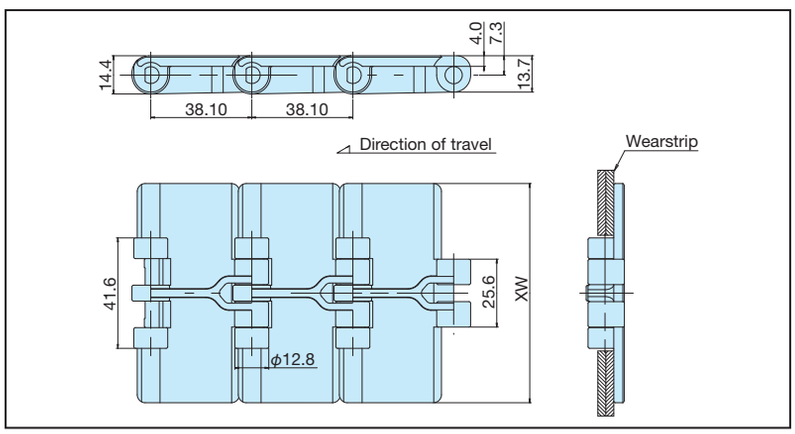
Stainless Steel Pins

Straight Running

Features

- Worldwide standard shape. Can be used for a diverse range of applications.
- Wide range of plate widths available. Can accommodate a wide range of conveyed object sizes.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTP635	63.5	304 stainless steel	0.8 (0.7 /1.0/0.75)	3048 {10}
TTP762	76.2		0.9 (0.75/1.0/0.8)	
TTP826	82.6		0.9 (0.75/1.0/0.8)	
TTP1016	101.6		1.0 (0.8 /1.2/0.9)	
TTP1143	114.3		1.0 (0.8 /1.2/0.9)	
TTP1270	127.0		1.1 (0.95/1.4/1.0)	
TTP1524	152.4		1.2 (1.0 /1.5/1.1)	
TTP1651	165.1		1.3 (1.1 /1.6/1.2)	
TTP1905	190.5		1.4 (1.2 /1.8/1.3)	

Note: 1. Mass shown in ( ) is for DIA/DIY/MPD.
2. Standard chain length is 80 links.
3. Type 820 chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TTP	826	–	LFB

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width *XW* mm	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	63.5 to 190.5	0.83 {85}	-20 to 80	100	50
●	Low Friction	LFB	Brown	63.5 to 190.5				
●		LFG	Green	63.5 to 190.5				
●		UL	Green	63.5 to 190.5				
●	Ultra Low Friction	ULF	Blue	63.5 to 190.5				
★	Low Friction	LFW	White	63.5 to 190.5	0.83 {85}	-20 to 80	100	50
★	Heat Resistant/High Speed	KV150	Black	63.5 to 82.6	0.83 {85}	-20 to 150	–	200
★		KV180		63.5 to 82.6		-20 to 180	200	
★	Chemical Resistant	Y	Mat White	63.5 to 190.5	0.41 {42}	-20 to 80	100	50
★	Electroconductive	E	Black	63.5 to 190.5	0.58 {59}			
★	Impact Resistant	DIA	Cream	63.5 to 114.3	0.69 {70}		–	
★		DIY	Green	63.5 to 114.3	0.69 {70}		100	
★	Antibacteria/Mold Resistant	MWS	Cream	63.5 to 114.3	0.83 {85}			
★	Metal Detectable	MPD	Black	63.5 to 114.3	0.69 {70}		–	
★	High Speed	HS	Cream	63.5 to 190.5	0.74 {75}	-20 to 50	–	230

● = Standard material ★ = Made-to-order material

Sprockets See page 22
Idler Wheels See page 22
Wearstrips See page 137
Return-Way Parts See page 147

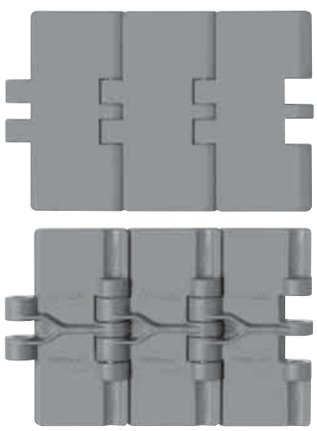
TTPT Plastic Top Chain

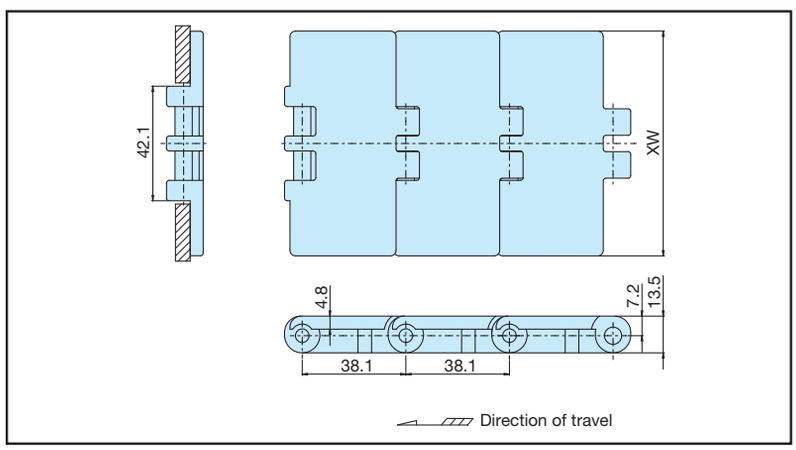
Stainless Steel Pins

Straight Running

Features

- Plates are thicker than TTP chain. Ideal for applications where the plates would be susceptible to wear. (Plate thickness: TTPT = 4.8mm, TTP = 4.0mm)
- Uses the same sprockets and idler wheels as TTP chain. Designed to allow common components to be used.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTPT826	82.6	Austenitic steel	1.04	3048 {10}
TTPT1143	114.3		1.29	
TTPT1905	190.5		1.82	

Note: 1. Standard chain length is 80 links.
2. Type 831 chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TTPT	**826**	**–**	**LFB**

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width *XW* mm	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	Low Friction	LFB	Brown	82.6 to 190.5	0.83 {85}	-20 to 65 (80)	100	50

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● = Standard material

Sprockets See page 22
Idler Wheels See page 22
Wearstrips See page 137
Return-Way Parts See page 147

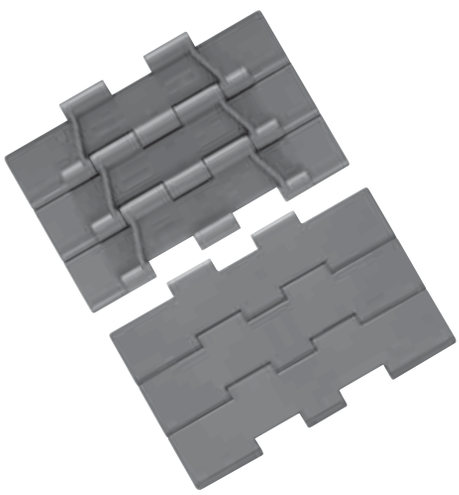
TTPDH Plastic Top Chain

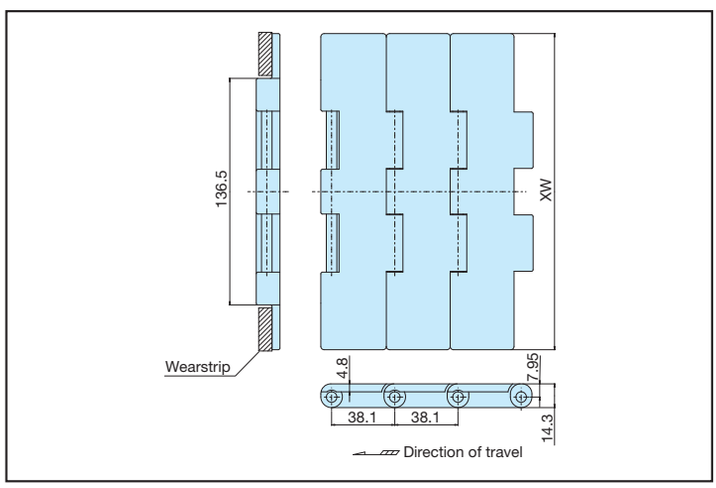
Stainless Steel Pins

Straight Running

Features

- Higher maximum allowable load than TTP chain (approx. double). Ideal for higher applied load conditions.
- Plates are wider, and thus can be used to convey larger objects.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTPDH1905	190.5	Austenitic steel	2.59	3048 {10}
TTPDH2540	254.0		3.08	
TTPDH3048	304.8		3.35	

Note: 1. Standard chain length is 80 links.
2. Type 821 chain.

Chain Numbering

Chain type | Plate width | – | Chain material

TTPDH 1905 – LFB

1905 = 190.5mm

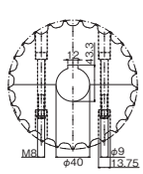
Material

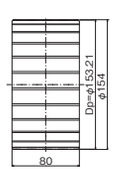
	Material	Material mark	Link color	Top plate width *XW* mm	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	190.5 to 304.8	1.67 {170}	-20 to 65 (80)	100	50
●	Low Friction	LFB	Brown	190.5 to 304.8	1.67 {170}			
★	Low Friction	LFG	Green	190.5 to 304.8	1.67 {170}			
★	Low Friction	UL	Green	190.5 to 304.8	1.67 {170}	-20 to 80		

Note: Operating temperature of (80) is for dry conditions (no lubrication). ● = Standard material ★ = Made-to-order material

Engineering Plastic Sprockets

Applicable chain: TTPDH, TTPDH-LBP

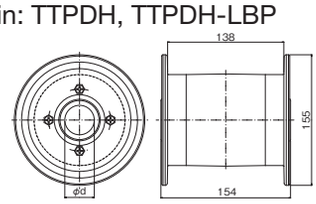




Tsubaki sprocket no.	Actual teeth	Effective teeth	Approx. mass kg	Material	Keyway	Type
TP-C12295T-SPR	25	12½	0.97	Polyamide (color: white) Bolt: Stainless steel Nut: Brass + nickel plating	DIN 6885 key seat	Split

Engineering Plastic Idler Wheels

Applicable chain: TTPDH, TTPDH-LBP



Tsubaki idler wheel no.	No. of equivalent teeth	Shaft diameter *d*	Approx. mass kg	Material	Color	Type
TP-C121646T-IW	25	35	0.76	Body: Polyamide Bolt: Stainless steel	Black	Solid

Wearstrips
See page 137

Return-Way Parts
See page 147

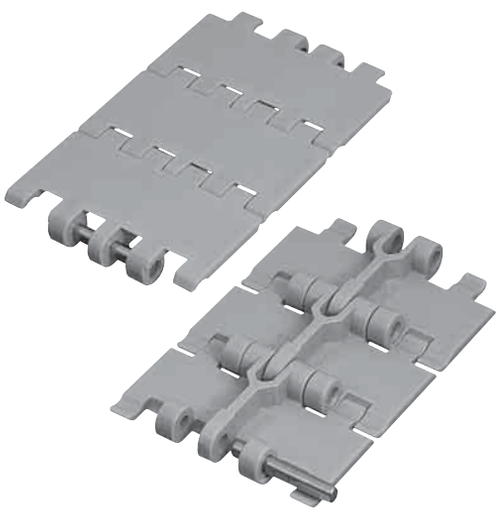
TTPH Plastic Top Chain

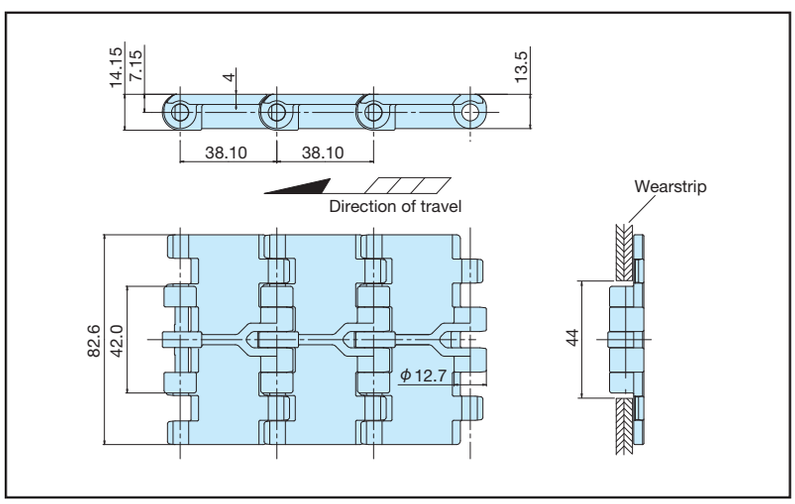
Plastic Pins & Stainless Steel Pins

Straight Running

Features

- Comb-toothed plates minimize gaps between links. Ideal for conveying unstable containers such as PET bottles and dessert cups.
- Surface of top plate is flatter and smoother. Effective in preventing container wobbling and tip-over during conveyance.
- Same basic dimensions as TTP plastic top chain. Can provide stable container conveyance simply by replacing the chain.
- Both ends of the plates are slightly chamfered, ensuring smooth lateral plate-to-plate transfers between adjacent chains.
- Models with plastic pins also available. All-plastic construction means light weight and easy handling. Longer service life under water lubrication than stainless steel pins.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTPH826P	82.6	Special engineering plastic	0.65 (0.8)	3048 {10}
TTPH826		304 stainless steel	0.9 (0.75/1.1)	

Note: 1. Mass shown in ( ) is for DIY or DIA/DIY.
2. For plastic pins, the connecting pin is colored orange so as to distinguish it from base-chain pins (colored white).
3. Standard chain length is 80 links.
4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	Plastic pin	–	Chain material
TTPH	**826**	**P**	**–**	**LFB**

826 = 82.6mm

Note: For stainless steel pins, omit the "P" in the chain number that indicates plastic pins.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	Gray	0.83 {85}	-20 to 60 (80)	100	50
●	Low Friction	LFB	Brown				
●		LFG	Green				
●	Ultra Low Friction	ULF	Blue				
★	Low Friction	LFW	White	0.83 {85}	-20 to 60 (80)	100	50
★	Chemical Resistant	Y	Mat white	0.41 {42}			
★	Electroconductive	E	Black	0.58 {59}			
★	Impact Resistant	DIA	Cream	0.69 {70}		–	
★		DIY	Green			100	
★	Antibacterial/Mold Resistant	MWS	Cream	0.83 {85}			

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. TTPH826 chains made of "Y" or "DIA" materials are available only with stainless steel pins.

● = Standard material ★ = Made-to-order material

Sprockets See page 22
Idler Wheels See page 22
Wearstrips See page 137
Return-Way Parts See page 147

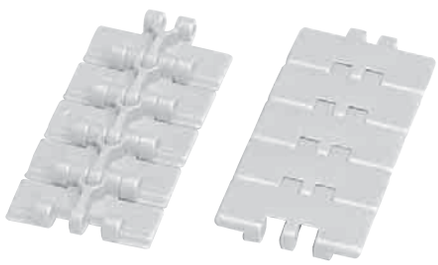
TTPM Plastic Top Chain

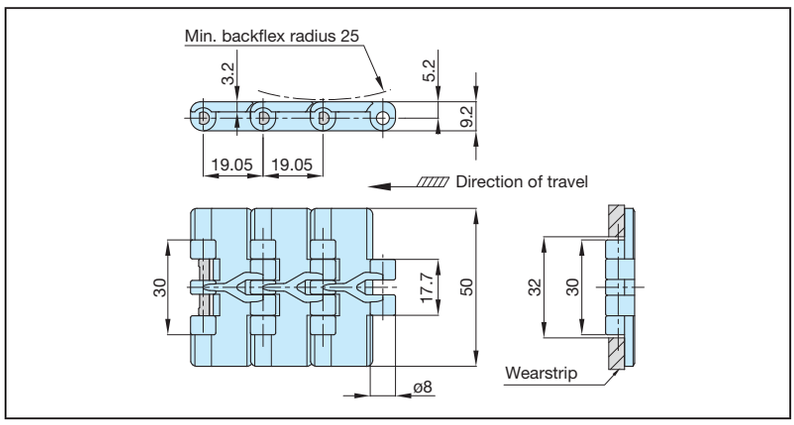
Stainless Steel Pins

Straight Running

Features

- Small chain pitch of 19.05mm is effective in reducing chordal action on sprockets in addition to minimizing dead space between conveyors.
- Chain is designed to construct compact straight conveyors for conveying smaller products.





Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTPM500	50	304 stainless steel	0.4	1905 {6.25}

Note: 1. Plastic pins are not available.
2. Standard chain length is 100 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	Top plate width	–	Chain material
TTPM	**500**	**–**	**BL**

500 = 50.0mm

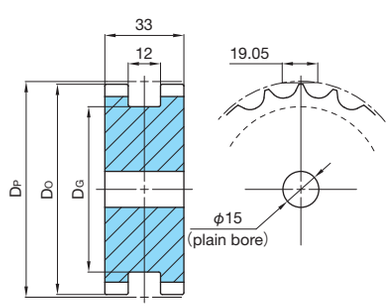
Material

	Material	Material mark	Link color	Max. allowable load kn {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Standard	W	White	0.29 {30}	-20 to 80	100	50
●	Standard	BL	Sky blue	0.29 {30}	-20 to 80	100	50
★	Low Friction	LFB	Brown	0.29 {30}	-20 to 65 (80)	100	50
★	Low Friction	UL	Green	0.29 {30}	-20 to 80	100	50
★	Ultra Low Friction	ULF	Blue	0.29 {30}	-20 to 65 (80)	100	50
★	Chemical Resistant	Y	Mat white	0.29 {30}	-20 to 80	100	50
★	Electroconductive	E	Black	0.24 {24}	-20 to 80	100	50

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● : Standard material ★ : Made-to-order material

Steel Sprockets

Applicable chain: TTPM



Tsubaki sprocket no.	Teeth	Pitch diameter D_P	Outside diameter D_O	Groove diameter D_G	Bore diameter d		Approx. mass kg
					Plain bore	Max.	
TTPM1200T	12	73.6	73	59	15	35	0.9
TTPM1300T	13	79.6	79	65			1.0
TTPM1400T	14	85.6	85	70		40	1.2
TTPM1500T	15	91.6	92	75			1.4
TTPM1700T	17	103.6	104	89			1.9
TTPM1800T	18	109.7	110	95			2.1
TTPM1900T	19	115.7	116	100		50	2.4
TTPM2000T	20	121.7	122	105			2.6
TTPM2100T	21	127.8	128	110			2.9
TTPM2300T	23	139.9	141	125			3.5
TTPM2500T	25	151.9	153	135			4.1

Note: Carbon steel

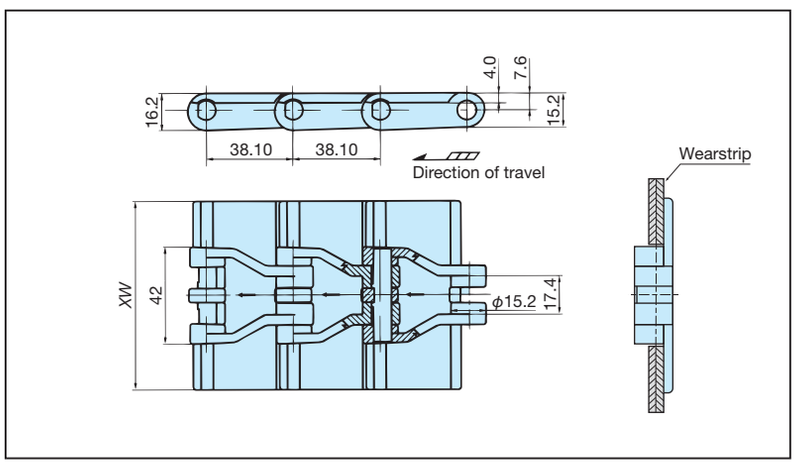
TPS-P Plastic Top Chain

Plastic Pins

Straight Running

Features

- Approx. 17% higher maximum allowable load than TTP plastic top chain (plastic pin type). Ideal for higher applied load conditions.
- Uses the same sprockets as TTUP and TPU sideflexing plastic top chains. Designed to allow common sprockets to be used.
- Models with plastic pins also available. All-plastic construction means light weight and easy handling. Longer service life under water lubrication than stainless steel pins.



Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPS826P	82.6	Special engineering plastic	0.75 (0.90)	3048 {10}
TPS1143P	114.3		1.00 (1.20)	

Note: 1. Mass shown in ( ) is for DIY.
2. The connecting pin is colored orange so as to distinguish it from base-chain pins (colored white).
3. Standard chain length is 80 links.
4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	Plastic pin	–	Chain material
TPS	**826**	**P**	**–**	**LFB**

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width *XW* mm	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	Low Friction	LFB	Brown	82.6 to 114.3	0.98 {100}	-20 to 60 (80)	100	50
●		LFG	Green					
●	Ultra Low Friction	ULF	Blue					
★	Standard	–	Gray	82.6 to 114.3	0.98 {100}	-20 to 60 (80)	100	50
★	Low Friction	LFW	White					
★	Electroconductive	E	Black		0.69 { 70}			
★	Impact Resistant	DIY	Green		0.78 { 80}			
★	Antibacterial/Mold Resistant	MWS	Cream		0.98 {100}			

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● : Standard material ★ : Made-to-order material

Sprockets See page 30
Idler Wheels See page 30
Wearstrips See page 137
Return-Way Parts See page 147

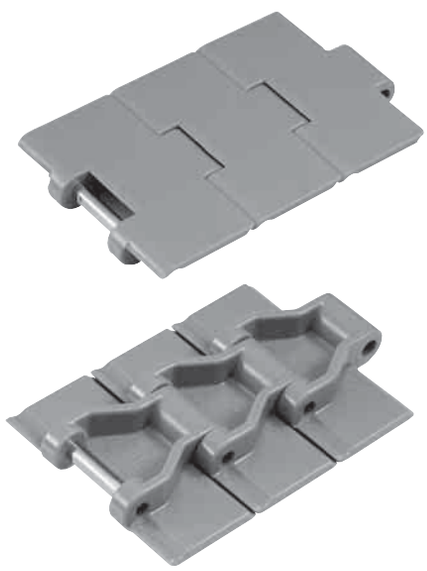
TPS Plastic Top Chain

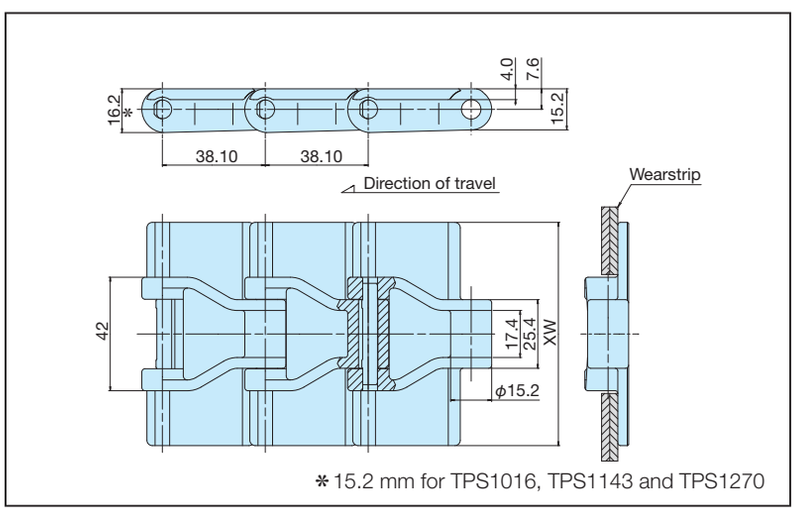
Stainless Steel Pins

Straight Running

Features

- Approx. 40% higher maximum allowable load than TTP plastic top chain. Ideal for higher applied load conditions.
- Uses the same sprockets as TTUP and TPU sideflexing plastic top chains. Designed to allow common sprockets to be used.





* 15.2 mm for TPS1016, TPS1143 and TPS1270

Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPS762	76.2	304 stainless steel	0.85 (0.75/1.1)	3048 {10}
TPS826	82.6		0.85 (0.75/1.1)	
TPS1016	101.6		1.05 (0.9 /1.3)	
TPS1143	114.3		1.10 (0.95/1.35)	
TPS1270	127.0		1.20 (1.0 /1.45)	

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. Standard chain length is 80 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TPS	**826**	**–**	**LFB**

826 = 82.6mm

Material

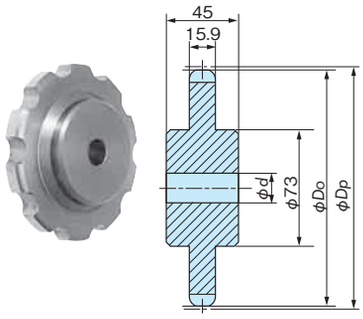
	Material	Material mark	Link color	Top plate width *XW* mm	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	76.2 to 127.0	1.18 {120}	-20 to 80	100	50
●	Low Friction	LFB	Brown					
●		LFG	Green					
●	Ultra Low Friction	ULF	Blue					
★	Low Friction	LFW	White	76.2 to 127.0	1.18 {120}	-20 to 80	100	50
★	Heat Resistant/High Speed	KV150	Black	76.2 to 82.6	0.98 {100}	-20 to 150	–	200
★		KV180				-20 to 180	200	
★		KV250				-20 to 250		
★	Chemical Resistant	Y	Mat white	76.2 to 127.0	0.59 { 60}	-20 to 80	100	50
★	Impact Resistant	DIA	Cream		0.93 { 95}		–	
★		DIY	Green				100	
★	Antibacterial/Mold Resistant	MWS	Cream		1.18 {120}			

● : Standard material ★ : Made-to-order material

● Steel Sprockets

• Sprockets (with Plain Bore)

Applicable chain: TPS, TPH, TTUP, TTUPH, TPU, TPU-LH, TPUT-LH, TPUH-BO, TTUP-M, TTUPT-M, TPM, TPUM

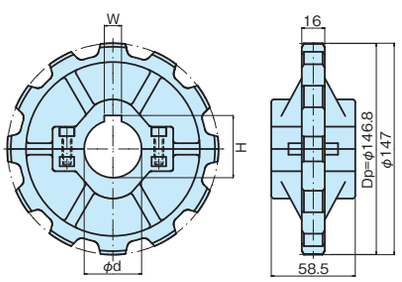


Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter *Dp*	Outside diameter *Do*	Bore diameter *d*		Approx. mass kg	Material
					Plain bore	Max.		
TTUP900T	–	9	111.40	111	18	47	2.0	Carbon steel
TTUP912T	19	9½	117.34	117			2.1	
TTUP1000T	–	10	123.29	123			2.2	
TTUP1012T	21	10½	129.26	129			2.4	
TTUP1100T	–	11	135.23	135			2.6	
TTUP1112T	23	11½	141.22	141			2.8	
TTUP1200T	–	12	147.21	147			3.0	
TTUP1212T	25	12½	153.20	153			3.2	
TTUP1300T	–	13	159.20	159			3.4	

Only TTUP1012T, TTUP1112T or TTUP1212T sprockets can be used on TPM/TPUM chain. For number of teeth other than these or for engineering plastic sprockets, contact Tsubaki.

● Engineering Plastic Sprockets

Applicable chain: TPS, TPH, TTUP, TTUPH, TPU, TPU-LH, TPUT-LH, TPUH-BO, TTUP-M, TTUPT-M

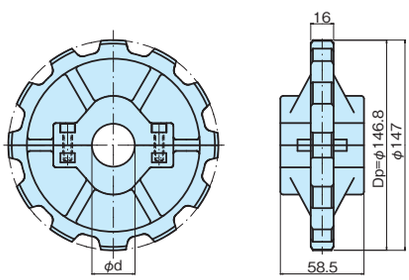


Tsubaki sprocket no.	Teeth	Shaft diameter d	Keyway		Approx. mass kg
			W	H	
TP-C12400T-SPR	12	25	8	28.3	0.38
TP-C12711T-SPR		30	8	33.3	0.37
TP-C12401T-SPR		35	10	38.3	0.35
TP-C12402T-SPR		40	12	43.3	0.35

Type: Split
Material: Bolt: Stainless steel
Nut: Brass + nickel plating
Body: Reinforced polyamide
Color: Black
Keyway: DIN 6885 key seat

● Engineering Plastic Idler Wheels

Applicable chain: TPS, TPH, TTUP, TTUPH, TPU, TPU-LH, TPUT-LH, TPUH-BO, TTUP-M, TTUPT-M



Tsubaki idler wheel no.	Effective teeth	Shaft diameter d	Approx. mass kg
TP-C12404T-IW	12	30	0.31

Type: Split
Material: Bolt: Stainless steel
Nut: Brass + nickel plating
Body: Polyamide
Color: Black

Wearstrips
See page 137
Return-Way Parts
See page 147

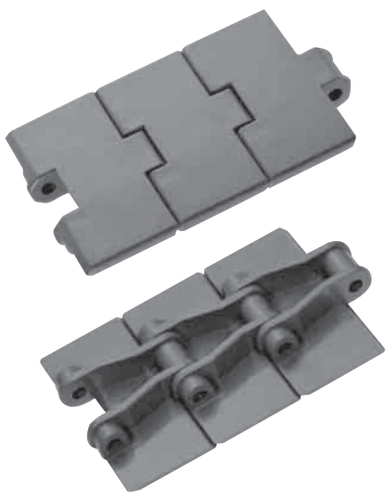
TPF Plastic Top Chain

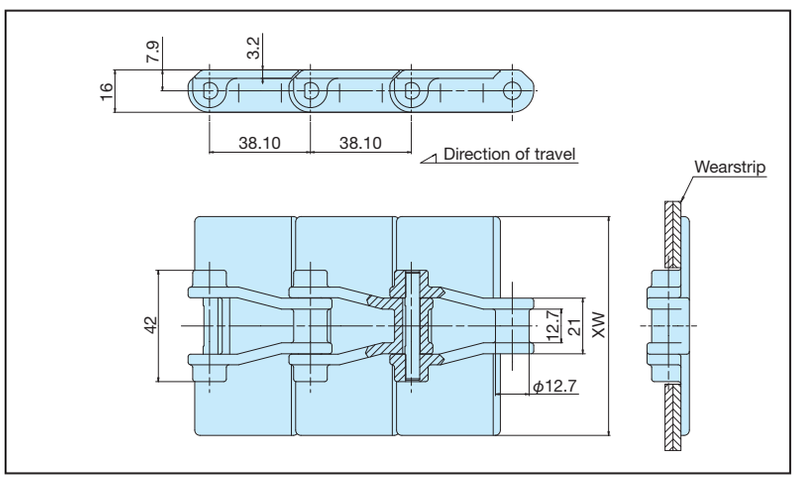
Stainless Steel Pins

Straight Running

Features

- Approx. 40% higher maximum allowable load than TTP Plastic Top Chain. Ideal for higher applied load conditions.
- 3.2mm plate thickness, the same plate thickness as TT Stainless Steel Top Chain.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPF762	76.2	304 stainless steel	0.85 (0.75/1.1)	3048 {10}
TPF826	82.6			

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. Standard chain length is 80 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TPF	**826**	**–**	**LFB**

826 = 82.6mm

Material

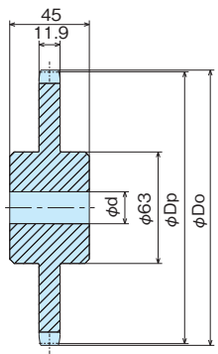
	Material	Material mark	Link color	Top plate width *XW* mm	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	Standard	W	White	76.2 to 82.6	1.18 {120}	-20 to 80	100	50
●		–	Gray					
●	Low Friction	LFB	Brown					
●		LFG	Green					
★	Ultra Low Friction	ULF	Blue	76.2 to 82.6	1.18 {120}	-20 to 80	100	50
★	Low Friction	LFW	White					
★	Chemical Resistant	Y	Mat white		0.59 { 60}			
★	Electroconductive	E	Black		0.82 { 84}			
★	Impact Resistant	DIA	Cream		0.93 { 95}		–	
★		DIY	Green				100	
★	Antibacterial/Mold Resistant	MWS	Cream		1.18 {120}			

● : Standard material ★ : Made-to-order material

● Steel Sprockets

• Sprockets (with Plain Bore)

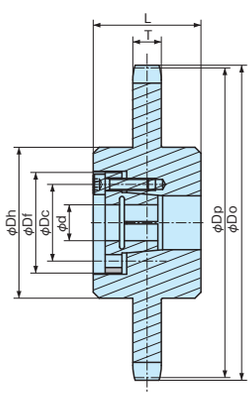
Applicable chain: TPF



Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter *Dp*	Outside diameter *Do*	Bore diameter *d*		Approx. mass kg	Material
					Plain bore	Max.		
TPF912T	19	9½	117.34	120.0	18	42	1.7	Carbon steel (machined)
TPF1012T	21	10½	129.26	131.5			1.9	
TPF1112T	23	11½	141.22	143.5			2.1	
TPF1212T	25	12½	153.20	155.5			2.3	

• Lock Sprockets

Applicable chain: TPF



Sleeve no.	Df diameter mm	Dc diameter mm	Bolt size M × L	Bolt tightening torque N·m
S2	42.0	32.0	M5 × 18	8.3
S3	48.5	38.5	M5 × 20	8.3
S4	56.0	46.0	M5 × 20	8.3

Tsubaki sprocket no.	Actual teeth	Pitch diameter *Dp* mm	Outside diameter *Do* mm	Facewidth *T* mm	Hub diameter *DH* mm	Length *L* mm
TPF912T	19	117.34	120.0	11.9	63	45
TPF1012T	21	129.26	131.5			
TPF1112T	23	141.22	143.5			
TPF1212T	25	153.20	155.5			

Sleeve Combinations and Transfer Torque Values

Sleeve no.		S2							S3			S4		
Bore diameter *d* mm		15	16	17	18	19	20	22	24	25	28	30	32	35
		Max. allowable transfer torque N·m												
Tsubaki sprocket no.	TPF912T	105	112	119	126	133	139	153	167	174	195	279	298	325
	TPF1012T													
	TPF1112T													
	TPF1212T													

Idler Wheels See page 22
Wearstrips See page 137
Return-Way Parts See page 147

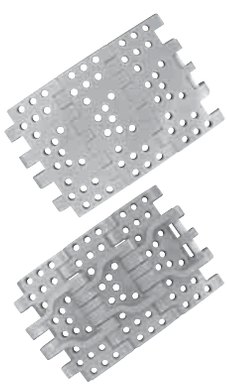
TPH Plastic Top Chain

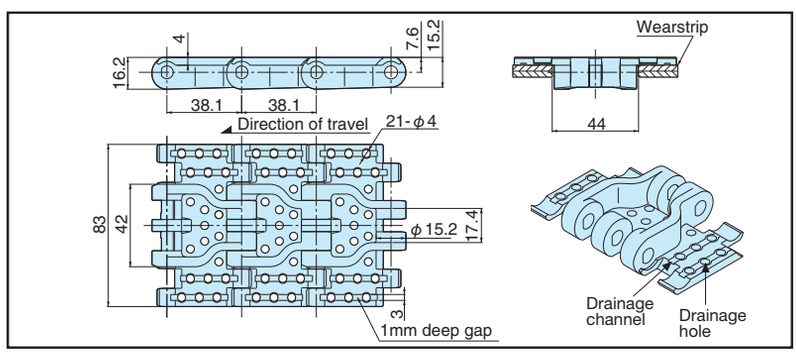
Plastic Pins & Stainless Steel Pins

Straight Running

Features

- Comb-toothed plates minimize gaps between links. Ideal for conveying unstable containers such as PET bottles and dessert cups.
- Surface of top plate is flatter and smoother. Effective in preventing container wobbling and tip-over during conveyance.
- Plates are perforated with numerous drainage holes that effectively remove excess lubricant and water remaining on plate surface.
- Same basic dimensions as TPS plastic top chain. Can provide stable container conveyance simply by replacing the chain.
- Models with plastic pins also available. All-plastic construction means light weight and easy handling. Longer service life under water lubrication than stainless steel pins.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPH830P	83.0	Special engineering plastic	0.75 (0.9)	3048 {10}
TPH830		304 stainless steel	1.0 (0.85/1.2)	

Note: 1. Mass shown in ( ) is for DIA or DIA/DIY.
2. For plastic pins, the connecting pin is colored orange so as to distinguish it from base-chain pins (colored white).
3. Standard chain length is 80 links.
4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	Plastic pin	–	Chain material
TPH	**830**	**P**	**–**	**LFB**

830 = 83.0mm

Note: For stainless steel pins, omit the "P" in the chain number that indicates plastic pins.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf} *	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	Gray	0.78 { 80} 1.18 {120}	-20 to 60 (80)	100	50
●	Low Friction	LFB	Brown				
●		LFG	Green				
●	Ultra Low Friction	ULF	Blue				
★	Low Friction	LFW	White	0.78 { 80} 1.18 {120}	-20 to 60 (80)	100	50
★	Chemical Resistant	Y	Mat white	– 0.59 { 60}			
★	Electroconductive	E	Black	0.54 { 55} 0.82 { 84}			
★	Impact Resistant	DIA	Cream	– 0.93 { 95}		–	
★		DIY	Green	0.64 { 65} 0.93 { 95}		100	
★	Antibacterial/Mold Resistant	MWS	Cream	0.78 { 80} 1.18 {120}			

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. * For max. allowable load, the upper figure is for plastic pin chain; lower figure is for stainless steel pin chain.

● : Standard material ★ : Made-to-order material

Sprockets See page 30
Idler Wheels See page 22/30
Wearstrips See page 137
Return-Way Parts See page 147

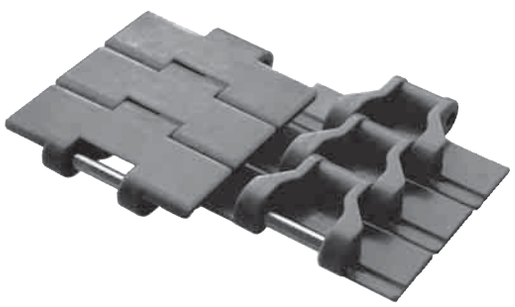
TPSS Plastic Top Chain

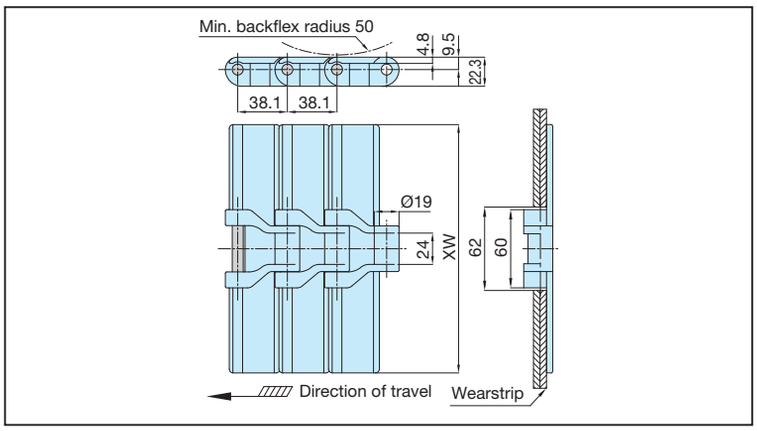
Stainless Steel Pins

Straight Running

Features

- Chain is 2.3 times stronger than TTP chains. Suitable for higher load applications.
- Can handle larger and heavier products.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPSS1143	114.3	304 stainless steel	1.9	3048 {10}
TPSS1270	127.0		2.0	
TPSS1524	152.4		2.1	
TPSS1905	190.5		2.4	

Note: 1. Plastic pins are not available.
2. Top plate widths of 127.0mm and 152.4mm are made by trimming a 190.5mm-wide top plate.
3. Standard chain length is 80 links.
4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TPSS	**1143**	**–**	**LFG**

1143 = 114.3mm

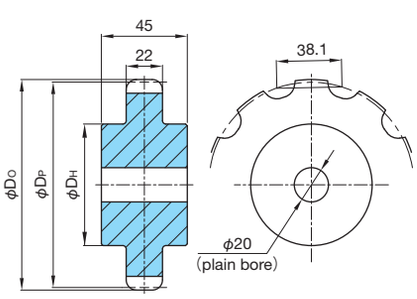
Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
★	Standard	–	Gray	1.96 {200}	-20 to 80	100	50
★	Low Friction	LFB	Brown	1.96 {200}	-20 to 65 (80)	100	50
★		LFG	Green				
★	Low Friction	UL	Green	1.96 {200}	-20 to 80	100	50

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. ★ : Made-to-order material
3. 127.0 mm and 152.4 mm top plate widths are made to order.

Steel Sprockets

Applicable chain: TPSS, TTUPS



	Tsubaki sprocket no.	Teeth	Pitch diameter D_P	Outside diameter D_O	Hub diameter D_H	Bore diameter *d*		Approx. mass kg
						Plain bore	Max.	
★	TPSS900T	9	114.4	111	63	20	35	1.9
●	TPSS1000T	10	123.3	124	71		40	2.3
●	TPSS1100T	11	135.2	136				2.7
●	TPSS1200T	12	147.2	149				3.1
★	TPSS1300T	13	159.2	161				3.6
★	TPSS1400T	14	171.2	173				4.1
★	TPSS1500T	15	183.3	186				4.6

Note: 1. ● : Standard ★ : Made-to-order
2. Material: Carbon steel

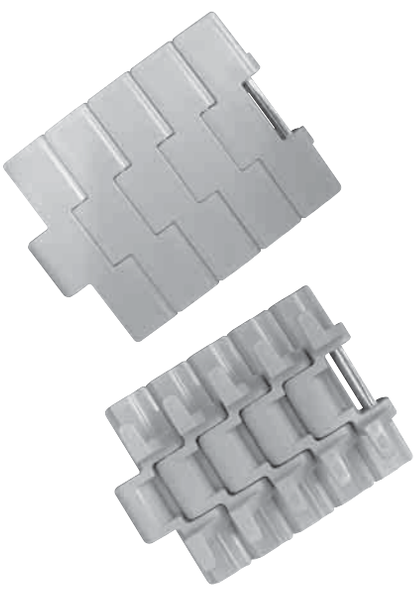
TPM Plastic Top Chain

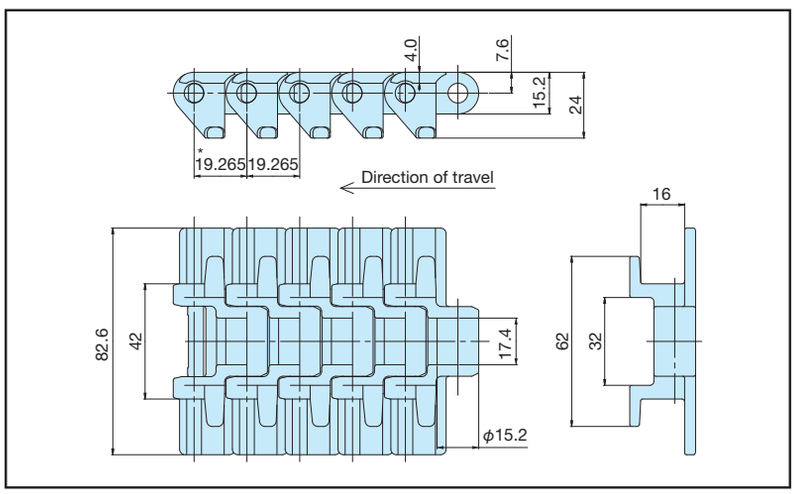
Stainless Steel Pins

Straight Running

Features

- Chain pitch is approximately one-half of conventional conveyor chains, effectively lowering conveyor noise level and reducing the gap between the end of one conveyor and the start of the next conveyor.
- Type TPS sprockets (odd number of teeth) can be used. Designed to allow common sprockets to be used.
- Equipped with float-preventive tabs. Keeps the chain securely in position on corner turns and in incline/decline sections, as well as preventing damage (scratches, etc.) to the top surface of the plates on the return way.





* Pitch (p = 19.265) has been designed for engagement with TPS sprockets (TTUP1012T; number of actual teeth is 21).

Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPM826	82.6	304 stainless steel	1.4 {1.2/1.7}	3082.4 {10.1}

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. Standard chain length is 160 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Tab	–	Chain material
TPM	**826**	**–**	**T**	**–**	**LFB**

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	82.6	1.18 {120}	-20 to 80	100	50
●	Low Friction	LFB	Brown					
●		LFG	Green					
★	Ultra Low Friction	ULF	Blue	82.6	1.18 {120}	-20 to 80	100	50
★	Low Friction	LFW	White					
★	Chemical Resistant	Y	Mat white		0.59 { 60}			
★	Electroconductive	E	Black		0.82 { 84}			
★	Impact Resistant	DIA	Cream		0.93 { 95}		–	
★		DIY	Green				100	
★	Antibacterial/Mold Resistant	MWS	Cream		1.18 {120}			

● : Standard material ★ : Made-to-order material

Sprockets See page 30
Wearstrips See page 137
Return-Way Parts See page 147

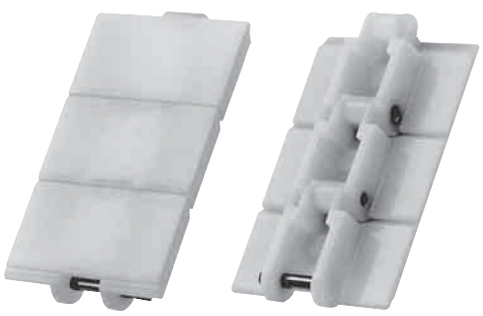
TPRF2040 Plastic Top Chain

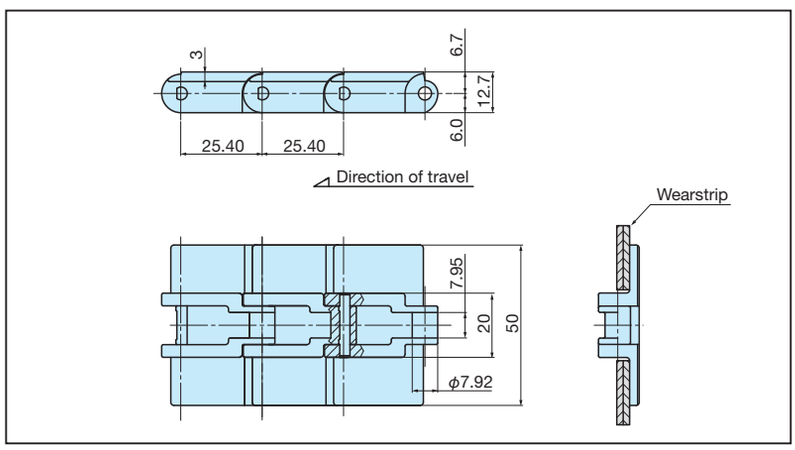
Stainless Steel Pins

Straight Running

Features

- With a plate width of 50mm and a 25.4mm pitch, this plastic top chain is ideal for conveying small objects.
- RF2040S sprockets can be used (19 teeth or more).





Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPRF2040	50	304 stainless steel	0.42 (0.36/0.52)	3048 {10}

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. Standard chain length is 120 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	Chain size	–	Chain material
TPRF	2040	–	LFB

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	White	0.44 {45}	-20 to 80	60	60
●	Low Friction	LFB	Brown				
●		LFG	Green				
●	Ultra Low Friction	ULF	Blue				
★	Low Friction	LFW	White	0.44 {45}	-20 to 80	60	60
★	Chemical Resistant	Y	Mat white	0.22 {22}			
★	Electroconductive	E	Black	0.31 {31}			
★	Impact Resistant	DIA	Cream	0.34 {35}		–	
★		DIY	Green			60	
★	Antibacterial/Mold Resistant	MWS	Cream	0.44 {45}			

● : Standard material ★ : Made-to-order material

Sprockets

Use standard ANSI #C2040 sprockets with at least 19 teeth.

Wearstrips
See page 137

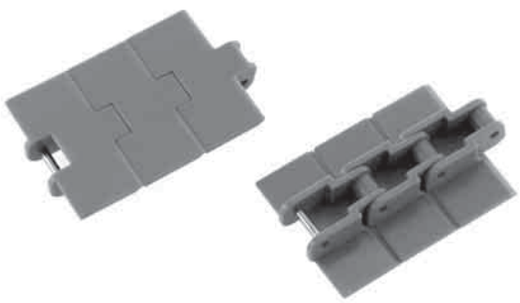
TPRF2060 Plastic Top Chain

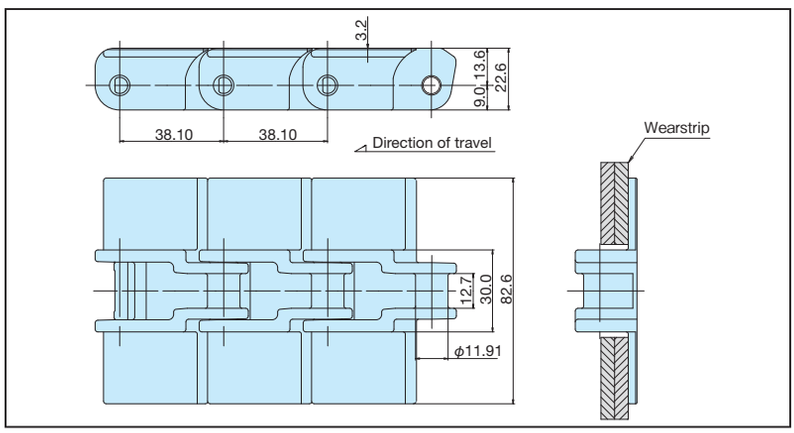
Stainless Steel Pins

Straight Running

Features

- Double-pitch top chain featuring wider plastic top plates for better product support.
- RF2060S sprockets can be used (19 teeth or more).





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPRF2060	82.6	304 stainless steel	0.9 (0.7/1.1)	3048 {10}

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. Standard chain length is 80 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	Chain size	–	Chain material
TPRF	**2060**	**–**	**LFB**

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
★	Standard	–	Gray	0.88 {90}	-20 to 80	100	50
★	Low Friction	LFB	Brown				
★		LFG	Green				
★		LFW	White				
★	Ultra Low Friction	ULF	Blue				
★	Chemical Resistant	Y	Mat white	0.44 {45}			
★	Electroconductive	E	Black	0.62 {63}			
★	Impact Resistant	DIA	Cream	0.69 {70}		–	
★		DIY	Green			100	
★	Antibacterial/Mold Resistant	MWS	Cream	0.88 {90}			

★ : Made-to-order material

Sprockets

Use standard ANSI #C2060 sprockets with at least 19 teeth.

Wearstrips
See page 137

Return-Way Parts
See page 147

TN Snap Top Chain

Straight Running

Features

- Suitable for heavy loads and long conveyor applications because of high allowable chain load (except for SS and PC types).
- Replacing top plates is simple and easy.
- Base chain types available for operating environments where corrosion could be a problem.

Chain Construction

TN top chains consist of snap top plates and ANSI #60 base chain. The “legs” of the top plates are used to snap the plates onto the outer links of the base chain and hold down the detachable plate and prevent it from coming loose. Connecting link pins have a shouldered end to maintain the correct connecting link inner width.

Chain Types

1. TN Standard type

Base chain is normal steel roller chain. Key dimensions are identical to those of ANSI #60 roller chains. Base chain requires lubrication.

2. TN-NP type

Base chain is nickel-plated roller chain. The nickel plating makes for a better appearance, as well as providing corrosion resistance. Lubrication is required.

3. TN-NP-Lambda type

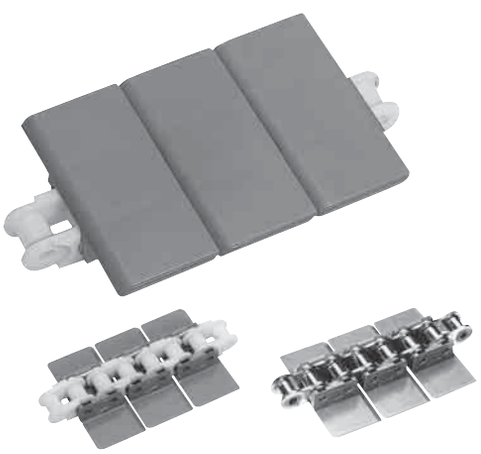
Base chain is lube-free Lambda roller chain that uses oil-impregnated sintered bushes. Components other than bushes are nickel-plated for corrosion resistance.

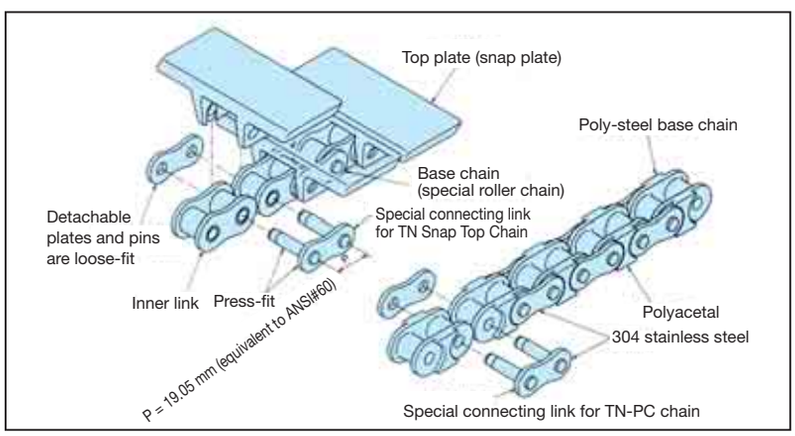
4. TN-SS type

All base chain components are made of 304 stainless steel, and designed for use in environments where high corrosion resistance is required. Lubrication of base chain is necessary.

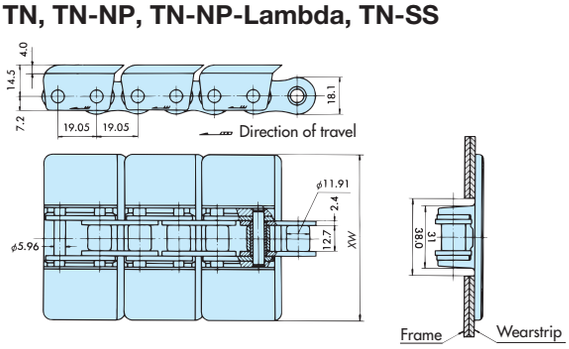
5. TN-PC type

Base chain is constructed from RF60PC poly-steel chain. Stainless steel outer links combined with inner links made of engineering plastic deliver corrosion resistance and low noise with no lubrication required.

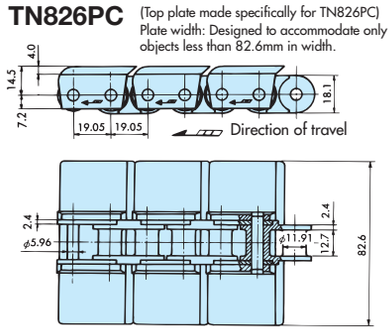




TN, TN-NP, TN-NP-Lambda, TN-SS



TN826PC (Top plate made specifically for TN826PC)
Plate width: Designed to accommodate only objects less than 82.6mm in width.



TN Snap Top Chain

Straight Running

● Chain Numbering (Base Chain and Connecting Link)

Chain type	–	Base chain	–	Base chain material	–	※1
TN	**–**	**C**	**–**	**LMC–NP – JL**		

※1: Specify JL only when connecting link is required.

● Chain Numbering (Top Plate)

Chain type	Plate width	Top plate material	–	Base chain material
TN	**826**	**P**	**–**	**PC** ※2

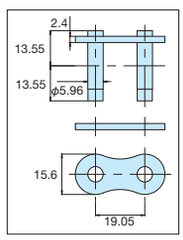
※2: Specify PC only when base chain material is to be type PC.

Top Plate
Top plates for Poly-Steel Attachment Chain (PC) are available by special order only. Top plates for all other types including Standard, NP, NP-Lambda and SS Chain are identical. Color of top plates for all five types is gray.

Base Chain
Special chain identical in size to ANSI #60 chain (pin ends are different for general drive chain). Connecting links are TN type. However, for Poly-Steel Attachment Chain (PC), parts other than connecting links are identical to those for drive chain.

Sprockets
Standard ANSI #60 sprockets can be used. 12-tooth sprocket is recommended as the minimum to prevent any interference between chain and sprocket.

Connecting Link
Cotter pins and spring clips are not used on roller chain or Poly-Steel Attachment Chain. The “legs” of the top plates serve to hold the connecting link plate in place and keep it from coming loose.



Caution!
Be sure to specify chain length using the number of links in the base chain. TN top plates are attached only to the outer links of the base chain, which means that the number of links in the chain is twice the number of top plates. Also, note that the number of links for standard base chain length is 160. In other words, with a chain pitch of 19.05mm, standard length is 3,048mm.

● Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Approx. mass kg/m	Top plate material	Type				
				Standard	NP	NP-Lambda	SS	PC
				Gray	Gray	Gray	Gray	Gray
TN826	82.6	2.1 (1.5)	Polyacetal	●	●	●	●	●
TN1016	101.6	2.2		●	●	●	●	–
TN1143	114.3	2.3		●	●	●	●	–
TN1270	127.0	2.4		●	●	●	●	–
TN1905	190.5	2.8		●	●	●	●	–
Max. allowable load kN {kgf}				6.28 {640}			1.03 {105}	0.88 {90}
Operating temperature range °C				-10 to 80			-20 to 80	
Max. allowable speed m/min		With lube		120		–	70	100
		No lube		60			45	50

● : Available —: Not available
Note: 1. Mass in ( ) is for PC type.
2. Top plates for TN826PC chain are specially designed for that type. All other top plates for other four types are identical.
3. Tsubaki original chain.

● Snap Top Plate Material

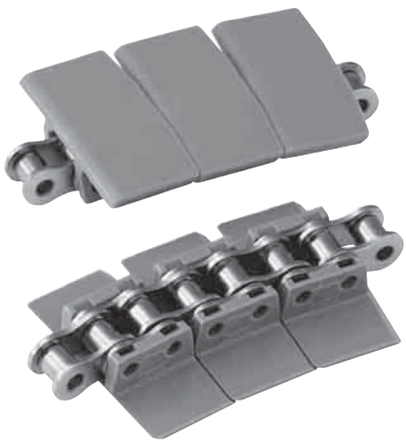
Material	Standard	Low Friction			Antibacterial/Mold Resistant
Link color	Gray	Brown	Green	White	Cream
Material mark	–	LFB	LFG	LFW	MWS
Snap top plate	●	★	★	★	★

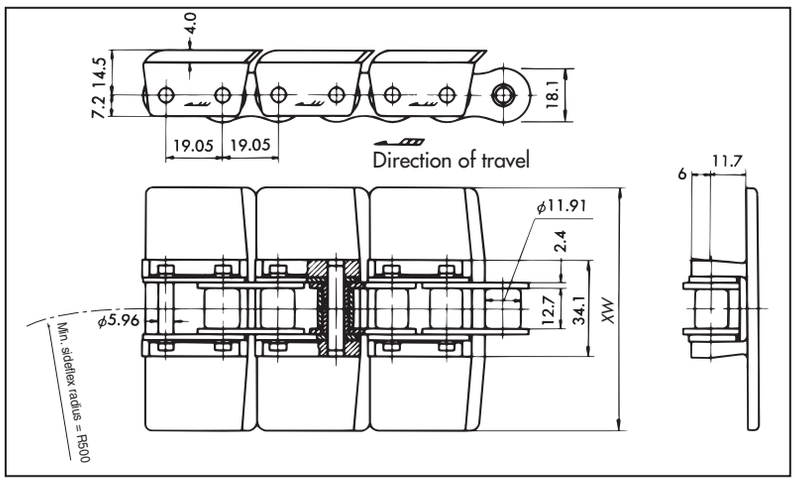
● : Standard material ★ : Made-to-order material

Wearstrips
See page 137
Return-Way Parts
See page 147

TNU Snap Top Chain

Sideflexing





● Chain Numbering (Base Chain and Connecting Link)

Chain type		Base chain		Base chain material		※
TNU	–	C		–NP	–	JL

※ Specify JL only when connecting link is required.

● Chain Numbering (Top Plate)

Chain type	plate width	Top plate material
TNU	826	P

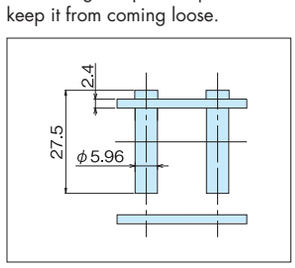
● Chain Information

Tsubaki chain no.	Top plate width XW mm	Approx. mass kg/m	Top plate material	Type		
				Standard	NP	AS
				Gray	Gray	Gray
TNU826	82.6	2.2	Polyacetal	★	★	★
TNU1143	114.3	2.3		★	★	★
TNU1270	127.0	2.5		★	★	★
Max. allowable load kN {kgf}				4.02 {410}		0.78 {80}
Operating temperature range ℃				-10 to 80		-20 to 80
Max. allowable speed m/min		With lube		100		–
		No lube		60		45

Note: 1. ★ : Made-to-order
2. Tsubaki original chain.

Connecting Link

Cotter pins and spring clips are not used on TNU chain. The "legs" of the top plates serve to hold the connecting link plate in place and keep it from coming loose.



● Snap Top Plate Material

Material	Standard	Low Friction	Low Friction	Low Friction	Antibacterial/ Mold Resistant
Material mark	–	LFB	LFG	LFW	MWS
Snap top plate	★	★	★	★	★

● : Standard material ★ : Made-to-order material

● Sprockets

Standard ANSI #60 sprockets can be used. 12-tooth sprocket is recommended as the minimum to prevent any interference between chain and sprocket.

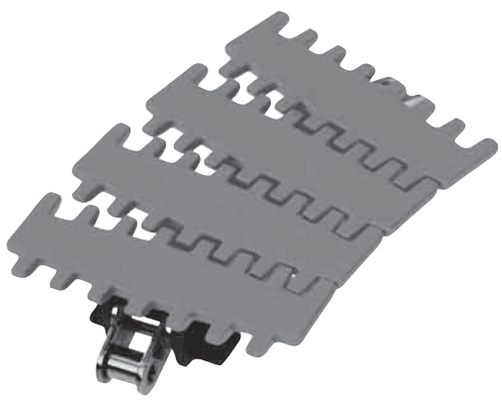
Wearstrips
See page 137
Return-Way Parts
See page 147

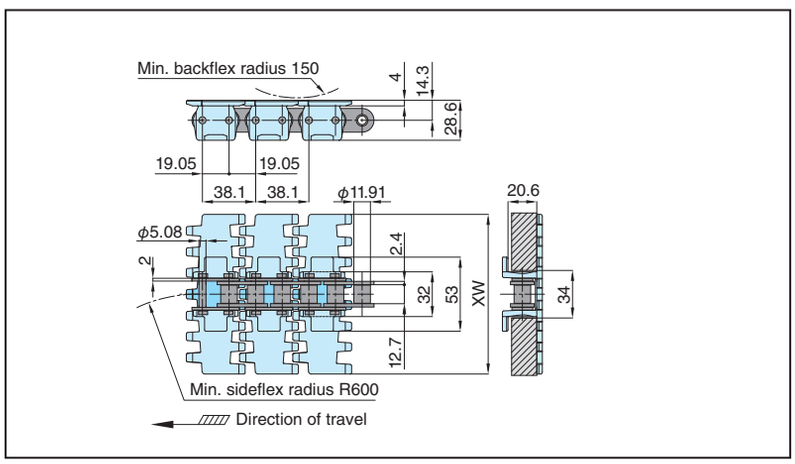
PT Snap Top Chain

Sideflexing

Features

- Plastic top plates snap on a sideflexing roller chain.
- Top plates have comb-shaped indentations to minimize gaps for better product handling.
- Suitable for higher load applications.





Chain Information

Tsubaki chain no.	Top plate width *XW* mm	Approx. mass kg/m	Standard chain length mm {ft}
PT32	82.6	2.2	1905 {6.25}
PT44	114.3	2.3	

Note: 1. Top plate width of 82.6mm is made by trimming a 114.3mm-wide top plate.
2. Number of links is equal to the number of top plates.

Chain Numbering

Chain type	Top plate width	Roller chain material	–	Top plate material
PT	**32**	**(SUS)**	**–**	**LFG**

Specify SUS only when roller chain material is to be stainless steel.

Roller Chain Material

Roller chain material	Max. allowable load kN {kgf}	Max. allowable speed m/min		Availability
		With lube	No lube	
Steel nickel plated	2.16 {220}	100	40	●
Stainless steel	0.88 { 90}	60	30	★

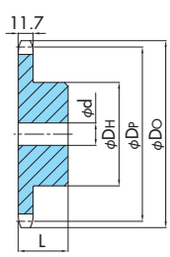
● : Standard material ★ : Made-to-order material

Top Plate Material

Material	Material mark	Color	Operating temperature range °C	Availability	
				PT32	PT44
Standard	–	Gray	-20 to 80	★	★
Low Friction	LFG	Green	-20 to 65 (80)	★	●
Ultra Low Friction	ULF	Blue	-20 to 65 (80)	★	★
Low Friction	UL	Green	-20 to 80	★	★

Note: 1. ● : Standard material ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.
4. Tsubaki original chain.

Sprockets Applicable chain: PT, PT-S



Tsubaki sprocket no.	Teeth	Pitch diameter D_P	Outside diameter D_O	Hub		Bore diameter *d*		Approx. mass kg
				Diameter D_H	Width *L*	Plain bore	Max.	
B-620	20	121.78	131	83	40	16	55	2.2
B-621	21	127.82	137	83	40	16	55	2.3
B-622	22	133.86	143	83	40	16	55	2.5
B-623	23	139.90	149	83	40	16	55	2.5
B-624	24	145.95	155	83	40	16	55	2.6
B-625	25	151.99	162	83	40	16	55	2.7
B-626	26	158.04	168	83	40	16	55	2.9
B-627	27	164.09	174	83	40	16	55	3.0
B-628	28	170.14	180	83	40	16	55	3.1
B-629	29	176.20	186	83	40	16	55	3.2

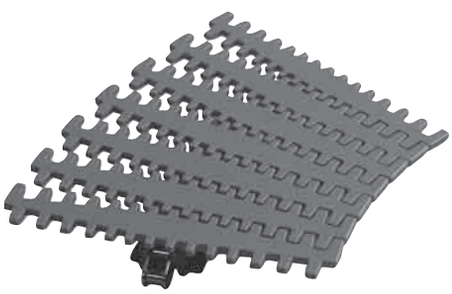
Note: Sprockets for ANSI #60 roller chains with at least 20 teeth can be used.

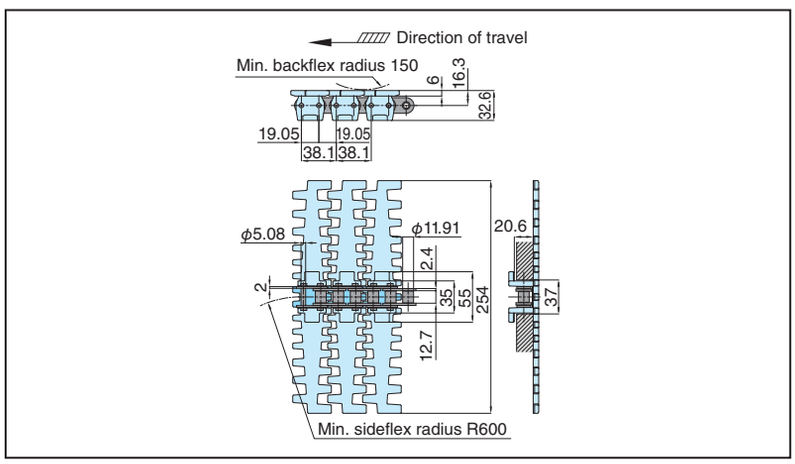
PT-S Snap Top Chain

Sideflexing

Features

- Plastic top plates snap on a sideflexing roller chain.
- Top plates have comb-shaped indentations to minimize gaps for better product handling.
- Suitable for higher load applications such as handling cases and crates.





Chain Information

Tsubaki chain no.	Top plate width mm	Approx. mass kg/m	Standard chain length mm {ft}
PT100S	254.0	3.5	1905 {6.25}

Note: Number of links is equal to the number of top plates.

Roller Chain Material

Roller chain material	Max. allowable load kN {kgf}	Max. allowable speed m/min		Availability
		With lube	No lube	
Steel nickel plated	2.16 {220}	100	40	●
Stainless steel	0.88 { 90}	60	30	★

● : Standard material ★ : Made-to-order material

Top Plate Material

Material	Material mark	Color	Operating temperature range °C	Availability
Standard	–	Gray	-20 to 80	★
Low Friction	LFG	Green	-20 to 65 (80)	●
Ultra Low Friction	ULF	Blue	-20 to 65 (80)	★
Low Friction	UL	Green	-20 to 80	★

Note: 1. ● : Standard material ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.
4. Tsubaki original chain.

Chain Numbering

Chain type	Roller chain material	–	Top plate material
PT100S	**(SUS)**	**–**	**LFG**

Specify SUS only when roller chain material is to be stainless steel.

Sprockets

Sprockets are the same as for PT Snap Top Chain.

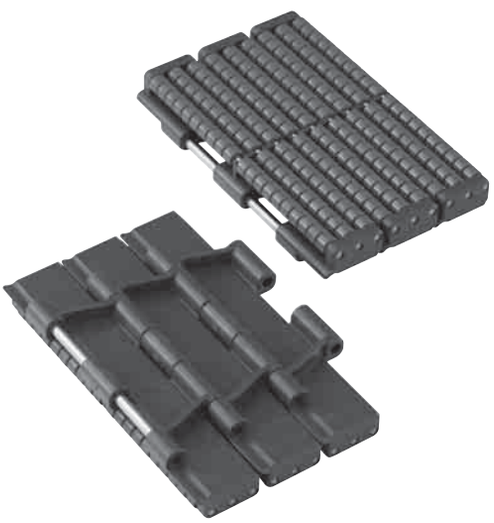
TTPDH-LBP Plastic Top Chain

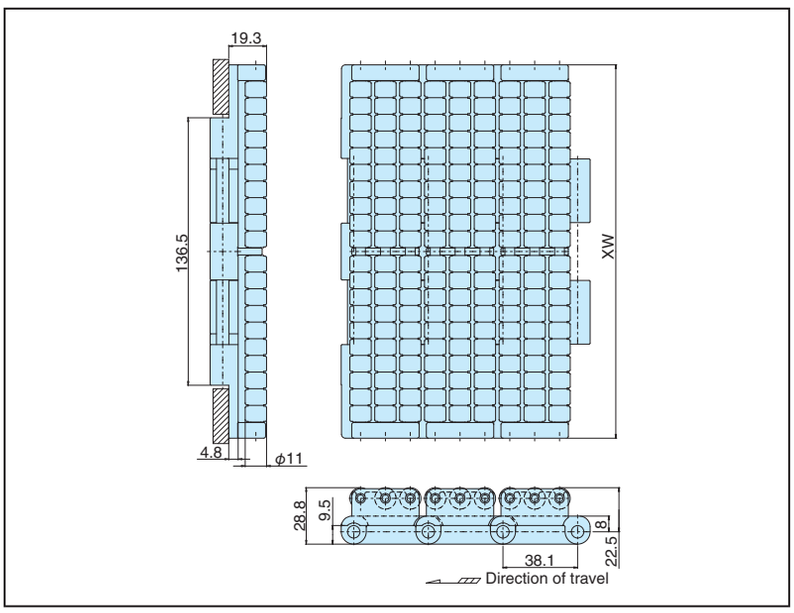
Stainless Steel Pins

Straight Running

Features

- Free rotation of plastic accumulation rollers protects conveyed objects from damage. Ideal for minimizing marks or scratches on the bottom sides of conveyed objects and for reducing line pressure when used in accumulation applications.
- Coefficient of rolling friction for free-flow rollers is 0.10.





Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTPDH1905-LBP	190.5	Austenitic steel	5.52	1524 {5}
TTPDH2540-LBP	254.0		6.90	
TTPDH3048-LBP	304.8		8.00	

Note: 1. Shipped chain will consist of an integral number of standard chain units plus (if necessary) one fractional length having the number of links needed to make up the total chain length as ordered by the customer.
2. Specifications other than the above are not available.
3. Connecting pins not sold separately.
4. Plastic pins are not available.
5. Standard chain length is 40 links.

Chain Numbering

Chain type	Plate width	–	Accumulation chain
TTPDH	**1905**	**–**	**LBP**

1905 = 190.5mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Dark gray	190.5 to 304.8	1.67 {170}	-20 to 80	30	

● : Standard material
Roller color: Water blue

Sprockets See page 25
Idler Wheels See page 25
Wearstrips See page 137
Return-Way Parts See page 151

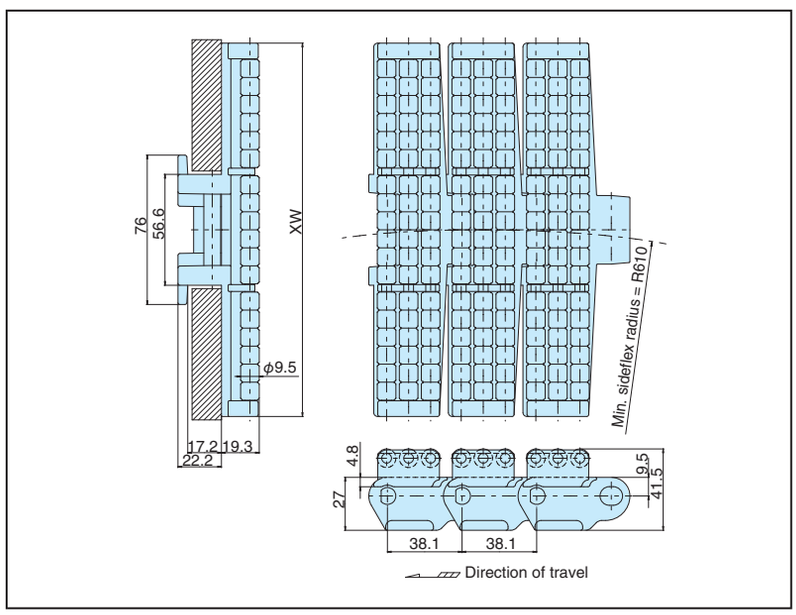
TPUS-LBP Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Free rotation of plastic accumulation rollers protects conveyed objects from damage. Ideal for minimizing marks or scratches on the bottom sides of conveyed objects and for reducing line pressure when used in accumulation applications.
- Coefficient of rolling friction for free-flow rollers is 0.10.



Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUS953-T-LBP	95.3	Austenitic steel	3.31	1524 {5}
TPUS1905-T-LBP	190.5		4.70	
TPUS2540-T-LBP	254.0		5.90	
TPUS3048-T-LBP	304.8		6.50	

Note: 1. Shipped chain will consist of an integral number of standard chain units plus (if necessary) one fractional length having the number of links needed to make up the total chain length as ordered by the customer.
2. Specifications other than the above are not available.
3. Connecting pins not sold separately.
4. Plastic pins are not available.
5. Standard chain length is 40 links.

Chain Numbering

Chain type	Plate width	–	Tab	–	Accumulation chain
TPUS	953	–	T	–	LBP

953 = 95.3mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Dark gray	95.3 to 304.8	2.16 {220}	-20 to 80	30	

● : Standard material
Roller color: Water blue

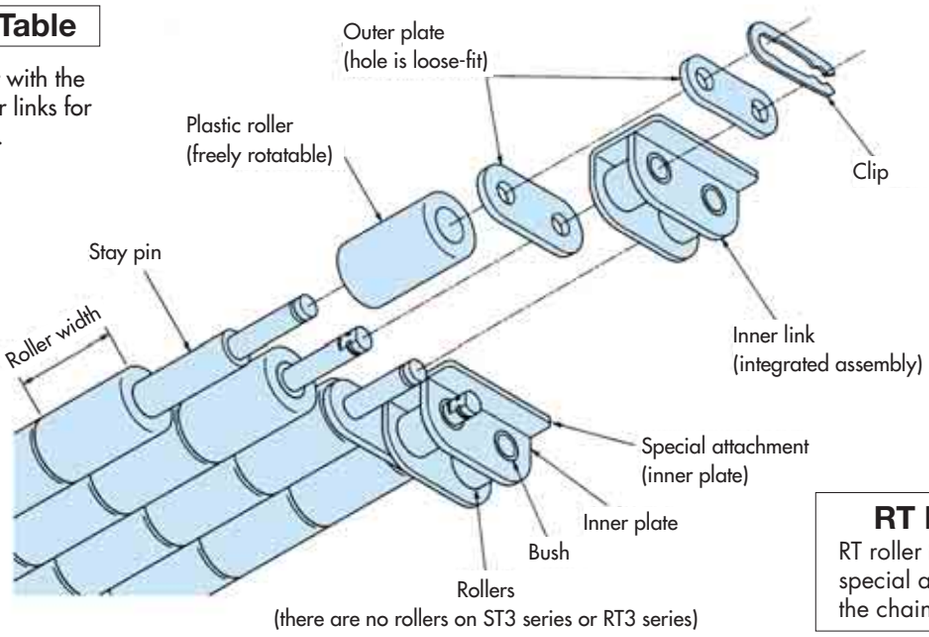
Sprockets See page 57
Idler Wheels See page 57
Wearstrips See page 137
Return-Way Parts See page 151

ST/RT Roller Table

Straight Running

ST Roller Table

Parts are loose-fit with the exception of inner links for easy disassembly.



RT Roller Table

RT roller table does not have special attachments covering the chain.

Features

- Conveyed goods can be placed directly on rollers without the use of pallets.
- ST type has special attachments that are level with the plastic rollers, enabling conveyed goods to move smoothly from one side to the other across two parallel strands of chain.
- RT type has plastic rollers double the width of the ST type, and can be used for the transfer of objects having large widths such as shipping crates and pallets.
- Coefficient of rolling friction for rollers is from 0.06 to 0.10.
- Gap between plastic rollers does not change even when bending because rollers are mounted above the pitch line of the base chain.
- Applications include packaging, manufacturing, assembly, cleaning, filling and inspection processes for food, beverage and pharmaceutical products, electronic and mechanical parts, etc.
- Operating temperature range
  ST-SS, RT-SS: -20℃ to 80℃ ST-NP : -10℃ to 80℃
- Max. allowable speed: 30 m/min

● Material

ST type

SS (stainless steel) Series

Plastic roller	Polyacetal (light gray)
Stay pin	304 stainless steel
Special attachment	304 stainless steel
Clip	301 stainless steel
Base chain	Stainless steel

NP (nickel-plated) Series

Plastic roller	Polyacetal (light gray)
Stay pin	304 stainless steel
Special attachment	304 stainless steel
Clip	301 stainless steel
Base chain	Nickel-plated

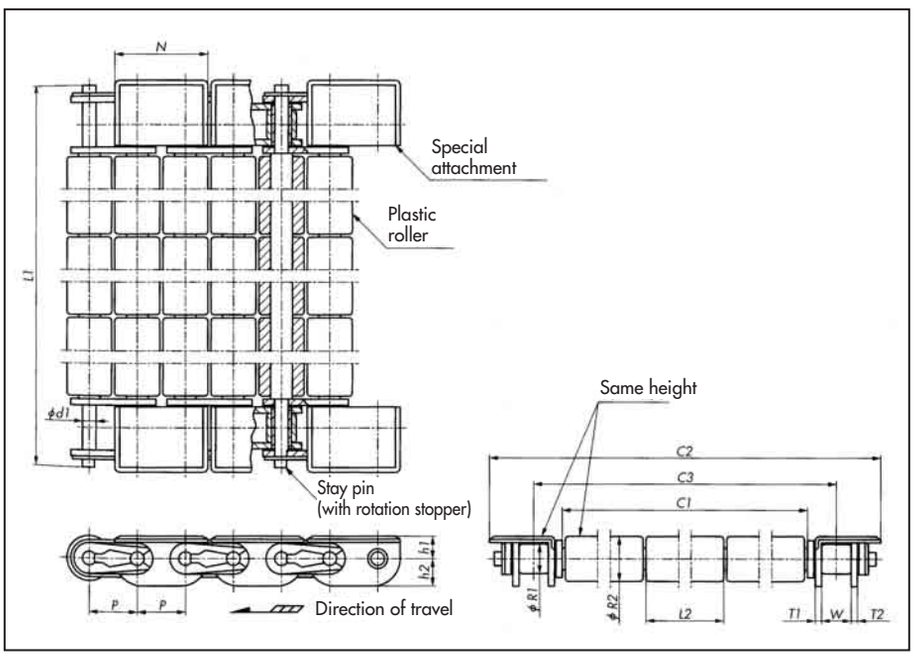
RT type

SS (stainless steel) Series

Plastic roller	Polyacetal (light gray)
Stay pin	304 stainless steel
Clip	301 stainless steel
Base chain	Stainless steel

ST Roller Table

Straight Running



● Dimensions

Type	Pitch *P*	Width *W*	Roller (bush) diameter *R1*	Attachment height *h1*	Plate height *h2*	Attachment width *N*	Attachment thickness *T1*	Plate thickness *T2*	Pin diameter *d1*	Plastic roller outer diameter *R2*	Plastic roller length *L2*	Max. allowable conveying load* kg/m²
ST300	9.525	4.78	(5.08)	4.4	5.2	18.3	0.75	1.25	3.54	9.2	10.0	50
ST400	12.70	7.95	7.92	5.7	7.0	24.4	1.2	1.5	3.92	12.0	25.0	250
ST500	15.875	9.53	10.16	7.1	8.5	30.5	1.5	2.0	5.00	15.0	25.0	350

Tsubaki chain no.	Effective width *C1*	Total width *C2*	Center distance *C3*	Pin length *L1*	Approx. mass kg/m
ST305SS	50.0	75.0	60.4	74.2	1.75
ST310SS	100.0	125.0	110.4	124.2	2.68
ST315SS	150.0	175.0	160.4	174.2	3.61
ST320SS	200.0	225.0	210.4	224.2	4.54

Tsubaki chain no.	Effective width *C1*	Total width *C2*	Center distance *C3*	Pin length *L1*	Approx. mass kg/m
ST404SS (NP)	101.2	138.0	115.6	135.6	4.42
ST406SS (NP)	151.2	188.0	165.6	185.6	5.78
ST408SS (NP)	201.2	238.0	215.6	235.6	7.13
ST410SS (NP)	251.2	288.0	265.6	285.6	8.48
ST412SS (NP)	301.2	338.0	315.6	335.6	9.82
ST414SS (NP)	351.2	388.0	365.6	385.6	11.17
ST416SS (NP)	401.2	438.0	415.6	435.6	12.52

Tsubaki chain no.	Effective width *C1*	Total width *C2*	Center distance *C3*	Pin length *L1*	Approx. mass kg/m
ST504SS (NP)	101.2	145.2	119.0	142.8	6.16
ST506SS (NP)	151.2	195.2	169.0	192.8	8.08
ST508SS (NP)	201.2	245.2	219.0	242.8	9.88
ST510SS (NP)	251.2	295.2	269.0	292.8	11.74
ST512SS (NP)	301.2	345.2	319.0	342.8	13.60
ST514SS (NP)	351.2	395.2	369.0	392.8	15.46
ST516SS (NP)	401.2	445.2	419.0	442.8	17.31
ST518SS (NP)	451.2	495.2	469.0	492.8	19.18
ST520SS (NP)	501.2	545.2	519.0	542.8	21.04
ST522SS (NP)	551.2	595.2	569.0	592.8	22.90
ST5246SS (NP)	601.2	645.2	619.0	642.8	24.76

Note: 1. The base chain for ST300 (#35) is rollerless and bushed type.
2. * Changes depending on the width and length of the roller table.
3. The unit of all dimensions is millimeter unless specified.
4. Made to order.

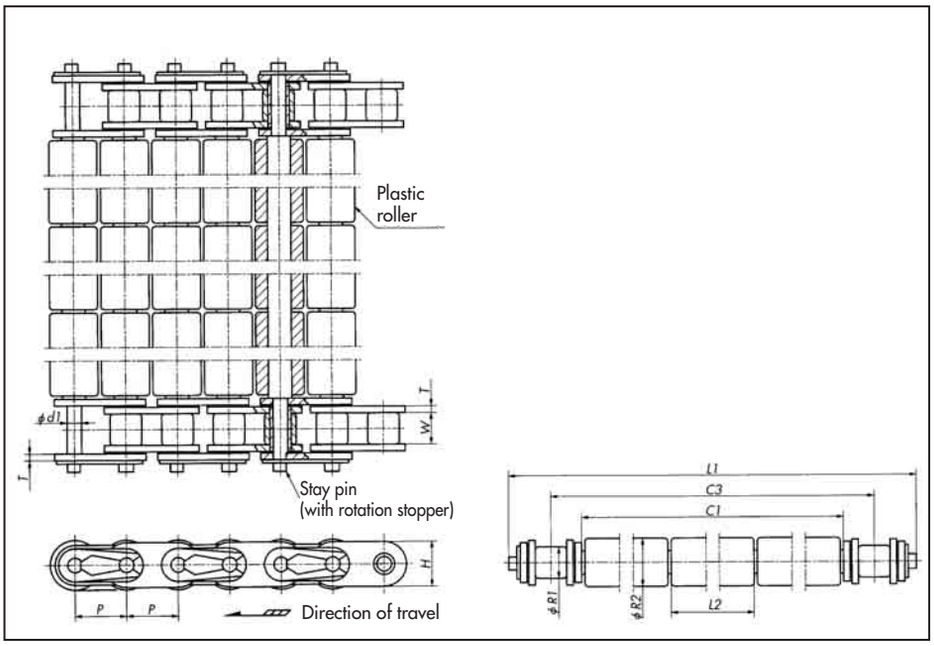
● Sprockets

Standard ANSI sprockets (type B) can be used provided they have at least 23 teeth. When the number of teeth is 22 or less, special sprockets should be used. See page 48.

Return-Way Parts
See page 151

RT Roller Table

Straight Running



● Dimensions

Tsubaki chain no.	Pitch *P*	Width *W*	Roller (bush) diameter *C3*	Plate		Pin		Plastic roller		Effective width *C1*	Center distance *C3*	Max. allowable conveying load* kg/m²	Approx. mass kg/m
				Height *H*	Thickness *T*	Diameter *d1*	Length *L1*	Diameter *R2*	Length *L2*				
RT305SS	9.525	4.78	(5.08)	8.2	1.25	3.54	74.2	9.2	10.0	50.5	60.4	50	1.68
RT310SS							124.2			100.0	110.4		2.61
RT315SS							174.2			150.0	160.4		3.54
RT320SS							224.2			200.0	210.4		4.47
RT404SS	12.70	7.95	7.92	11.1	1.5	3.92	135.6	12.2	50.0	101.2	115.6	200	4.03
RT408SS							235.6			201.2	215.6		6.76
RT412SS							335.6			301.2	315.6		9.48
RT416SS							435.6			401.2	415.6		12.21
RT504SS	15.875	9.53	10.16	13.9	2.0	5.00	142.8	15.2	50.0	101.2	119.0	300	5.80
RT508SS							242.8			201.2	219.0		9.48
RT512SS							342.8			301.2	319.0		13.17
RT516SS							442.8			401.2	419.0		16.89
RT520SS							542.8			501.2	519.0		20.54
RT524SS							642.8			601.2	619.0		24.23
RT604SS	19.05	12.70	11.91	16.8	2.4	5.96	153.6	18.3	50.0	101.2	124.0	300	6.73
RT608SS							253.6			201.2	224.0		10.38
RT612SS							353.6			301.2	324.0		14.03
RT616SS							453.6			401.2	424.0		17.68
RT620SS							553.6			501.2	542.0		21.32
RT624SS							653.6			601.2	624.0		24.97

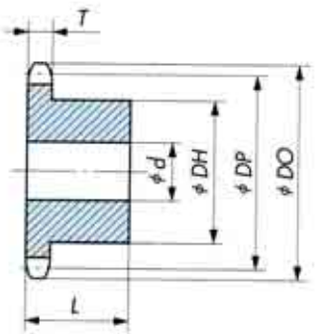
Note: 1. The base chain for RT300 (#35) is rollerless and bushed type.
2. * Changes depending on the width and length of the roller table.
3. The unit of all dimensions is millimeter unless specified.
4. Made to order.

● Sprockets

1. Standard ANSI sprockets (type B) can be used provided they have at least 15 teeth. When the number of teeth is 14 or less, special sprockets should be used. See page 48.
2. For the RT600 series, outer plate height is identical to inner plate height.

Return-Way Parts
See page 151

● Sprockets Applicable chain: ST/RT Roller Table



Tsubaki sprocket no.	Teeth	Pitch diameter *DP*	Outside diameter *DO*	Facewidth *T*	Bore diameter *d*		Hub diameter *DH*	Length thru bore *L*	Approx. mass kg	Material
					Plain bore	Max.				
RS35-1B13T-R	13	39.80	44	4.4	9.5	12	26	20	0.09	Carbon steel
RS35-1B14T-R	14	42.81	46			15	29		0.11	
RS35-1B15T-R	15	45.80	51			16	32		0.14	
RS35-1B16T-R	16	48.82	53			19	35		0.18	
RS35-1B17T-R	17	51.84	57			20	38		0.20	
RS35-1B18T-R	18	54.85	60		12.7	23	41		0.23	
RS35-1B19T-R	19	57.87	63			26	44		0.25	
RS35-1B20T-R	20	60.89	66			28	47		0.29	
RS35-1B21T-R	21	63.91	69			30	50		0.33	
RS40-1B10T-R	10	41.10	46	7.3	9.5	12	24	22	0.10	
RS40-1B11T-R	11	45.08	51			15	28		0.14	
RS40-1B12T-R	12	49.07	53			17	32		0.17	
RS40-1B13T-R	13	53.07	58		12.7	20	36		0.22	
RS40-1B14T-R	14	57.07	63			23	40		0.27	
RS40-1B15T-R	15	61.08	67			26	44		0.32	
RS40-1B16T-R	16	65.10	71			28	48		0.38	
RS40-1B17T-R	17	69.12	75			32	52		0.44	
RS40-1B18T-R	18	73.14	78			35	56		0.50	
RS40-1B19T-R	19	77.16	83			38	60		0.57	
RS40-1B20T-R	20	81.18	88			41	64	25	0.72	
RS40-1B21T-R	21	85.21	92			45	68		0.80	
RS40-1B22T-R	22	89.24	96			47	72		0.90	
RS50-1B10T-R	10	51.37	58	8.9	9.5	16	31	25	0.20	
RS50-1B11T-R	11	56.35	63		12.7	20	36		0.24	
RS50-1B12T-R	12	61.34	68			23	41		0.31	
RS50-1B13T-R	13	66.34	73			27	46		0.40	
RS50-1B14T-R	14	71.34	78			31	51		0.50	
RS50-1B15T-R	15	76.35	83			35	56		0.60	
RS50-1B16T-R	16	81.37	83			38	61		0.70	
RS50-1B17T-R	17	86.39	93			43	66		0.80	
RS50-1B18T-R	18	91.42	98			46	71	28	0.97	

Note:
1. Teeth for all sprockets are hardened.
2. A greater number of teeth than those given in the table above can be used with ANSI standard sprockets.
3. RT type roller table can use the same sprockets as above with the exception of the following.
   RS351B: 14 teeth or greater
   RS401B: 13 teeth or greater
   RS501B: 14 teeth or greater, and
   RS601B: 12 teeth or greater can use ANSI standard sprockets.
4. 304 stainless steel series are the same as above. (Consult Tsubaki for details.)
5. Made to order.

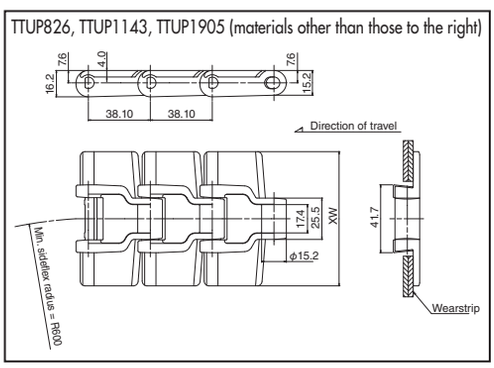
TTUP Plastic Top Chain

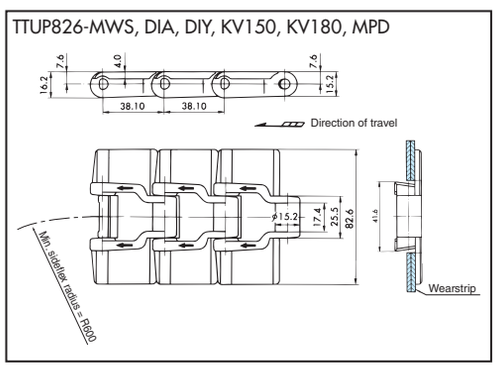
Stainless Steel Pins

Sideflexing

Features

- Most popular chain series designed for use in sideflexing conveyors. Simple construction facilitates washing and clean-up.
- Uses the same sprockets as TPS and TPU plastic top chains. Designed to allow common sprockets to be used.





Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTUP826	82.6	304 stainless steel	1.0 (0.85/1.2 /0.9)	3048 {10}
TTUP1143	114.3		1.1 (0.95/1.35/1.0)	
TTUP1905	190.5		1.6 (1.35/1.95/ -)	

Note: 1. Mass shown in ( ) is for DIA/DIY/MPD.
2. New chain cannot be connected to an old chain model. When replacing an old chain model, always replace the entire chain.
3. Standard chain length is 80 links.
4. Type 880 chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TTUP	**826**	**–**	**LFB**

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	82.6 to 190.5	1.08 {110}	-20 to 80	100	50
●	Low Friction	LFB	Brown	82.6 to 190.5				
●		LFG	Green	82.6 to 190.5				
●	Ultra Low Friction	ULF	Blue	82.6 to 190.5				
●	Low Friction	UL	Green	82.6 to 190.5			90	40
★	Low Friction	LFW	White	82.6 to 190.5	1.08 {110}	-20 to 80	100	50
★	Heat Resistant / High Speed	KV150	Black	82.6	0.98 {100}	-20 to 150	–	200
★		KV180		82.6		-20 to 180	200	
★	Chemical Resistant	Y	Mat white	82.6 to 190.5	0.54 { 55}	-20 to 80	100	50
★	Electroconductive	E	Black	82.6 to 190.5	0.76 { 77}			
★	Impact Resistant	DIA	Cream	82.6 to 190.5	0.83 { 85}		–	
★		DIY	Green	82.6 to 190.5			100	
★	Antibacterial / Mold Resistant	MWS	Cream	82.6 to 190.5	1.08 {110}			
★	Metal Detectable	MPD	Black	82.6 to 114.3	0.83 { 85}		–	

● : Standard material ★ : Made-to-order material

Sprockets See page 30
Idler Wheels See page 22/30
Wearstrips See page 137
Return-Way Parts See page 147

TTUP-P Plastic Top Chain

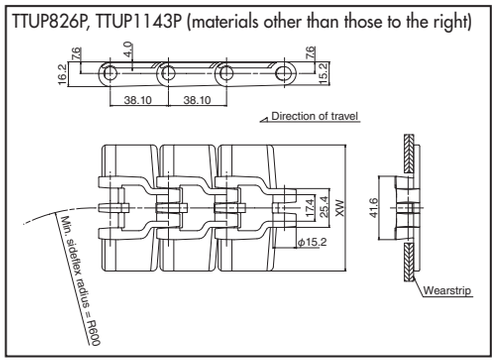
Plastic Pins

Sideflexing

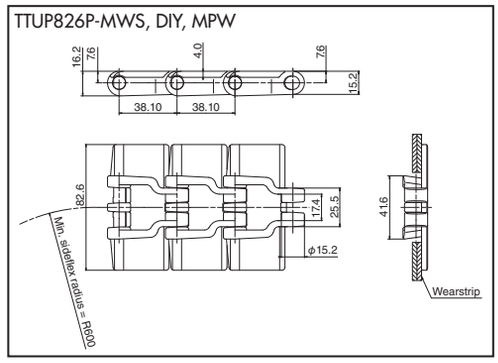
Features

- Most popular chain series designed for use in sideflexing conveyors. Simple construction facilitates washing and clean-up.
- Uses the same sprockets as TPS and TPU plastic top chains. Designed to allow common sprockets to be used.
- Models with plastic pins also available. All-plastic construction means light weight and easy handling. Longer service life under water lubrication than stainless steel pins.

TTUP826P, TTUP1143P (materials other than those to the right)



TTUP826P-MWS, DIY, MPW



Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTUP826P	82.6	Special engineering plastic	0.70 (0.9 /0.65)	3048 {10}
TTUP1143P	114.3		0.80 (1.05/0.75)	

Note: 1. Mass shown in ( ) is for DIY/MPW.
2. The connecting pin is colored orange so as to distinguish it from base-chain pins (colored white).
3. Standard chain length is 80 links.
4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	Plastic pin	–	Chain material
TTUP	**826**	**P**	**–**	**LFB**

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	82.6 to 114.3	0.88 {90}	-20 to 60 (80)	100	50
●	Low Friction	LFB	Brown	82.6 to 114.3				
●		LFG	Green	82.6 to 114.3				
●		UL	Green	82.6 to 114.3				
●	Ultra Low Friction	ULF	Blue	82.6 to 114.3				
★	Low Friction	LFW	White	82.6 to 114.3	0.88 {90}	-20 to 60 (80)	100	50
★	Electroconductive	E	Black	82.6 to 114.3	0.62 {63}			
★	Impact Resistant	DIY	Green	82.6 to 114.3	0.69 {70}			
★	Antibacterial/Mold Resistant	MWS	Cream	82.6 to 114.3	0.88 {90}			
★	Metal Detectable	MPW	Black	82.6 to 114.3	0.34 {35}	-20 to 60	50	50
★	Middle Friction	MF	Yellow	82.6 to 114.3	0.58 {59}	-20 to 80 (dry only)	–	50

Note: Operating temperature of ( ) is for dry conditions (no lubrication).
● : Standard material ★ : Made-to-order material

Sprockets See page 30
Idler Wheels See page 22/30
Wearstrips See page 137
Return-Way Parts See page 147

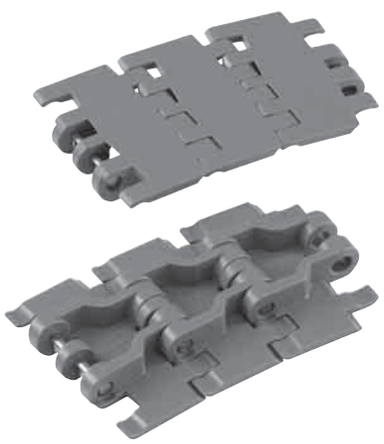
TTUPH Plastic Top Chain

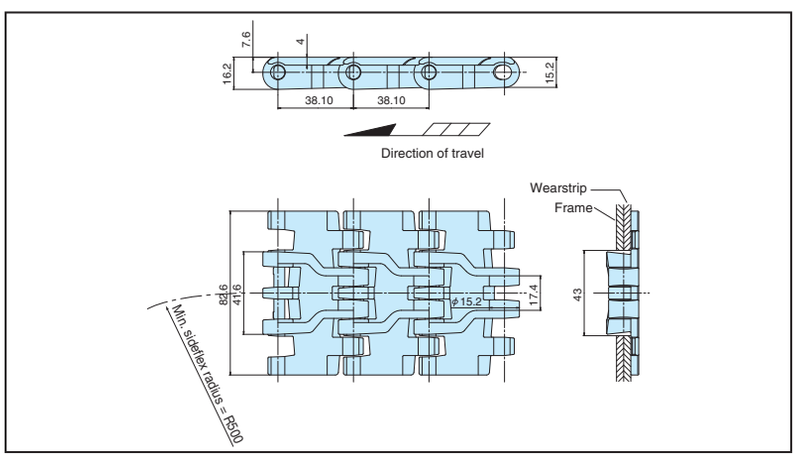
Stainless Steel Pins

Sideflexing

Features

- Comb-toothed plates minimize gaps between links. Ideal for conveying unstable containers such as PET bottles and dessert cups.
- Surface of top plate is flatter and smoother. Effective in preventing container wobbling and tip-over during conveyance.
- Same basic dimensions as TTUP plastic top chain. Can provide stable container conveyance simply by replacing the chain.
- Both ends of the plate are slightly chamfered, ensuring smooth lateral plate-to-plate transfers between adjacent chains.





Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTUPH826	82.6	304 stainless steel	1.0 (0.85/1.20)	3048 {10}

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. Plastic pins are not available.
3. Standard chain length is 80 links.
4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TTUPH	**826**	**–**	**LFB**

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	82.6	1.08 {110}	-20 to 80	100	50
●	Low Friction	LFB	Brown					
●		LFG	Green					
●	Ultra Low Friction	ULF	Blue					
★	Low Friction	LFW	White	82.6	1.08 {110}	-20 to 80	100	50
★	Chemical Resistant	Y	Mat white	82.6	0.54 { 55}	-20 to 80	100	50
★	Electroconductive	E	Black		0.76 { 77}		100	
★	Impact Resistant	DIA	Cream		0.83 { 85}		–	
★		DIY	Green				100	
★	Antibacterial/Mold Resistant	MWS	Cream		1.18 {120}			

● : Standard material ★ : Made-to-order material

Sprockets See page 30
Idler Wheels See page 22/30
Wearstrips See page 137
Return-Way Parts See page 147

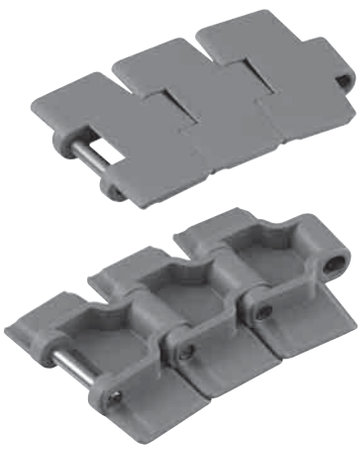
TTUP(T)-M Plastic Top Chain

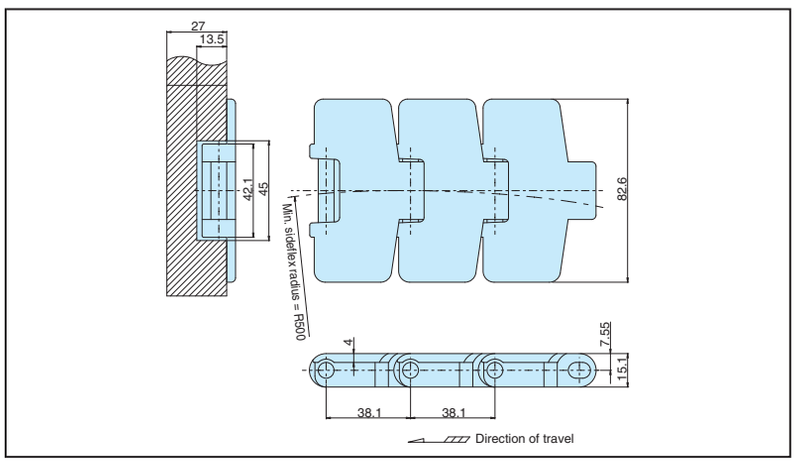
Stainless Steel Pins

Sideflexing

Features

- Combining a magnetic wearstrip prevents the chain from floating in curved sections.





Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTUP826M	82.6	Ferritic stainless steel	1.05	3048 {10}
TTUPT826M			1.15	

Note: 1. Available only in LFB (Low Friction/Anti-Wear) material.
2. Plastic pins are not available.
3. Please contact Tsubaki regarding magnetic wearstrip for curved sections.
4. Standard chain length is 80 links.
5. Type 880M and 879M chain.

Chain Numbering

Chain type	Plate width	Chain type	–	Chain material
TTUPT	**826**	**M**	**–**	**LFB**

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Low Friction	LFB	Brown	82.6	0.98 {100}	-20 to 65 (80)	100	50

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● : Standard material

Sprockets See page 30
Idler Wheels See page 22/30
Wearstrips See page 137
Return-Way Parts See page 147

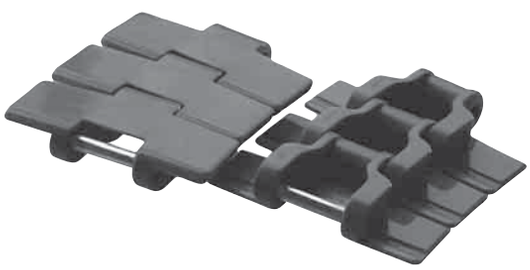
TTUPS Plastic Top Chain

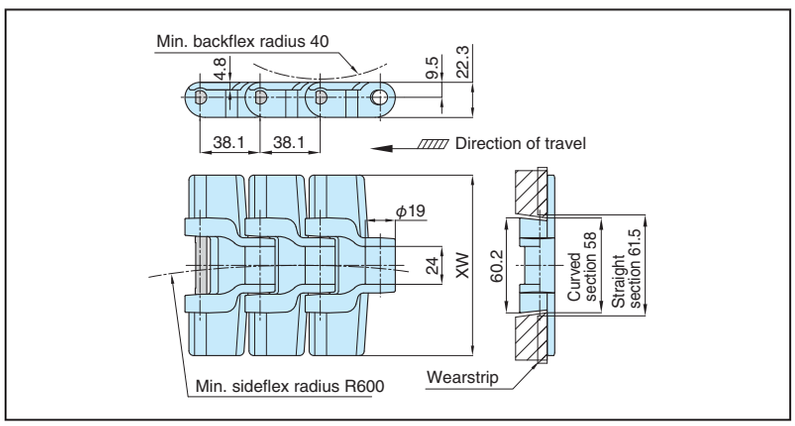
Stainless Steel Pins

Sideflexing

Features

- Chain is 1.8 times stronger than TTUP chains. Suitable for higher load applications.
- Can handle larger and heavier products.





Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm{ft}
TTUPS1143	114.3	304 stainless steel	1.9	3048 {10}
TTUPS1270	127.0		2.0	
TTUPS1524	152.4		2.1	
TTUPS1905	190.5		2.3	

Note: 1. Plastic pins are not available.
2. Top plate widths of 127.0mm and 152.4mm are made by trimming a 190.5mm-wide top plate.
3. TPSS sprockets can be used.
4. Standard chain length is 80 links.
5. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TTUPS	**1143**	**–**	**LFG**

1143 = 114.3mm

Material

Material	Material mark	Color	Chain mass kg/m				Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min		Availability			
			TTUPS1143	TTUPS1270	TTUPS1524	TTUPS1905			With lube	No lube	TTUPS1143	TTUPS1270	TTUPS1524	TTUPS1905
Standard	–	Gray	1.9	2.0	2.1	2.3	1.96 {200}	-20 to 80	90	40	★	★	★	★
Low Friction	LFG	Green	1.9	2.0	2.1	2.3	1.96 {200}	-20 to 65 (80)	90	40	●	★	★	●
Ultra Low Friction	ULF	Blue	1.9	2.0	2.1	2.3	1.96 {200}	-20 to 65 (80)	90	40	★	★	★	★
Low Friction	UL	Green	1.9	2.0	2.1	2.3	1.96 {200}	-20 to 80	90	40	★	★	★	★
Electroconductive	E	Black	1.9	2.0	2.1	2.3	1.57 {180}	-20 to 80	90	40	★	★	★	★
Chemical Resistant	Y	Mat white	2.3	2.4	2.5	2.8	1.57 {160}	-20 to 80	90	40	★	★	★	★

Note: 1. ● : Standard material ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.

Sprockets See page 34
Wearstrips See page 137
Return-Way Parts See page 147

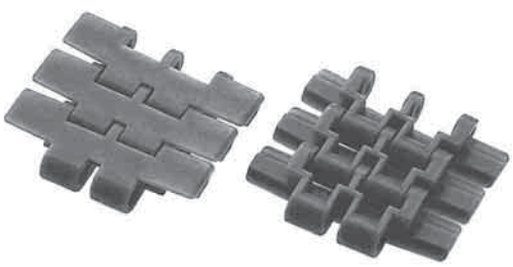
TTUPM-P Plastic Top Chain

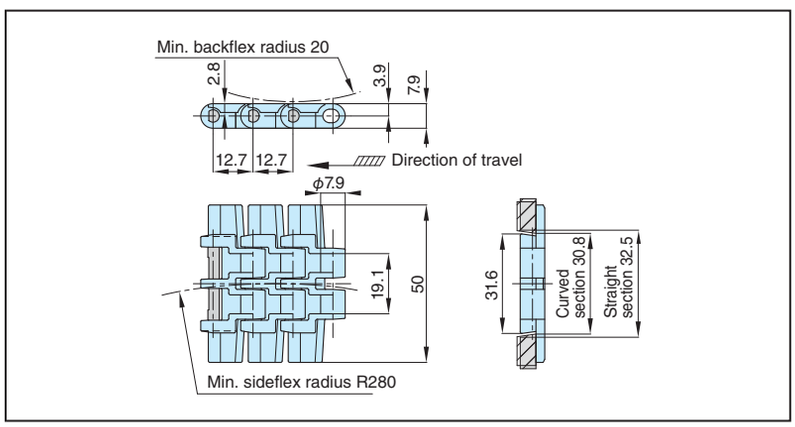
Plastic Pins

Sideflexing

Features

- Small chain pitch of 12.7mm is effective in reducing chordal action on sprockets in addition to minimizing dead space between conveyors.
- Chain is designed for compact curved conveyors for conveying smaller products.





Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TTUPM500P	50	Special engineering plastic	0.3	1270 {4.167}

Note: 1. Standard chain length is 100 links.
2. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	Plastic pins	–	Chain material
TTUPM	**500**	**P**	**–**	**LFB**

500 = 50.0mm

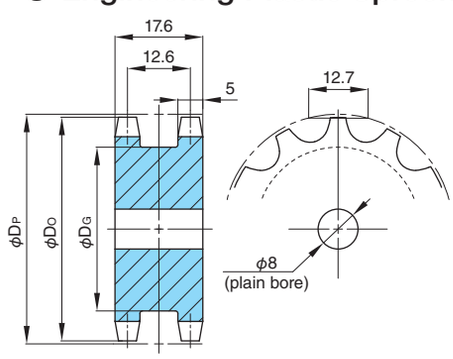
Material

Material	Material mark	Color	Chain mass kg/m	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min		Availability
						With lube	No lube	
Standard	–	Gray	0.3	0.25 {25}	-20 to 60 (80)	60	40	★
Low Friction	LFB	Brown	0.3	0.25 {25}	-20 to 60 (80)	60	40	●
	LFW	White		0.25 {25}				★
Ultra Low Friction	ULF	Blue	0.3	0.25 {25}	-20 to 60 (80)	60	40	★
Low Friction	UL	Green	0.3	0.25 {25}	-20 to 60 (80)	60	40	★
Electroconductive	E	Black	0.3	0.20 {20}	-20 to 60 (80)	60	40	★

Note: 1. ● : Standard material ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.

Engineering Plastic Sprockets

Applicable chain: TTUPM-P



Tsubaki sprocket no.	Teeth	Pitch diameter D_P	Outside diameter D_O	Groove diameter D_G	Bore diameter d		Approx. mass kg	Availability
					Plain bore	Max.		
TTUPM1100T	11	45.1	45	32	8	20	0.03	●
TTUPM1300T	13	53.1	53.3	40		25	0.04	★
TTUPM1500T	15	61.1	61.4	48		30	0.05	★

Note: 1. ● : Standard item ★ : Made-to-order item
2. Material: Ultra high molecular weight polyethylene
3. Operating temperature range is –20°C to 60°C. Use stainless steel sprockets (made-to-order item) when operating temperatures exceed 60°C.

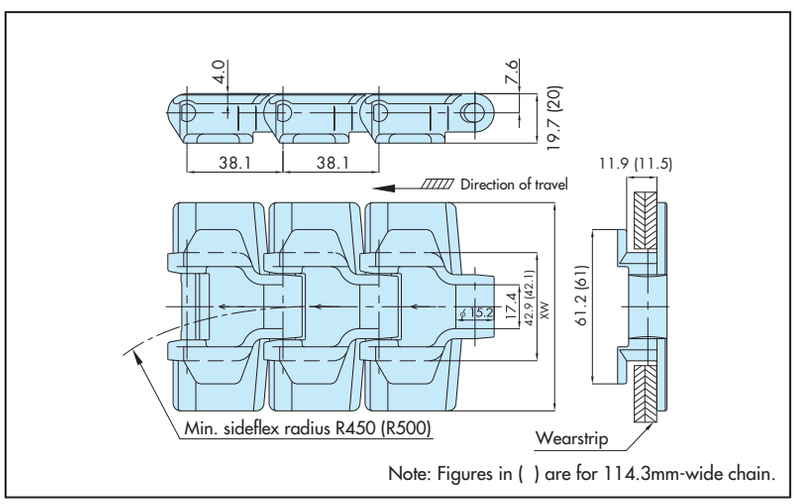
TPU-LH Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Link height is lower than TPU chain, enabling more compact conveyor layouts.
- The 114.3mm plate width is wider than TPU chain, allowing it to be used to convey larger objects.



Note: Figures in ( ) are for 114.3mm-wide chain.

Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
880TAB-K325	82.6	Austenitic steel	1.0	3048 {10}
TPU1143-LH	114.3		1.08	

Note: 1. Plastic pins are not available.
2. Standard chain length is 80 links.
3. Type 880TAB chain.

Chain Numbering

	Chain type	Plate width		Chain type	–	Tab	–	Chain material
(114.3mm)	TPU	1143	–	LH	–	T	–	LFB

1143 = 114.3mm

	Chain material	Chain type	Tab	–	Plate width
(82.6mm)	LFB	880	TAB	–	K325

325 = 3.25 inches
= 82.6mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Low Friction	LFB	Brown	82.6 to 114.3	1.08 {110} 0.98 {100}	-20 to 65 (80)	100	50
●	Ultra Low Friction	ULF	Blue	82.6	1.08 {110}	-20 to 65	100	50

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. For maximum allowable load, the upper figure is for 82.6mm plate width; lower figure is for 114.3mm plate width.
3. ULF (Ultra Low Friction) material is available only for 82.6mm-wide chain.

● : Standard material

Sprockets See page 30
Idler See page 30
Wearstrips See page 137
Return-Way Parts See page 147

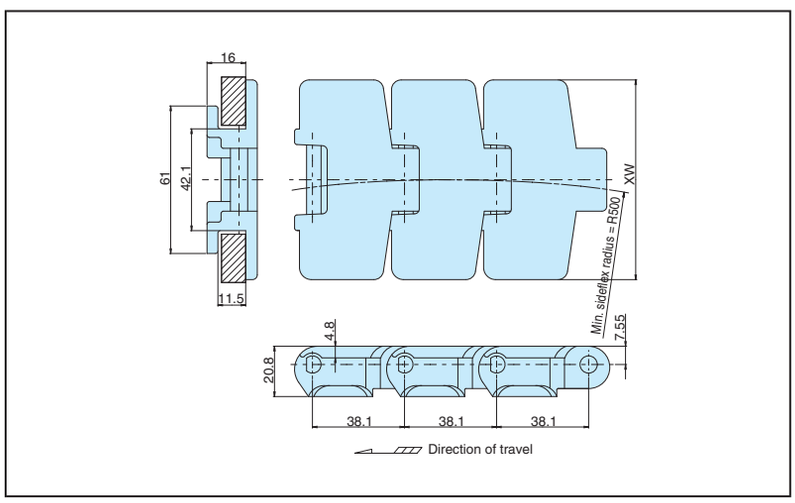
TPUT-LH Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Link height is lower than TPU chain, enabling more compact conveyor layouts.
- Plate thickness (4.8mm) is thicker than TPU-LH chain. Ideal for applications where the plates would be susceptible to wear.



Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUT826-LH	82.6	Austenitic steel	0.98	3048 {10}
TPUT1143-LH	114.3		1.14	

Note: 1. Available only in LFB (Low Friction) material.
2. Plastic pins are not available.
3. Standard chain length is 80 links.
4. Type 879TAB chain.

Chain Numbering

Chain type	Plate width		Chain type	–	Tab	–	Chain material
TPUT	**826**	**–**	**LH**	**–**	**T**	**–**	**LFB**

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Low Friction	LFB	Brown	82.6 to 114.3	0.98 {100}	-20 to 65 (80)	100	50

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● : Standard material

Sprockets See page 30
Idler See page 30
Wearstrips See page 137
Return-Way Parts See page 147

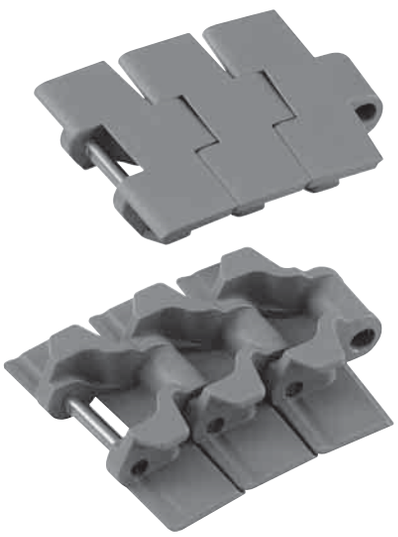
TPUS Plastic Top Chain

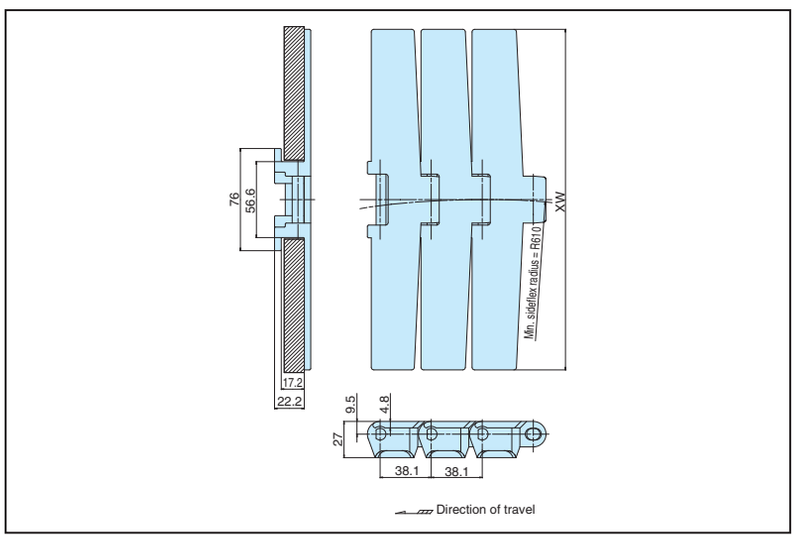
Stainless Steel Pins

Sideflexing

Features

- Approx. 2.2 times higher maximum allowable load than TPU chain. Ideal for higher load applications.
- Plates are wider, and thus can be used to convey larger objects.





Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUS1143	114.3	304 stainless steel	2.03	3048 {10}
TPUS1905	190.5		2.46	
TPUS2540	254.0		2.87	
TPUS3048	304.8		3.41	

Note: 1. Available only in LFB (Low Friction) material.
2. Plastic pins are not available. 3. Standard chain length is 80 links.
4. Type 882TAB chain.

Chain Numbering

Chain type	Plate width	–	Tab	–	Chain material
TPUS	1143	–	T	–	LFB

1143 = 114.3mm

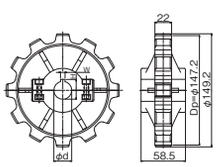
Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Low Friction	LFB	Brown	114.3 to 304.8	2.16 {220}	-20 to 65 (80)	100	50

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● : Standard material

Engineering Plastic Sprockets

Applicable chain: TPUS, TPUS-LBP

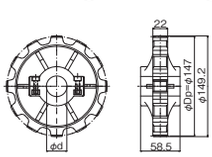


Tsubaki sprocket no.	Teeth	Shaft diameter *d*	Keyway		Approx. mass kg
			W	*H*	
TP-C12115T-SPR	12	30	8	33.3	0.37
TP-C12117T-SPR		40	12	43.3	0.34

Type: Split
Material: Bolt: Stainless steel
Nut: Brass + nickel plating
Body: Reinforced polyamide
Color: Black
Keyway: DIN 6885 key seat

Engineering Plastic Idler Wheels

Applicable chain: TPUS, TPUS-LBP



Tsubaki idler wheel no.	Teeth	Shaft diameter *d*	Approx. mass kg
TP-C12120T-IW	12	30	0.33
TP-C12122T-IW		40	0.30

Type: Split
Material: Bolt: Stainless steel
Nut: Brass + nickel plating
Body: Polyamide
Color: Black

Wearstrips
See page 137
Return-Way Parts
See page 147

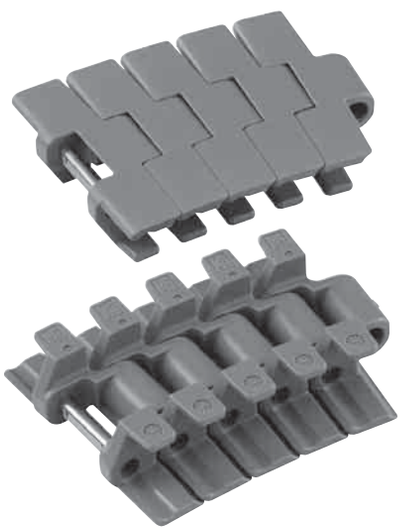
TPUM Plastic Top Chain

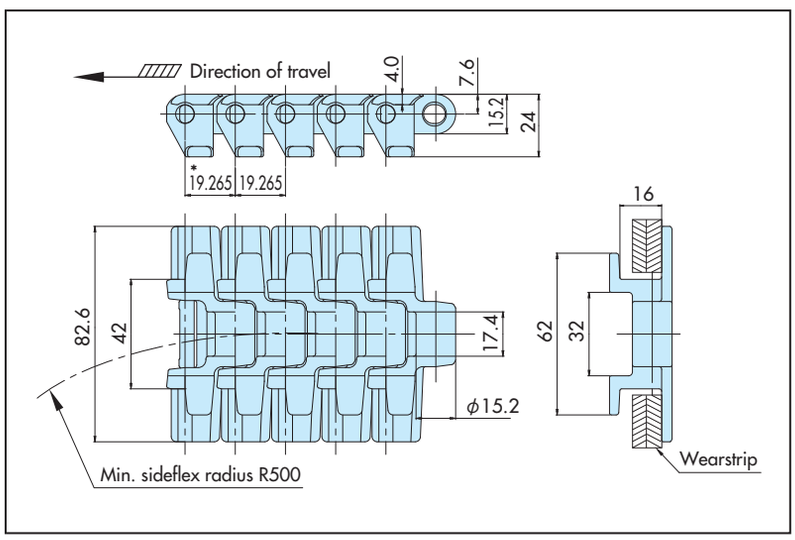
Stainless Steel Pins

Sideflexing

Features

- TPUM chain series designed for use in side-flexing conveyors. Chain pitch is approximately one-half of conventional conveyor chains, effectively lowering conveyor noise level and reducing the gap between the end of one conveyor and the start of the next conveyor.
- Equipped with float-preventive tabs. Keeps the chain securely in position in incline/decline sections, as well as preventing damage (scratches, etc.) to the top surface of the plates on the return way.
- Type TPS sprockets (odd number of teeth) can be used. Designed to allow common sprockets to be used.





Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUM826	82.6	304 stainless steel	1.4 (1.2/1.7)	3082.4 {10.1}

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. Plastic pins are not available.
3. Standard chain length is 160 links.
4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Tab	–	Chain material
TPUM	826	–	T	–	LFB

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	82.6	0.98 {100}	-20 to 80	100	50
●	Low Friction	LFB	Brown					
●		LFG	Green					
●	Ultra Low Friction	ULF	Blue					
★	Low Friction	LFW	White	82.6	0.98 {100}	-20 to 80	100	50
★	Chemical Resistant	Y	Mat white	82.6	0.49 { 50}	-20 to 80	100	50
★	Electroconductive	E	Black		0.69 { 70}		100	
★	Impact Resistant	DIA	Cream		0.78 { 80}		–	
★		DIY	Green				100	
★	Antibacterial/Mold Resistant	MWS	Cream		0.98 {100}			

● : Standard material ★ : Made-to-order material

Sprockets See page 30
Wearstrips See page 137
Return-Way Parts See page 147

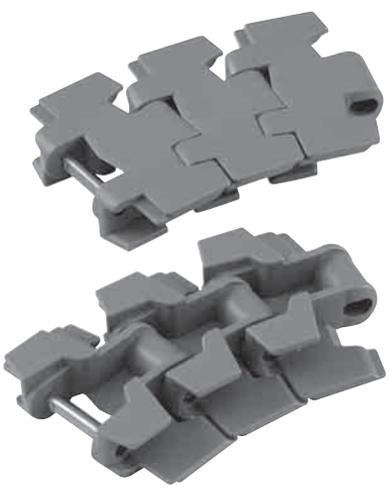
TPUH-BO Plastic Top Chain

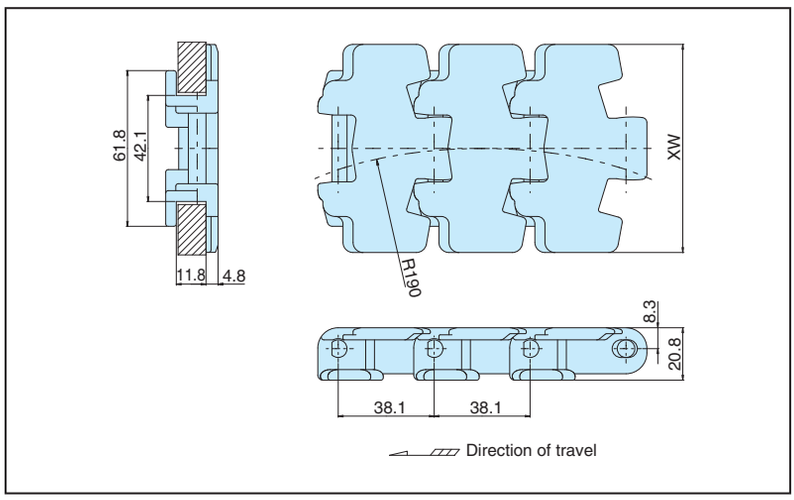
Stainless Steel Pins

Sideflexing

Features

- Sideflex radius is smaller (190mm) than TTUP or TPU-LH chain, enabling more compact conveyor layouts.
- Uses comb-toothed plates. Ideal for conveying unstable containers such as dessert cups.





Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUH826-BO	82.6	Austenitic steel	1.08	3048 {10}
TPUH1143-BO	114.3		1.20	

Note: 1. Available only in LFB (Low Friction) material.
2. Plastic pins are not available.
3. Standard chain length is 80 links.
4. Type 878TAB chain.

Chain Numbering

Chain type	Plate width		Chain type	–	Tab	–	Chain material

TPUH 826 – BO – T – LFB

826 = 82.6mm

Material

	Material	Material mark	Link color	Top plate width XW mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Low Friction	LFB	Brown	82.6 to 114.3	0.98 {100}	-20 to 65 (80)	100	50

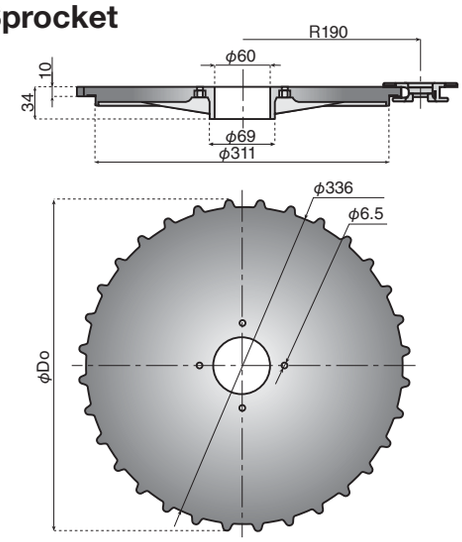
Note: Operating temperature of (80) is for dry conditions (no lubrication).
● : Standard material

Sprockets See page 30
Idler Wheels See page 30
Wearstrips See page 137
Return-Way Parts See page 147

● Horizontal Sprockets

Applicable chain: TPUH-BO

• Sprocket



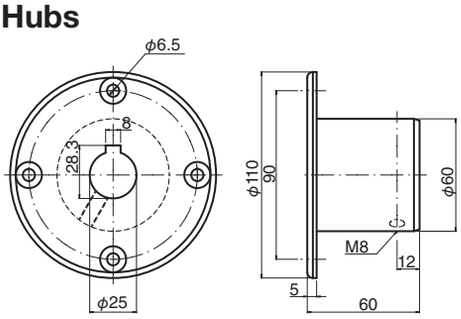
Tsubaki sprocket no.	Teeth	Outside diameter Do
TP-C12781LT-SPR	32	352

Note: 1. For applications other than horizontal conveyance, use sprockets for TPS chains.
2. Do not use to convey unstable containers. They may wobble and tip over during conveyance.
3. Must be used together with TP-C12773T-HB hub.

Specifications
Sprocket
Material: Polyamide (black)
Hub
Material: Aluminum

Note: Hub and sprocket must be used together.

• Hubs



Tsubaki hub no.
TP-C12773T-HB

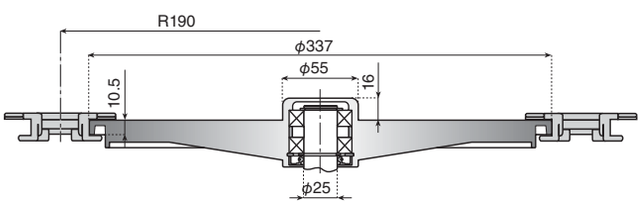
Note: 1.Must be used together with TP-C12781LT-SPR sprocket.
2. Four sets of M6 mounting bolts and nuts (stainless steel) are included.
3. Please contact Tsubaki if different shaft diameters are required.

● Corner Discs

Corner Discs for TPUH-BO Chain

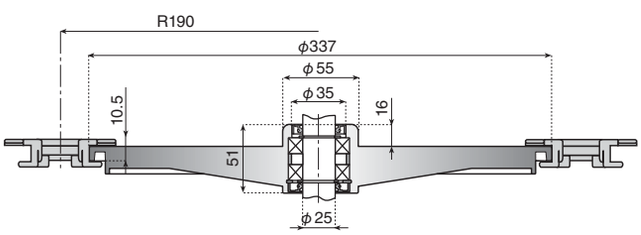
• Carry Way

Tsubaki corner disc no. : TP-C12779T-CD



• Return Way

Tsubaki corner disc no. : TP-C12777T-CD



- Main body material : Polyamide (black)
- Bearing : Type 6005-2RS (25 x 47 x 12)
- O-ring seal : NBR
- Retaining ring : 25mm diameter (DIN 471)
- Approx. mass : 0.98 kg/disc
- Chain sideflex radius : 190mm
- Operating temperature range : –20°C to 60°C
- Not recommended for conveying unstable containers.
- Carry-way and return-way corner discs differ only in whether the shaft extends through the disc.
- Bearings and O-ring seals are packaged separately and shipped in the same container as the disc unit.

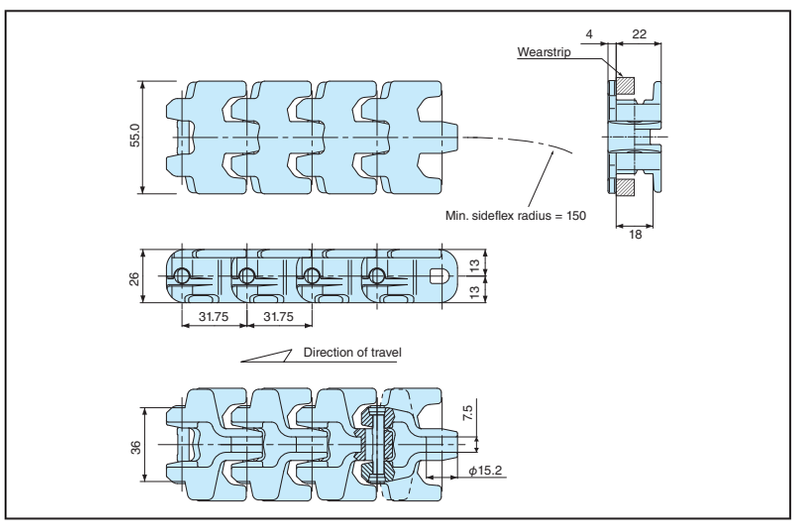
TPUSR550 Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Small sideflex radius (150mm) provides more flexibility in the layout of conveyor lines. Ideal for conveyance in tight spaces.
- Uses comb-toothed plates. Ideal for conveying unstable containers such as PET bottles, dessert cups, and paper packs.
- Curved sections use corner discs, suppressing the occurrence of wear dust and creaking/squealing noises.
- Equipped with float-preventive tabs. Keeps the chain securely in position on corner turns and in incline/decline sections, as well as preventing damage (scratches, etc.) to the top surface of the plates on the return way.



Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUSR550	55.0	304 stainless steel	1.0 (0.85/1.20)	3048 {10}

Note: 1. Mass shown in ( ) is for DIA/DIY. 2. Plastic pins are not available.
3. Standard chain length is 96 links. 4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Tab	–	Chain material
TPUSR	550	–	T	–	LFB

550 = 55.0mm

Material

	Material	Material mark	Link color	Top plate width mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	55.0	0.98 {100}	-20 to 80	100	50
●	Low Friction	LFB	Brown					
●		LFG	Green					
●	Ultra Low Friction	ULF	Blue					
★	Low Friction	LFW	White	55.0	0.98 {100}	-20 to 80	100	50
★	Chemical Resistant	Y	White	55.0	0.49 { 50}	-20 to 80	100	50
★	Electroconductive	E	Black		0.69 { 70}		100	
★	Impact Resistant	DIA	Cream		0.64 { 65}		–	
★		DIY	Green				100	
★	Antibacterial/Mold Resistant	MWS	Cream		0.98 {100}			

● : Standard material ★ : Made-to-order material

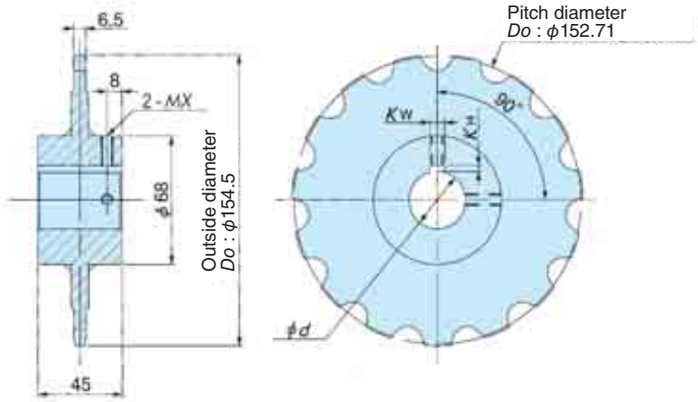
Wearstrips
See page 137

Return-Way Parts
See page 147

● Steel Sprockets, Stainless Steel Sprockets

Applicable chain: TPUSR550, TPUSR826

• Sprockets (with Plain Bore)

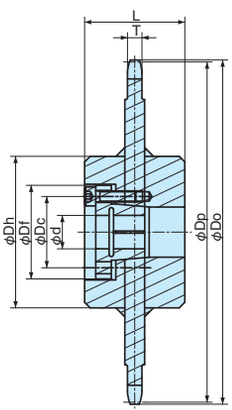


Tsubaki sprocket no.	Material	Teeth	Bore diameter		Finished bore diameter (tolerance H7)	Approx. mass kg
			Plain bore	Max.		
TPUSR1500T	steel	15	15.9	45	20 · 25 · 30 35 · 40 · 45	2.0
TPUSR1500T-SS	Stainless steel					

Note: For sprockets made from different materials or having numbers of teeth other than those described above, contact Tsubaki.

Applicable bore diameter	Keyway width Kw	Keyway height KH	Set screw MX
Greater than 17 to 22	6	2.8	M6
Greater than 22 to 30	8	3.3	
Greater than 30 to 38	10		M8
Greater than 38 to 42	12		
Greater than 42 to 50	14	3.8	

• Lock Sprockets



Sleeve no.	Df diameter mm	Dc diameter mm	Bolt size M x L	Bolt tightening torque N•m
S2	42	32	M5×18	8.3
S3	48.5	38.5	M5×20	8.3
S4	56	46	M5×20	8.3

Tsubaki sprocket no.	Actual teeth	Pitch diameter Dp mm	Outside diameter Do mm	Facewidth T mm	Hub diameter Dh mm	Length L mm
TPUSR1500T	15	152.71	154.5	6.5	68	45

Note: Available only in steel.

Sleeve Combinations and Transfer Torque Values

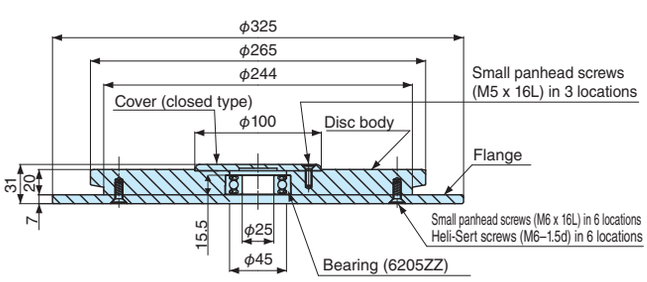
Sleeve no.	S2							S3			S4		
Bore diameter d mm	15	16	17	18	19	20	22	24	25	28	30	32	35
Tsubaki sprocket no.	Max. allowable transfer torque N•m												
TPUSR1500T	139	149	158	167	177	186	205	167	174	195	279	298	325

● Corner Discs

Applicable chain: TPUSR550

• Carry Way

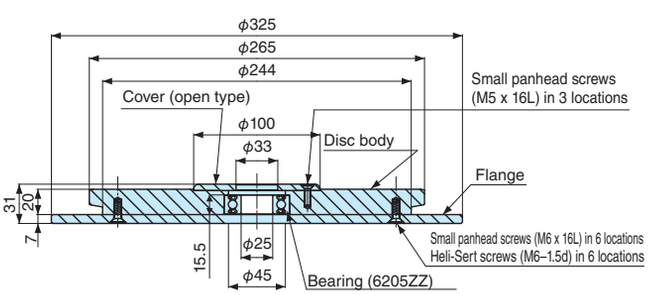
Tsubaki corner disc no. : TPUSR550-CD-R150C



- Disc body : Ultra high molecular weight polyethylene (white)
- Flange : Ultra high molecular weight polyethylene (white)
- Cover : Ultra high molecular weight polyethylene (white)
- Panhead screw : Stainless steel
- Approx. mass : 1.0 kg/disc
- Chain sideflex radius R = 150mm
- Please contact Tsubaki if dimensions, bearings, or materials other than those shown in the drawing above are required.

• Return Way

Tsubaki corner disc no. : TPUSR550-CD-R150R



- Operating temperature range : -20°C to 60°C
- Recommended for use in dry environments. Stainless steel bearings are also available for use in wet environments where there is exposure to water.

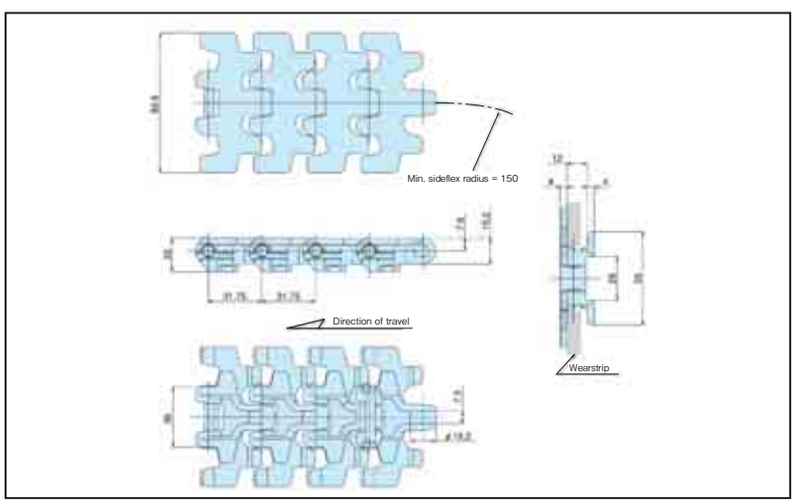
TPUSR826 Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Small sideflex radius (150mm) provides more flexibility in the layout of conveyor lines. Ideal for conveyance in tight spaces.
- Uses comb-toothed plates. Ideal for conveying unstable containers such as PET bottles, dessert cups, and paper packs.
- Curved sections use corner discs, suppressing the occurrence of wear dust and creaking/squealing noises.
- Equipped with float-preventive tabs. Keeps the chain securely in position on corner turns and in incline/decline sections, as well as preventing damage (scratches, etc.) to the top surface of the plates on the return way.



Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUSR826	82.6	304 stainless steel	0.9 (0.75/1.10)	3048 {10}

Note: 1. Mass shown in ( ) is for DIA/DIY. 2. Plastic pins are not available.
3. Standard chain length is 96 links. 4. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Tab	–	Chain material
TPUSR	826	–	T	–	LFB

826 = 82.6mm

Material

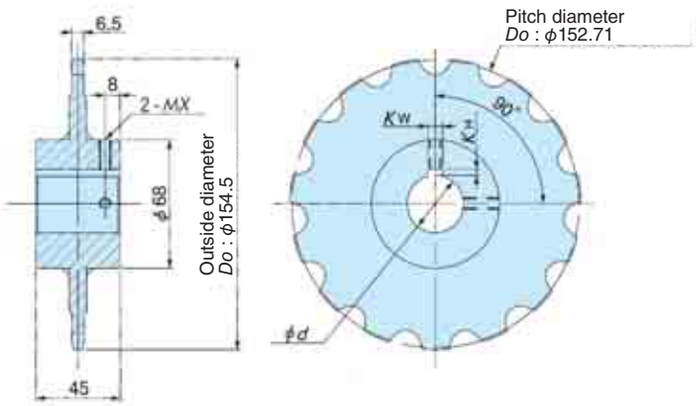
	Material	Material mark	Link color	Top plate width mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	82.6	0.98 {100}	-20 to 80	100	50
●	Low Friction	LFB	Brown					
●		LFG	Green					
●	Ultra Low Friction	ULF	Blue					
★	Low Friction	LFW	White	82.6	0.98 {100}	-20 to 80	100	50
★	Chemical Resistant	Y	Mat white	82.6	0.49 { 50}	-20 to 80	100	50
★	Electroconductive	E	Black		0.69 { 70}		100	
★	Impact Resistant	DIA	Cream		0.64 { 65}		–	
★		DIY	Green				100	
★	Antibacterial/Mold Resistant	MWS	Cream		0.98 {100}			

● : Standard material ★ : Made-to-order material

Wearstrips See page 137
Return-Way Parts See page 147

● Steel Sprockets Applicable chain: TPUSR550, TPUSR826

• Sprockets (with Plain Bore)

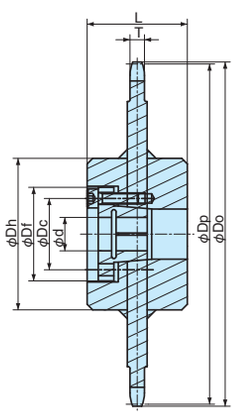


Tsubaki sprocket no.	Material	Teeth	Bore diameter		Finished bore diameter (tolerance H7)	Approx. mass kg
			Plain bore	Max.		
TPUSR1500T	Steel	15	15.9	45	20 · 25 · 30 35 · 40 · 45	2.0
TPUSR1500T-SS	Stainless steel					

Note: For sprockets made from different materials or having numbers of teeth other than those described above, contact Tsubaki.

Applicable bore diameter	Keyway width Kw	Keyway height KH	Set screw MX
Greater than 17 to 22	6	2.8	M6
Greater than 22 to 30	8	3.3	
Greater than 30 to 38	10		M8
Greater than 38 to 42	12		
Greater than 42 to 50	14	3.8	

• Lock Sprockets



Sleeve no.	Df diameter mm	Dc diameter mm	Bolt size M x L	Bolt tightening torque N•m
S2	42	32	M5×18	8.3
S3	48.5	38.5	M5×20	8.3
S4	56	46	M5×20	8.3

Tsubaki sprocket no.	Actual teeth	Pitch diameter Dp mm	Outside diameter Do mm	Facewidth T mm	Hub diameter Dh mm	Length L mm
TPUSR1500T	15	152.71	154.5	6.5	68	45

Note: Available only in steel.

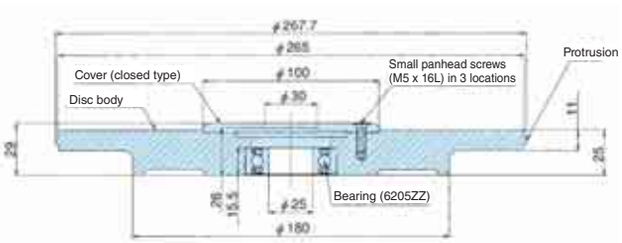
Sleeve Combinations and Transfer Torque Values

Sleeve no.	S2							S3			S4		
Bore diameter d mm	15	16	17	18	19	20	22	24	25	28	30	32	35
Tsubaki sprocket no.	Max. allowable transfer torque N•m												
TPUSR1500T	139	149	158	167	177	186	205	167	174	195	279	298	325

● Corner Discs Applicable chain: TPUSR826

• Carry Way

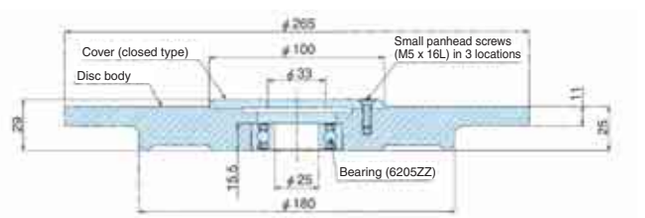
Tsubaki corner disc no. : TPUSR826-CD-R150C



- Disc body : Ultra high molecular weight polyethylene (green)
- Cover : Ultra high molecular weight polyethylene (green)
- Panhead screw : Stainless steel
- Approx. mass : 1.0 kg/disc
- Chain sideflex radius R = 150mm
- Please contact Tsubaki if dimensions, bearings, or materials other than those shown in the drawing above are required.

• Return Way

Tsubaki corner disc no. : TPUSR826-CD-R150R



- Operating temperature range : -20°C to 60°C
- Recommended for use in dry environments. Stainless steel bearings are also available for use in wet environments where there is exposure to water.

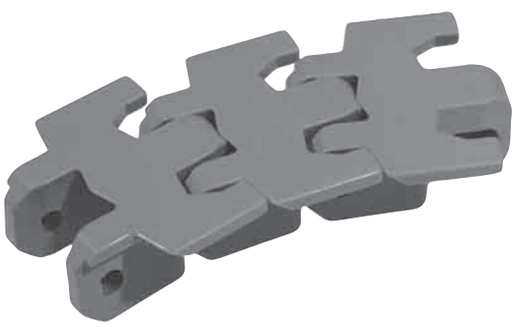
UB36 Plastic Top Chain

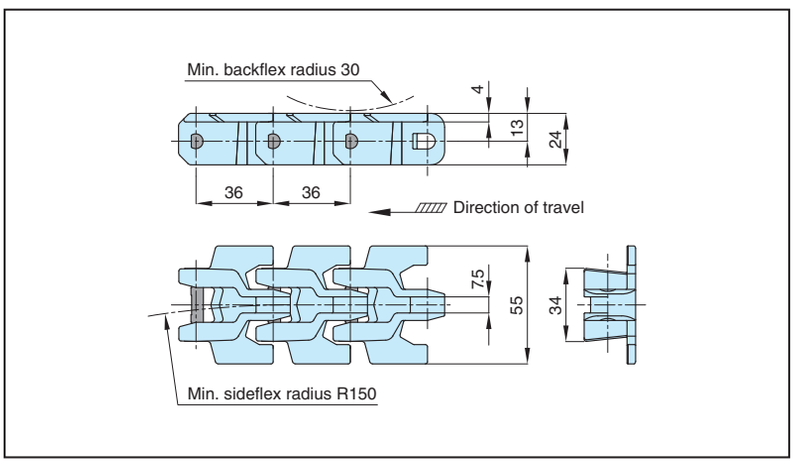
Stainless Steel Pins

Sideflexing

Features

- Chain is designed to sideflex with a small radius (150mm min.) and to be used with turn discs, which allow a longer conveyor with multiple curves in a compact area.
- Gaps between links are reduced for better handling of smaller products, such as paper packs.





Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm{ft}
UB36	55	304 stainless steel	1.0	2160 {7.087}

Note: 1. Plastic pins are not available.
2. Standard chain length is 60 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	–	Chain material
UB36	**–**	**ULF**

Material

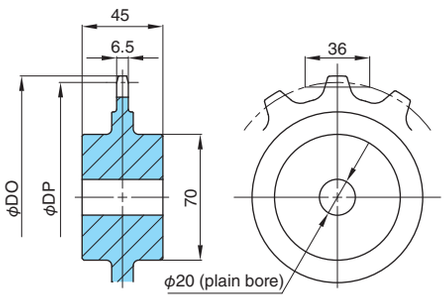
	Material	Material mark	Link color	Chain mass kg/m	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
★	Standard	–	Gray	1.0	0.9 {91}	-20 to 80	100	50
★	Low Friction	LFB	Brown	1.0	0.9 {91}	-20 to 65 (80)	100	50
★		LFG	Green					
★		LFW	White					
●	Ultra Low Friction	ULF	Blue	1.0	0.9 {91}	-20 to 65 (80)	100	50
★	Low Friction	UL	Green	1.0	0.9 {91}	-20 to 80	100	50
★	Electroconductive	E	Black	1.0	0.7 {71}	-20 to 80	100	50

Note: 1. ● : Standard material ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.

Wearstrips
See page 137

Return-Way Parts
See page 147

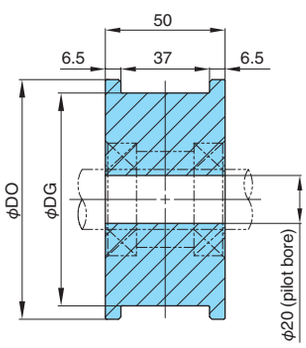
● Steel Sprockets Applicable chain: UB36



Tsubaki sprocket no.	Teeth	Pitch diameter DP	Outside diameter DO	Bore diameter *d*		Approx. mass kg	Availability
				Plain bore	Max.		
SP-UB-11	11	127.8	135	20	40	1.8	★
SP-UB-12	12	139.1	147			2.0	★
SP-UB-13	13	150.4	159			2.5	●

Note: 1. ● : Standard ★ : Made-to-order
2. Material: Carbon steel

● Engineering Plastic Idler Wheels Applicable chain: UB36

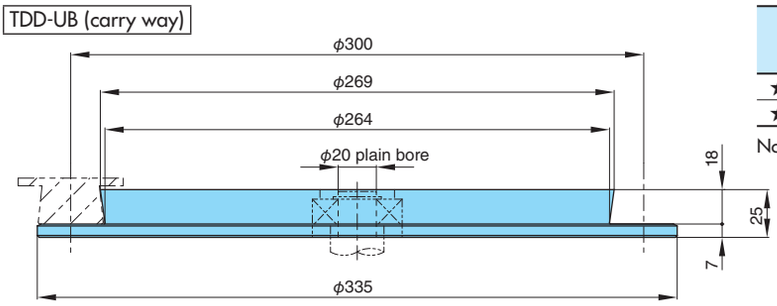


Tsubaki idler wheel no.	No. of equivalent teeth	DO	DG	Approx. mass kg	Availability
UB-11-IW	11	112	100	0.4	★
UB-12-IW	12	124	112	0.5	★
UB-13-IW	13	136	124	0.6	★

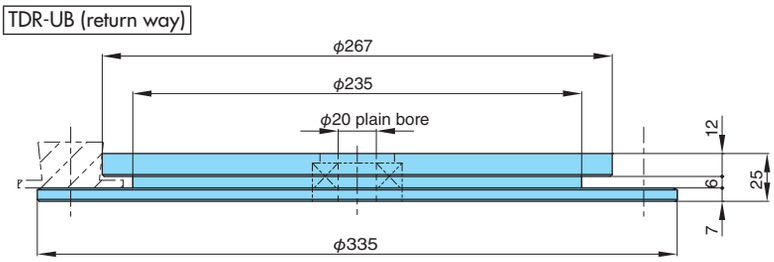
Note: 1. ★ : Made-to-order
2. Material: Ultra high molecular weight polyethylene
3. Operating temperature range is −20°C to 60°C. Use stainless steel idler wheels (made-to-order item) when operating temperatures exceed 60°C.

● Engineering Plastic Turn Discs Applicable chain: UB36

TDD-UB (carry way)



TDR-UB (return way)



	Model name	Color	Remarks
★	TDD-UB	White	Carry way
★	TDR-UB		Return way

Note: 1. ★ : Made-to-order
2. Material: Ultra high molecular weight polyethylene
3. Discs with integral bearings can also be fabricated upon request.
4. Operating temperature range: −20°C to 60°C

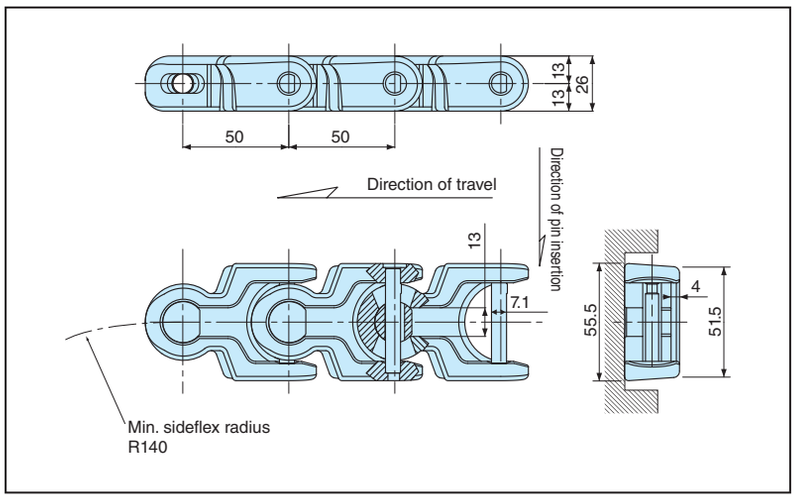
TPUN555 Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Small sideflex radius (140mm) provides more flexibility in the layout of conveyor lines. Ideal for conveyance in tight spaces.
- Approx. 1.8 times higher maximum allowable load than TTUP chain. Ideal for higher load applications.
- Uses D-pins that protrude from one side only, preventing poor articulation.
- Pivot wrong assembly prevention system prevents faulty engagement of the chain and sprocket by eliminating mistakes in the direction of pivot insertion.
- Gap between links is minimized, ensuring smooth conveyance around horizontal curves. Provides stable transport of conveyed goods.



Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUN550	55.5	304 stainless steel	1.45	3000 {9.8}

Note: 1. Plastic pins are not available.
2. Standard chain length is 60 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	Plate width	–	Chain material
TPUN	**555**	**–**	**LFB**

555 = 55.5mm

Material

	Material	Material mark	Link color	Top plate width mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Green	55.5	1.96 {200}	-20 to 80	35	35
●		W	White					
●	Low Friction	LFG	Green					
★	Ultra Low Friction	ULF	Blue					
★	Low Friction	LFB	Brown	55.5	1.96 {200}	-20 to 80	35	35
★		LFW	White					
★	Electroconductive	E	Black		1.37 {140}			
★	Antibacterial/Mold Resistant	MWS	Cream		1.96 {200}			

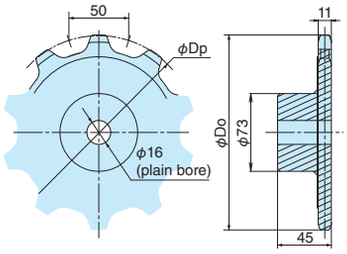
● : Standard material ★ : Made-to-order material

Wearstrips

See page 137

● Steel Sprockets Applicable chain: TPUN555, 50UNS, 50UNS-D76, TPUN550-LH, TPUN535-LH

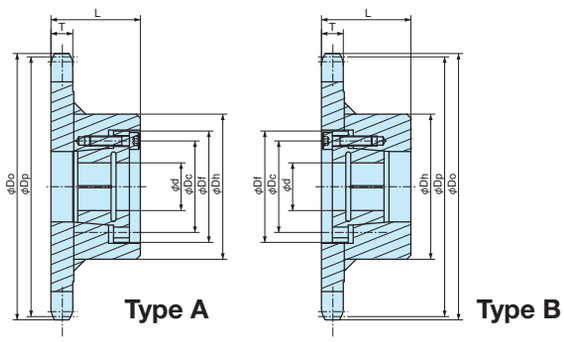
• Sprockets (with Plain Bore)



Tsubaki sprocket no.	Material	Construction	Effective teeth	Pitch diameter Dp mm	Outside diameter Do mm	Approx. mass kg
TPUN555-800T	Carbon steel	Machined	8	130.6	134	1.9
TPUN555-1000T			10	161.8	163	2.7
TPUN555-1200T	Steel	Welded	12	193.2	198	3.1

Note: For sprockets made from different materials or having numbers of teeth other than those described above, contact Tsubaki.

• Lock Sprockets



Sleeve no.	Df diameter mm	Dc diameter mm	Bolt size M x L	Bolt tightening torque N•m
S2	42.0	32.0	M5×18	8.3
S3	48.5	38.5	M5×20	8.3
S4	56.0	46.0	M5×20	8.3
S5	66.0	56.0	M5×22	8.3

Tsubaki sprocket no.	Actual teeth	Pitch diameter Dp mm	Outside diameter Do mm	Facewidth T mm	Hub diameter Dh mm	Length L mm
TPUN555-800T	8	130.60	134	8.8	73	45
TPUN555-1000T	10	161.80	163			
TPUN555-1200T	12	193.20	198			

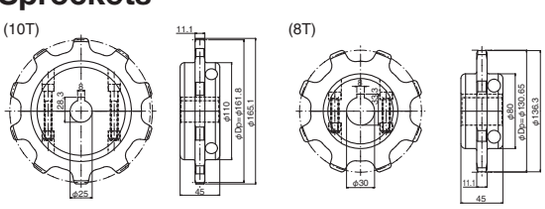
Note: Available only in steel.

Sleeve Combinations and Transfer Torque Values

Sleeve no.	S2							S3			S4			S5			
Bore diameter d mm	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45
Tsubaki sprocket no.	Max. allowable transfer torque N•m																
TPUN555-800T	139	149	158	167	177	186	205	167	174	195	279	298	325	442	465	586	628
TPUN555-1000T	174	186	198	209	221	232	256										
TPUN555-1200T																	

● Engineering Plastic Sprockets Applicable chain: TPUN555, TPUN550-LH, TPUN535-LH

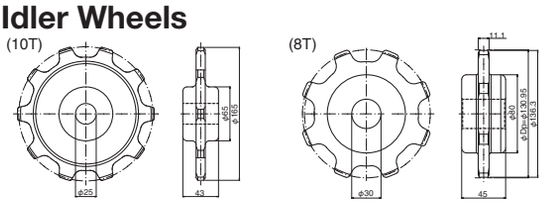
• Sprockets



Tsubaki sprocket no.	Teeth	Type	Approx. mass kg
TP-C12746T-SPR	10	Split	0.44
TP-C12732T-SPR	8	Split	0.29

Material: Polyamide (white)
Bolt: Stainless steel
Nut: Brass + nickel plating

• Idler Wheels



Tsubaki idler wheel no.	Teeth	Type	Approx. mass kg
TP-C12724T-IW	10	Solid	0.24
TP-C12737T-IW	8	Solid	0.29

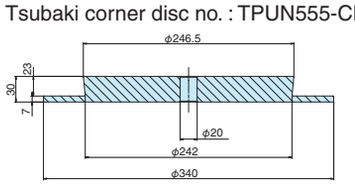
Material: Polyamide (white)

● Corner Discs

Corner Discs for TPUN555 Chain

• Carry Way

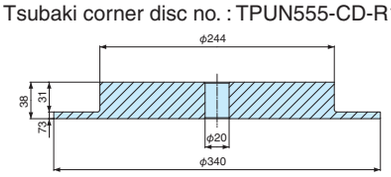
Tsubaki corner disc no. : TPUN555-CD-R150C



- Disc body: Ultra high molecular weight polyethylene (white)
- Approx. mass: 2.1 kg/disc
- Chain sideflex radius R = 150mm
- Please contact Tsubaki if dimensions, bearings, or materials other than those shown in the drawing above are required.

• Return Way

Tsubaki corner disc no. : TPUN555-CD-R150R



- Made-to-order items
- Operating temperature range: -20°C to 60°C

TPUN-LH Plastic Top Chain

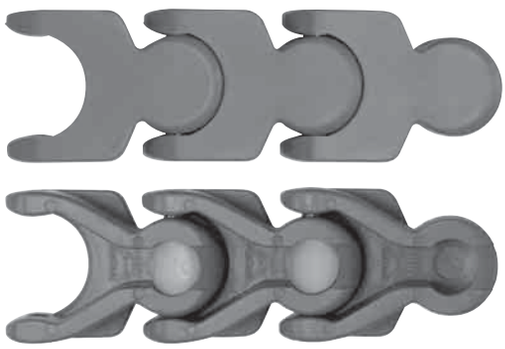
Stainless Steel Pins

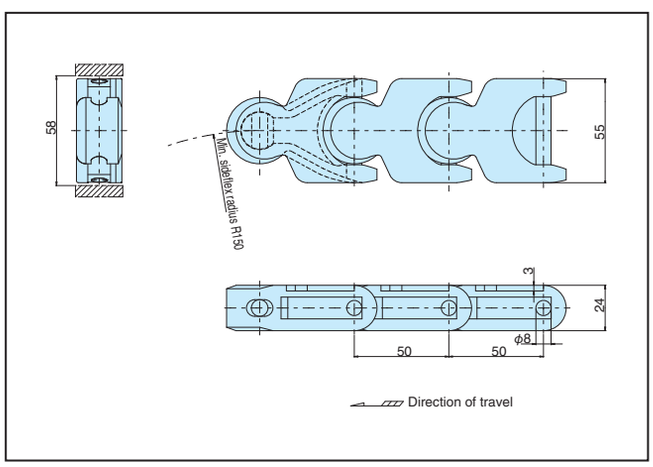
Sideflexing

Features

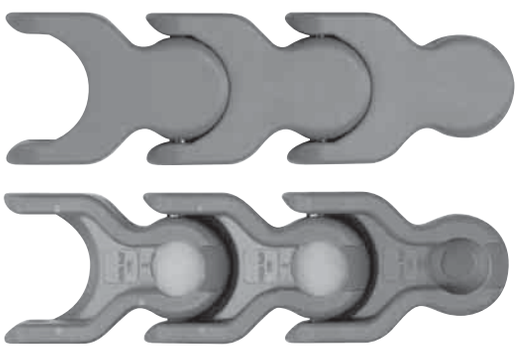
- Small sideflex radius (150mm) enables more compact conveyor layouts.
- This series features the link height often seen in overseas markets. Link height is slightly lower than TPUN chain.

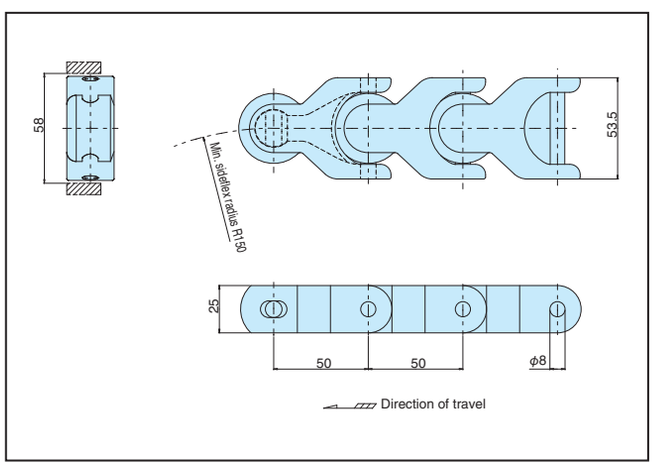
• TPUN550-LH





• TPUN535-LH





● Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPUN550-LH	55.0	Stainless steel	1.25	3050 {10}
TPUN535-LH	53.5		1.40	

Note: 1. Available only in standard material.
2. Plastic pins are not available.
3. Standard chain length is 61 links.
4. Type 1700 and 1702 chain.

● Chain Numbering

Chain type	Plate width	–	Chain type
TPUN	**550**	**–**	**LH**

550 = 55.0mm

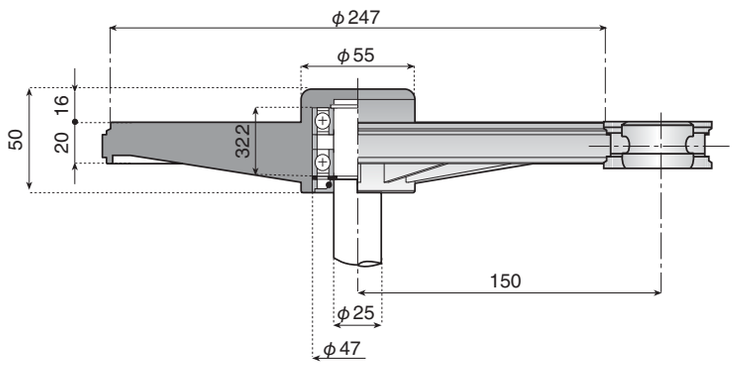
● Material

	Material	Material mark	Link color	Top plate width mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Standard	–	Gray	53.5 and 55.0	1.96 {200}	-20 to 65 (80)	35	35

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● : Standard material

● Corner Discs

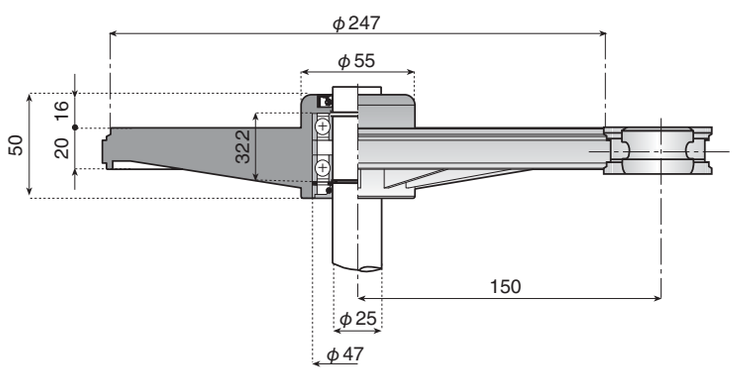
• **Carry Way** Applicable chain: TPUN550-LH, TPUN535-LH



Tsubaki corner disc no.	Material		Chain sideflex radius	Color
	Body	Shaft bearing		
TP-C12723T-CD	Reinforced polyamide	Steel	R150	Black

Note: Bearings and O-ring seals are packaged separately and shipped in the same container as the disc unit.

• **Return Way** Applicable chain: TPUN550-LH, TPUN535-LH



Tsubaki corner disc no.	Material		Chain sideflex radius	Color
	Body	Shaft bearing		
TP-C12725T-CD	Reinforced polyamide	Steel	R150	Black

Note: 1. Carry-way and return-way corner discs differ only in whether the shaft extends through the disc.
2. Bearings and O-ring seals are packaged separately and shipped in the same container as the disc unit.

Sprockets See page 68
Idler Wheels See page 68
Wearstrips See page 137

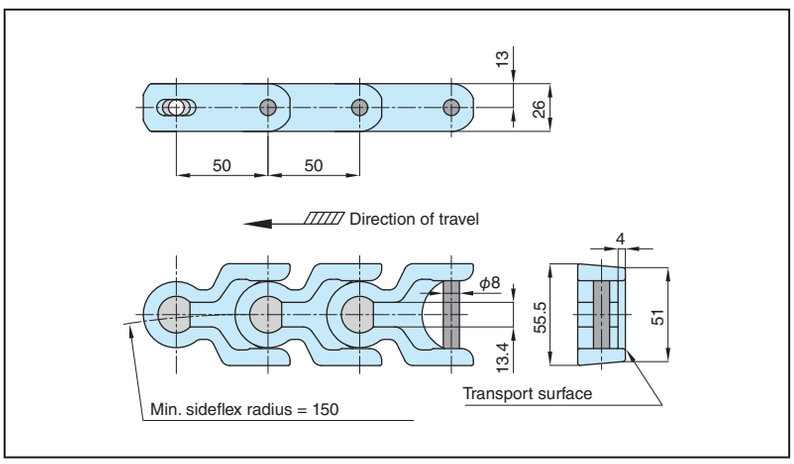
50UNS Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Chain is designed to sideflex with a small radius (150mm min.) and to be used with turn discs, which allow a longer conveyor with multiple curves in a compact area.
- Chain has a higher strength, which makes it suitable for high load applications such as case and crate handling.



Chain Information

Tsubaki chain no.	Width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
50UNS	55.5	304 stainless steel	1.5	2500 {8.202}

Note: 1. Plastic pins are not available.
2. Standard chain length is 50 links.
3. Tsubaki original chain.

Chain Numbering

Chain type	–	Chain material
50UNS	**–**	**UL**

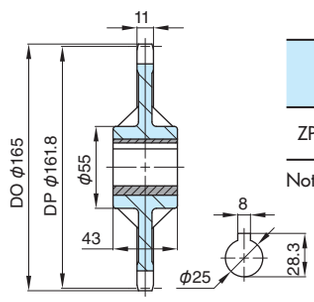
Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	Green	1.96 {200}	-20 to 65 (80)	35	35
★	Low Friction	LFW	White		-20 to 65 (80)		
★	Low Friction	UL	Green		--20 to 65 (80)		

Note: 1. ● : Standard material ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.

Sprockets & Idler Wheels

• Engineering Plastic Sprockets Applicable chain: TPUN555, 50UNS, 50UNS-D76

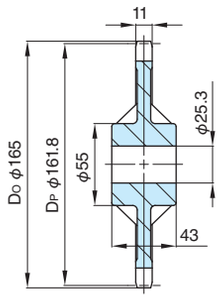


Tsubaki sprocket no.	Teeth	Pitch diameter Dp	Outside diameter Do	Hub diameter DH	Bore diameter d	Approx. mass kg	Material	
							Body	Insert bushing
ZP-501025	10	161.8	165	55	25	0.4	Reinforced polyamide (color: black)	Stainless steel

Note: 1. Operating temperature range: –20°C to 80°C
2. Cannot be used for applications where chain tension exceeds 0.68 kN {70 kgf}.
3. See page 68 for steel sprockets.

Wearstrips
See page 137

• Engineering Plastic Idler Wheels Applicable chain: TPUN555, 50UNS, 50UNS-D76

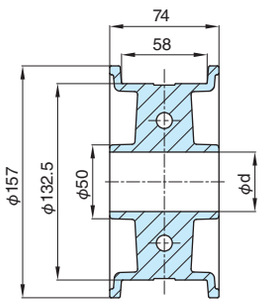


Tsubaki Idler Wheel no.	Teeth	Pitch diameter Dp	Outside diameter Do	Hub diameter DH	Bore diameter d	Approx. mass kg	Material
KU-501025	10	161.8	165	55	25.3	0.3	Reinforced polyamide (color: black)

Note: 1. Operating temperature range: −20°C to 80°C
2. Should not be used under abrasive conditions.
3. Shaft metal must be polished.

• Engineering Plastic Split Idler Wheels

Applicable chain: TPUN555, 50UNS, 50UNS-D76, 50UN-T95



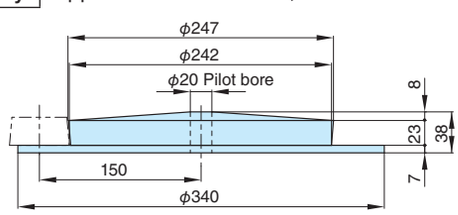
Tsubaki Idler Wheel no.	Equivalent no. of teeth	Bore diameter d	Approx. mass kg	Material	
				Body	Bolt & nut
IW50UNS-30	10	30.5	0.6	Polyacetal (color: green)	Stainless steel
IW50UNS-40		40.5			

Note: 1. Operating temperature range: −20°C to 80°C
2. Bolt tightening torque: 9.8 N•m {1 kgf•m}
3. When assembling the idler wheel, do not mix the halves with halves from other idler wheels.
4. Should not be used under abrasive conditions.
5. Shaft metal must be polished.

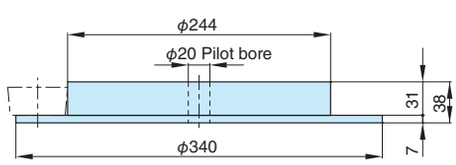
● Corner Discs

• Engineering Plastic Turn Discs (Machined)

Carry way Applicable chain: 50UNS, 50UNS-D76



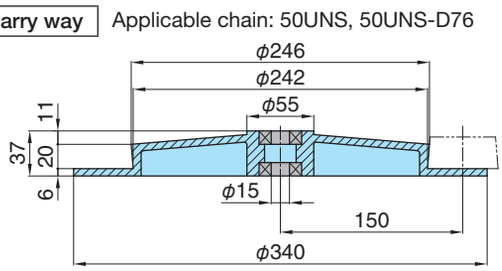
Return way Applicable chain: 50UNS



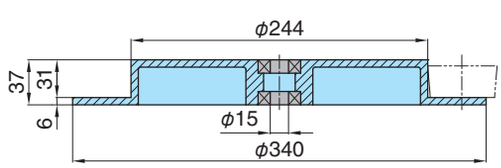
Note: 1. Made-to-order
2. Material: High-density polyethylene (white)
3. Bearings can be assembled upon request.
4. Operating temperature range: −20°C to 60°C

• Engineering Plastic Turn Discs (Molded)

Carry way Applicable chain: 50UNS, 50UNS-D76



Return way Applicable chain: 50UNS



Model name	Material			Color	Remarks
	Body	Bearing	Spacer		
TWD	Polyamide	Stainless steel (6202ZZ)	Stainless steel	White	Carry way
TWR					Return way

Note: 1. Made-to-order
2. Operating temperature range: −20°C to 60°C

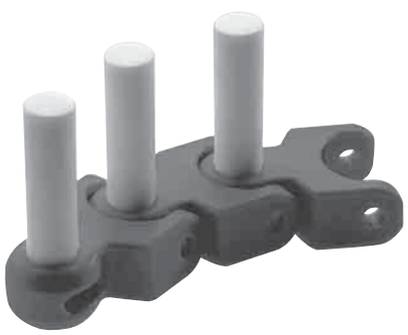
50UNS-D76 Plastic Top Chain

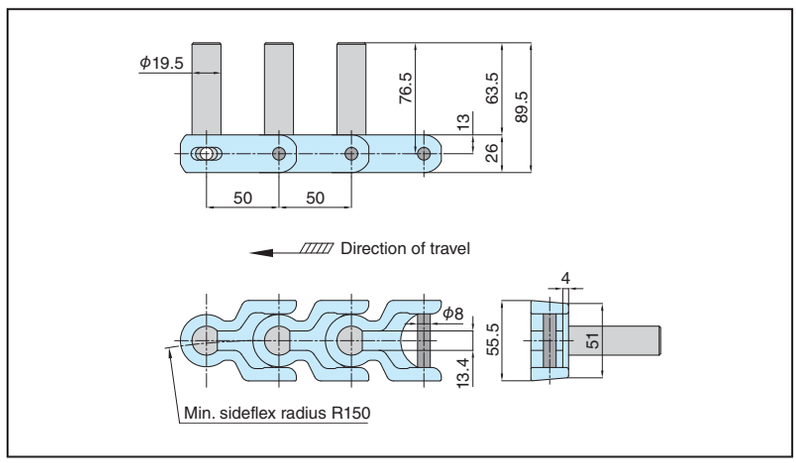
Stainless Steel Pins

Sideflexing

Features

- Chain is designed to sideflex with a small radius (150mm min.) and to be used with turn discs, which allow a longer conveyor with multiple curves in a compact area.
- Chain has a higher strength, which makes it suitable for high load applications.
- Constructed with pushers to move products up or down inclines.





Chain Information

Tsubaki chain no.	Width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
50UNS-D76	55.5	304 stainless steel	2.0	2500 {8.202}

Note: 1. Plastic pins are not available.
2. Standard chain length is 50 links.
3. Tsubaki original chain.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
						With lube	No lube
★	Standard	–	Green	1.96 {200}	-20 to 65 (80)	35	35

Note: 1. ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.
4. See pages 71 and 72 for corner discs.

Sprockets See page 71
Idler Wheels See page 72
Wearstrips See page 137

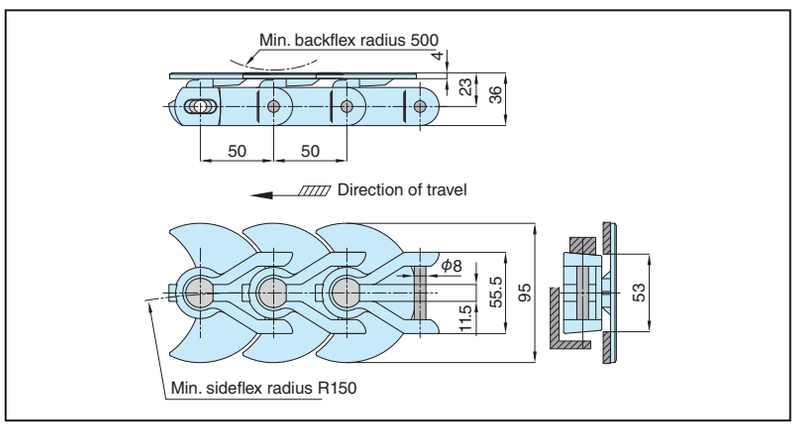
50UN-T95 Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Chain is designed to sideflex with a small radius (150mm min.) and to be used with turn discs, which allow a longer conveyor with multiple curves in a compact area.
- Chain has a higher strength, which makes it suitable for high load applications.
- Constructed with crescent-shaped top plates to minimize the gap in straight and curved sections for better product handling.



Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
50UN-T95	95	Stainless steel	1.9	2500 {8.202}

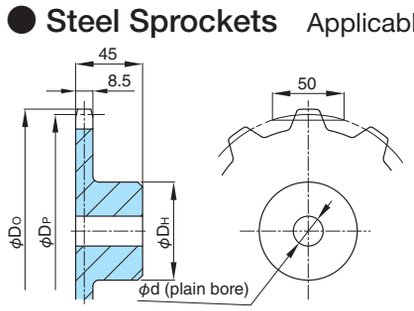
Note: 1. Plastic pins are not available.
2. Standard chain length is 50 links.
3. Tsubaki original chain.

Material

	Material	Material mark	Color	Chain mass kg/m	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
★	Standard	–	Green	1.9	1.96 {200}	-20 to 65 (80)	35	35

Note: 1. ★ : Made-to-order material
2. Specifications other than the above are not available.
3. Operating temperature in ( ) is for dry conditions (no lubrication).

Steel Sprockets Applicable chain: 50UN-T95



Tsubaki sprocket no.	Teeth	Pitch diameter D_P	Outside diameter DO	Hub diameter DH	Bore diameter d		Approx. mass kg
					Plain bore	Max.	
SP-50UNT-6	6	100.0	96	40	15	25	0.7
SP-50UNT-7	7	115.2	112	50		30	1.1
SP-50UNT-8	8	130.6	129	65		40	1.6
SP-50UNT-9	9	146.2	147		20		1.9
SP-50UNT-10	10	161.8	163				2.3
SP-50UNT-11	11	177.4	181				2.6
SP-50UNT-12	12	193.2	198				2.8
SP-50UNT-13	13	208.9	212				3.1

Note: Carbon steel

Idler Wheels
See page 72

Wearstrips
See page 137

TPCC420 Plastic Top Chain

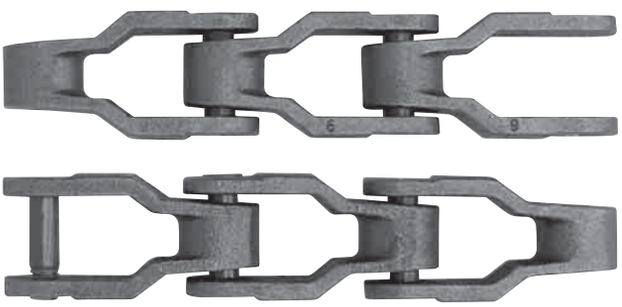
Stainless Steel Pins

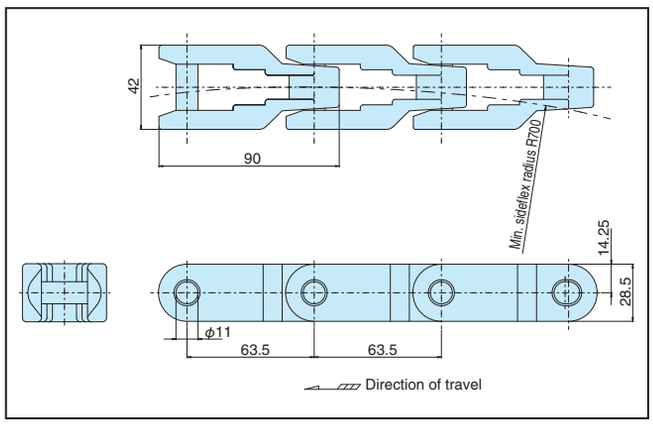
Sideflexing

Features

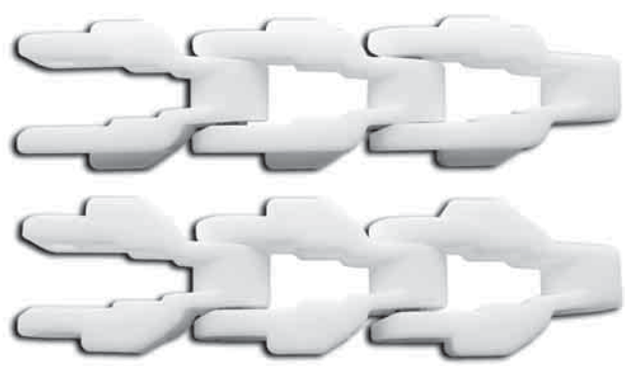
- Simple plastic chain with offset link design. For conveying crates, boxes, and the like.

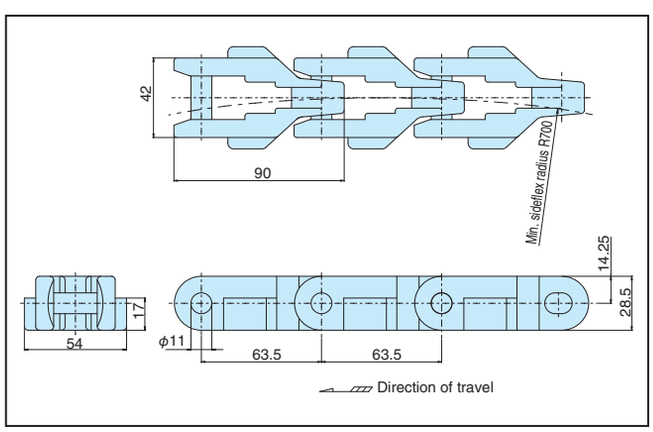
• TPCC420





• TPCC420-T





● Chain Information

Tsubaki chain no.	Top plate width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TPCC420	42.0	304 stainless steel	1.33	3048 {10}
TPCC420-T			1.49	

Note: 1. Available only in standard material.
2. Plastic pins are not available.
3. Standard chain length is 48 links.
4. Type CC600 and CC600TAB chain.

● Chain Numbering

Chain type	Width	–	Tab
TPCC	**420**	**–**	**T**

420 = 42.0mm

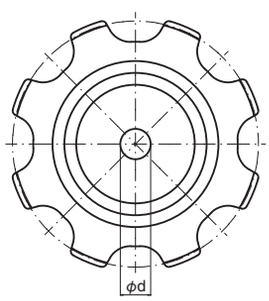
● Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	White	1.96 {200}	-20 to 65 (80)	35	35

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● : Standard material

● Engineering Plastic Sprockets

• Sprockets Applicable chain: TPCC420, TPCC420-T



Tsubaki sprocket no.	Teeth	Pitch diameter Dp	Outside diameter Do	Shaft diameter d
TP-C12326T-SPR	8	165.9	172	20 (plain bore)
TP-C12327T-SPR	10	205.5	215	
TP-C12328T-SPR	12	245.3	256	

Note: These sprockets have a plain bore.

Material: Polyamide (white)
Type: Solid

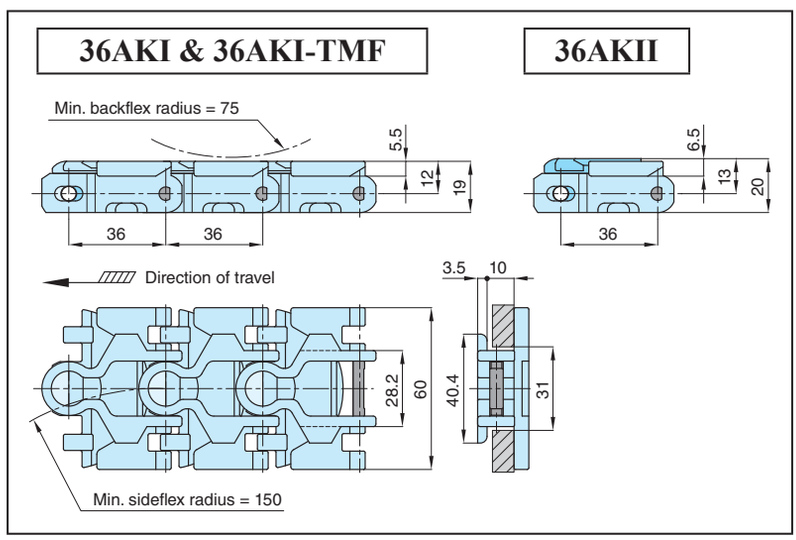
36AK Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- High-friction top plates can be assembled with standard link materials, making this chain suitable for incline or decline conveyors.
- Chain is uniquely designed to keep the gaps at a minimum in straight and curved sections for better product handling.



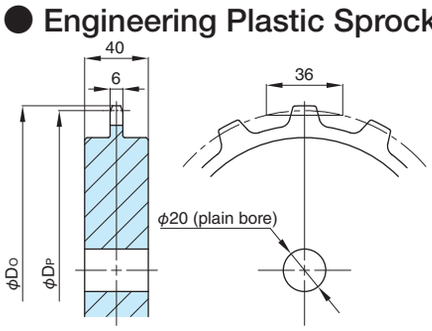
Chain Information

	Tsubaki chain no.	Top plate width mm	Link		Top plate			Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min		Approx. mass kg/m
			Material	Color	Material	Material mark	Color			With lube	No lube	
●	36AKI	60	Standard	White	Standard	–	White	0.5 {51 }	-20 to 80	100	50	0.75
★	36AKI-TMF		Standard	White	Middle Friction	MF	Yellow		-20 to 80 (dry only)	–		
★	36AKII		Standard	White	Polyurethane	–	Yellowish brown	0.07 { 7.1}	-20 to 70 (dry only)	–		

Note: 1. Connecting pins are stainless steel. Plastic pins are not available.
2. ● : Standard material ★ : Made-to-order material
3. 36AKII and 36AKI-TMF are for use in dry conditions.
4. Tsubaki original chain.

Engineering Plastic Sprockets

Applicable chain: 36AKI, 36AKI-TMF, 36AKII



Tsubaki sprocket no.	Teeth	Pitch diameter Dp	Outside diameter Do	Bore diameter d		Approx. mass kg	Material
				Plain bore	Max.		
SP-36AK-11	11	127.7	131	20	60	0.3	UHMW-PE
SP-36AK-13	13	150.4	155			0.5	
SP-36AK-15	15	173.1	178			0.7	

Note: Operating temperature range is –20°C to 60°C. Use stainless steel sprockets (made-to-order item) when operating temperatures exceed 60°C.

Chain Numbering

Chain type
36AKI-TMF

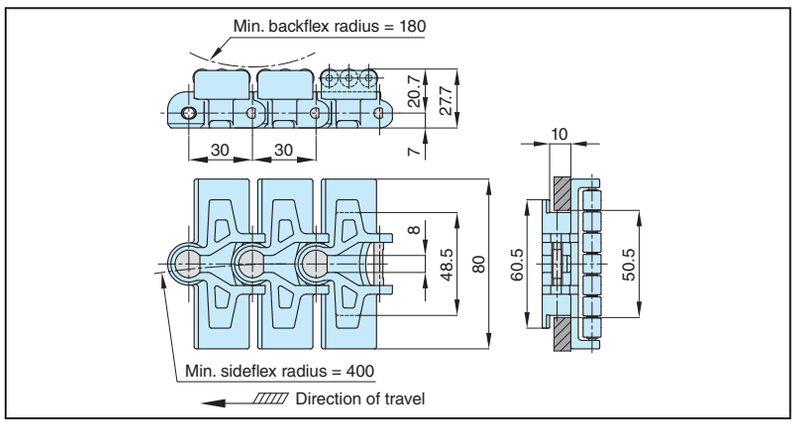
30UTW-LAP Plastic Top Chain

Stainless Steel Pins

Sideflexing

Features

- Constructed with free rollers to reduce line back pressure, which makes this chain suitable for applications where there is concern about product damage caused by accumulation.
- Sideflex radius is 400mm min.



Chain Information

Tsubaki chain no.	Top plate Width mm	Connecting pin material	Approx. mass kg/m
30UTW-LAP	80	304 stainless steel	1.9

Note: 1. Plastic pins are not available.
2. Tsubaki original chain.

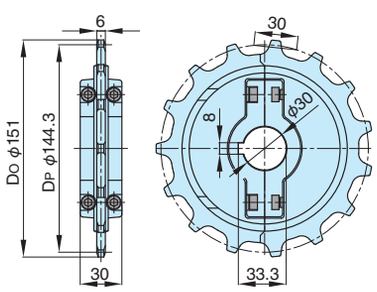
Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Low Friction	LFW	White	0.7{71}	-20 to 65 (80)	100	50

Note: 1. ● : Standard material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.

Engineering Plastic Split Sprockets

Applicable chain: 30UTW-LAP

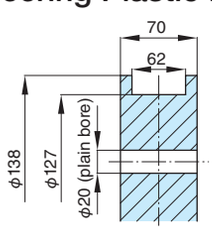


Tsubaki sprocket no.	Teeth	Pitch diameter Dp	Outside diameter Do	Approx. mass kg	Material	
					Body	Bolt & nut
SW30UT/15-30R	15	144.3	151	0.2	Reinforced polyamide (color: black)	Stainless steel

Note: 1. Operating temperature range: -20°C to 80°C
2. Bolt tightening torque: 5.7 N•m {0.58 kgf•m}
3. When assembling the halves of the sprocket, do not mix the halves with halves from other sprockets.

Engineering Plastic Idler Wheels

Applicable chain: 30UTW-LAP



Tsubaki idler wheel no.	No. of equivalent teeth	Approx. mass kg	Material
IW30UT/15	15	0.9	UHMW-PE

Note: Operating temperature range: -20°C to 60°C

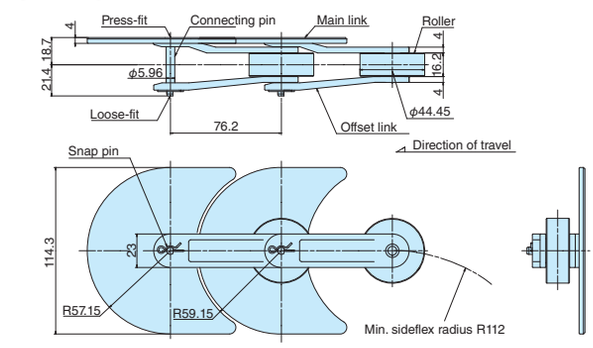
TORP/TOSP Plastic Top Chain **Stainless Steel Pins**

Sideflexing

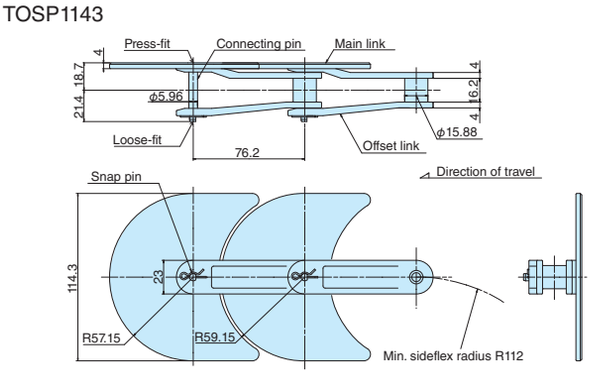
Features

- For horizontal circular conveyance. Designed so the entire surface can be used to convey objects.
- No return-way chain, so the height of the conveyer can be reduced.
- Crescent-shaped top plates. Space between links remains constant in curved sections, minimizing conveyed objects becoming pinched or caught in the gap.

TORP1143



TOSP1143



Chain Information

Tsubaki chain no.	Top plate width XW mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
TORP	114.3	Stainless steel	1.40	3048 {10}
TOSP			1.36	

Note: 1. Values for maximum allowable load are at ambient temperature.
2. Surface areas between the pins and bushings are pre-lubricated.
3. For TOSP chain, the sprockets should be installed in the curved sections.
4. Standard chain length is 40 links.
5. Tsubaki original chain.

Chain Numbering

Chain type	Plate width
TORP	**1143**

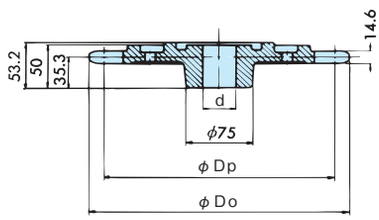
1143 = 114.3mm

Material

	Material	Material mark	Link color	Top plate width mm	Max. allowable load kN {kgf}	Operating temperature range ℃	Max. allowable speed m/min	
							With lube	No lube
●	Special engineering plastic	–	White	114.3	0.69 {70}	0 to 60	20	20

● : Standard material
Note: Specifications other than the above are not available.

● Steel Sprockets (with Plain Bore) Applicable chain: TORP, TOSP, TOR, TOS



Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter Dp	Outside diameter Do	Bore diameter d		Approx. mass kg	Material
					Plain bore	Max.		
TOS1013T	31	10⅓	254.59	269	23	45	7.2	FC250
TOR1100T	11	11	270.47	305			7.6	

Wearstrips
See page 137

RSP Plastic Block Chain

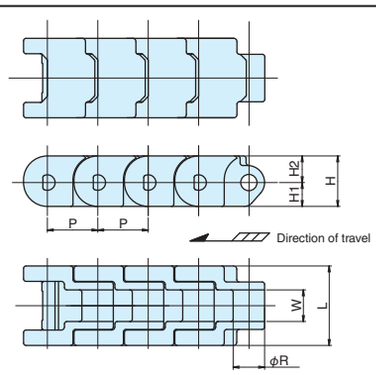
Stainless Steel Pins

Straight Running

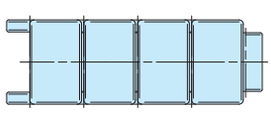
Features

- Smaller chain pitch than plastic top chain allows use of sprockets with a smaller outer diameter, effectively reducing the gap between the end of one conveyor and the start of the next conveyor.
- Diverse range of chain pitches and link widths available. Suitable for a wide range of applications.
- Standard ANSI sprockets can be used.
- Block shape and small link width ideal for conveying small goods.
- Multiple strands can be used in parallel; ideal for conveying pallets.

RSP (excluding type KV)



RSP40-KV, RSP60-KV only
(top surface shape of KV150, KV180 and KV250)



Chain Numbering

Chain type	Chain size	–	Chain material
RSP	40	–	LFB

Chain Information

Tsubaki chain no.	P	R	W	L	H1	H2	H	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}	No. of links per 10 ft
RSP35	9.525	5.08	4.78	13	4	5	9	304 stainless steel	0.15 (0.13/0.18)	3048 {10}	320
RSP40	12.7	7.92	7.95	20	6	6.7	12.7		0.36 (0.30/0.45)		240
RSP50	15.875	10.16	9.53	22.5	7	8	15		0.46 (0.40/0.55)		192
RSP60	19.05	11.91	12.7	30	8.5	8.8	17.3		0.72 (0.68/0.90)		160

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. Heat Resistant/High Speed chains (KV150, KV180, KV250) have different top link shapes. They cannot be connected to other chain types.
3. Tsubaki original chain.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf} RSP35	RSP40	RSP50	RSP60	Operating temperature range °C	Max. allowable speed m/min With lube	No lube
●	Standard	–	White	0.18 {18}	0.44 {45}	0.69 {70}	0.88 {90}	-20 to 80	60	60
●	Low Friction	LFB	Brown							
●		LFG	Green							
●	Ultra Low Friction	ULF	Blue							
★	Low Friction	LFW	White	0.18 {18}		0.69 {70}		-20 to 80	60	60
★	Heat Resistant/High Speed	KV150	Black	–	0.44 {45}	–	0.88 {90}	-20 to 150	–	100
★		KV180		0.18 {18}		–		-20 to 180	100	
★		KV250		–		–		-20 to 250		
★	Chemical Resistant	Y	Mat white	0.1 {10}	0.25 {25}	0.39 {40}	0.49 {50}	-20 to 80	60	60
★	Electroconductive	E	Black	0.13 {13}	0.34 {35}	0.49 {50}	0.64 {50}			
★	Impact Resistant	DIA	Cream	0.14 {14}	0.34 {35}	0.54 {55}	0.69 {70}		–	
★		DIY	Green						60	
★	Antibacterial/Mold Resistant	MWS	Cream	0.18 {18}	0.44 {45}	0.69 {70}	0.88 {90}			

● = Standard material ★ = Made-to-order material – = Not available

Sprockets

Standard ANSI sprockets can be used (minimum number of teeth is 14).

Wearstrips See page 137
Return-Way Parts See page 147

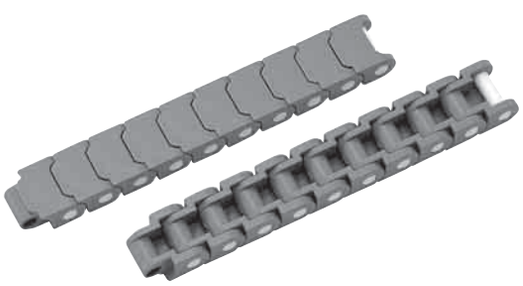
RSP-P Plastic Block Chain

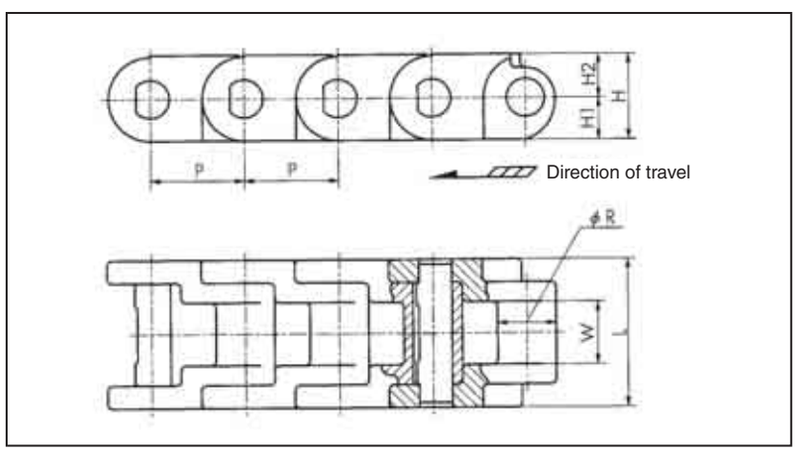
Plastic Pins

Straight Running

Features

- Smaller chain pitch than plastic top chain allows use of sprockets with a smaller outer diameter, effectively reducing the gap between the end of one conveyor and the start of the next conveyor.
- Diverse range of chain pitches and link widths available. Suitable for a wide range of applications.
- Block shape and small link width ideal for conveying small goods.
- Multiple strands can be used in parallel; ideal for conveying pallets.
- All-plastic construction means light weight and easy handling. Longer service life under water lubrication than stainless steel pins.





Chain Numbering

Chain type	Chain size	Plastic pin	–	Chain material
RSP	40	P	–	LFB

Chain Information

Tsubaki chain no.	P	R	W	L	H1	H2	H	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}	No. of links per 10 ft
RSP40P	12.7	7.92	7.95	20	6	6.7	12.7	Special engineering plastic	0.26 (0.30)	3048 {10}	240
RSP60P	19.05	11.91	12.7	30	8.5	8.8	17.3		0.53 (0.62)		160

Note: 1. Mass shown in ( ) is for DIY.
2. Tsubaki original chain.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}		Operating temperature range °C	Max. allowable speed m/min	
				RSP40	RSP60		With lube	No lube
●	Low Friction	LFB	Brown	0.25 {25}	0.59 {60}	-20 to 60 (80)	60	60
●		LFG	Green					
★	Standard	–	White	0.25 {25}	0.59 {60}	-20 to 60 (80)	60	60
★	Low Friction	LFW	White					
★	Electroconductive	E	Black	0.18 {18}	0.41 {42}			
★	Impact Resistant	DIY	Green	0.20 {20}	0.44 {45}			
★	Antibacterial/Mold Resistant	MWS	Cream	0.25 {25}	0.59 {60}			

Note: Operating temperature of (80) is for dry conditions (no lubrication). (For plastic pins)
● = Standard material ★ = Made-to-order material

Sprockets

Standard ANSI sprockets can be used (minimum number of teeth is 14).

Wearstrips
See page 137
Return-Way Parts
See page 147

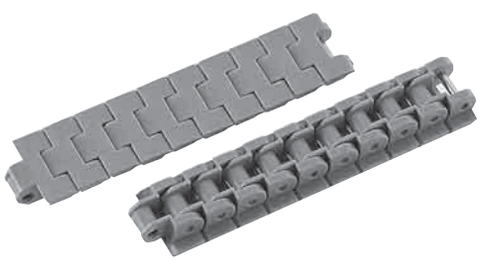
RSP-SL Plastic Block Chain

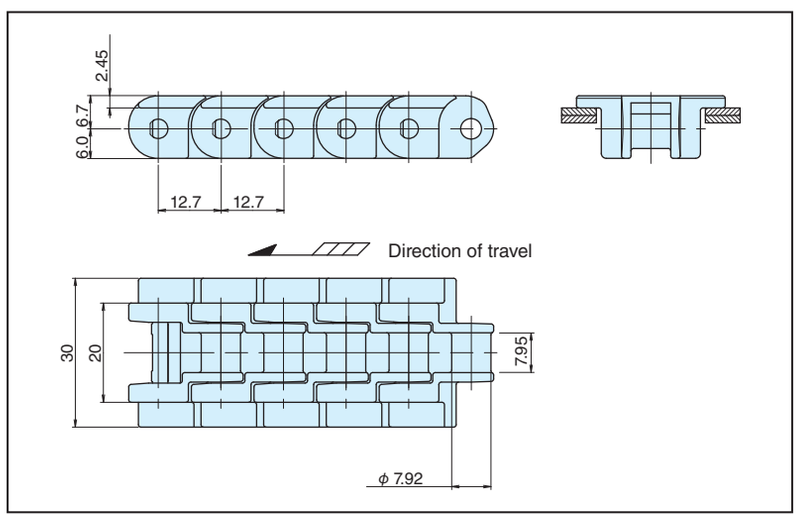
Stainless Steel Pins

Straight Running

Features

- Plastic Block Chain with top plates; ideal for conveying small goods.
- Suitable for suspended conveyance of goods between paralleled strands of chains.
- Smaller chain pitch than plastic top chain allows use of sprockets with a smaller outer diameter, effectively reducing the gap between the end of one conveyor and the start of the next conveyor.





Chain Numbering

Chain type	Chain size	–	Chain type	Plate width	–	Chain material
RSP	**40**	**–**	**SL**	**300**	**–**	**LFB**

300 = 30.0mm

Chain Information

Tsubaki chain no.	Chain pitch	Link width	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}	No. of links per 10 ft
RSP40-SL	12.7	30	304 stainless steel	0.36 (0.3/0.45)	3048 {10}	240

Note: 1. Plastic pins are not available.
2. Mass shown in ( ) is for DIA/DIY.
3. Tsubaki original chain.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
★	Standard	–	White	0.44 {45}	-20 to 80	60	60
●	Low Friction	LFB	Brown				
★		LFG	Green				
★		LFW	White				
★	Ultra Low Friction	ULF	Blue				
★	Chemical Resistant	Y	Mat white	0.22 {22}	-20 to 80	60	60
★	Electroconductive	E	Black	0.31 {31}			
★	Impact Resistant	DIA	Cream	0.34 {35}		–	
★		DIY	Green			60	
★	Antibacterial/Mold Resistant	MWS	Cream	0.44 {45}			

● = Standard material ★ = Made-to-order material

Sprockets

Standard ANSI #40 sprockets can be used (minimum number of teeth is 14).

Return-Way Parts
See page 147

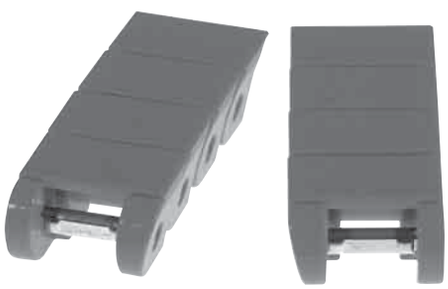
PO8PF Plastic Block Chain

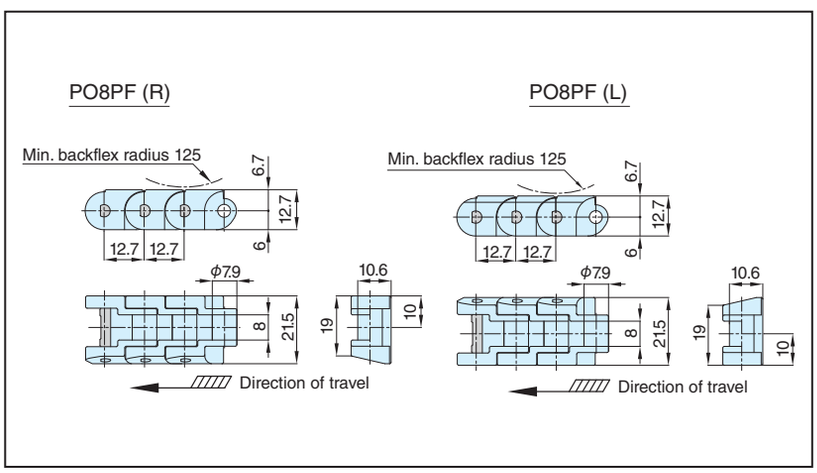
Stainless Steel Pins

Straight Running

Features

- Chain is designed to convey flanged products supported between two strands of chains.
- ANSI 40 roller chain sprockets can be used.





Chain Information

Tsubaki chain no.	Width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
PO8PF(R)	21.5	304 stainless steel	0.4	3048 {10}
PO8PF(L)				

Note: 1. Plastic pins are not available.
2. Standard chain length is 240 links.
3. Tsubaki original chain.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
★	Standard	–	Gray	0.49 {50}	-20 to 80	60	60
★	Low Friction	LFB	Brown	0.49 {50}	-20 to 65 (80)	60	60
★		LFG	Green				
★		LFW	White				
★	Ultra Low Friction	ULF	Blue	0.49 {50}	-20 to 65 (80)	60	60
●	Low Friction	UL	Green	0.49 {50}	-20 to 80	60	60
★	Electroconductive	E	Black	0.39 {40}	-20 to 80	60	60

Note: 1. ● : Standard material ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.

Sprockets

Standard ANSI #40 sprockets with at least 13 teeth can be used.

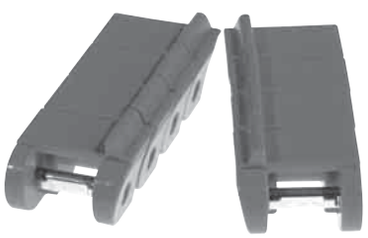
PO8PFT Plastic Block Chain

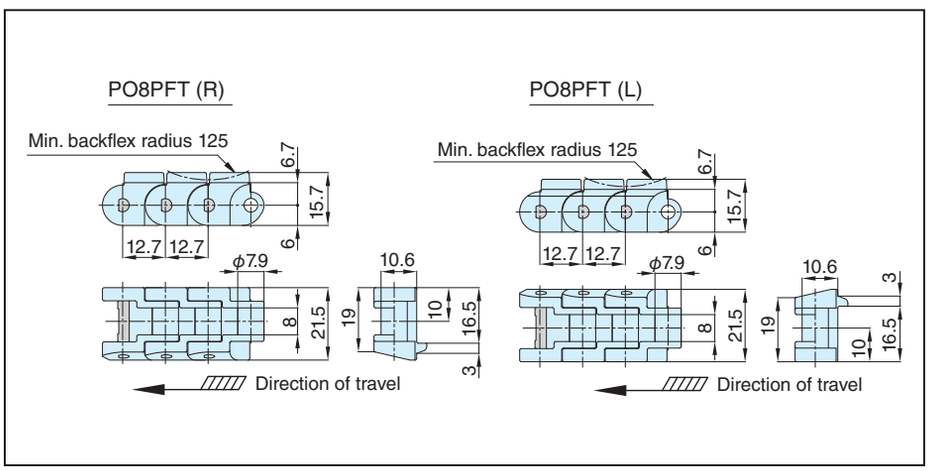
Stainless Steel Pins

Straight Running

Features

- Chain is designed to convey flanged products supported between two strands of chains.
- Protrusions on the surface enable centering of flanged products.
- ANSI #40 roller chain sprockets can be used.





Chain Information

Tsubaki chain no.	Width mm	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}
PO8PFT(R)	21.5	304 stainless steel	0.4	3048 {10}
PO8PFT(L)				

Note: 1. Plastic pins are not available.
2. Standard chain length is 240 links.
3. Tsubaki original chain.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
★	Standard	–	Gray	0.49 {50}	-20 to 80	60	60
★	Low Friction	LFB	Brown	0.49 {50}	-20 to 65 (80)	60	60
★		LFG	Green				
★		LFW	White				
★	Ultra Low Friction	ULF	Blue	0.49 {50}	-20 to 65 (80)	60	60
●	Low Friction	UL	Green	0.49 {50}	-20 to 80	60	60
★	Electroconductive	E	Black	0.39 {40}	-20 to 80	60	60

Note: 1. ● : Standard material ★ : Made-to-order material
2. Operating temperature in ( ) is for dry conditions (no lubrication).
3. Specifications other than the above are not available.

Sprockets

Standard ANSI #40 sprockets can be used (minimum number of teeth is 13).

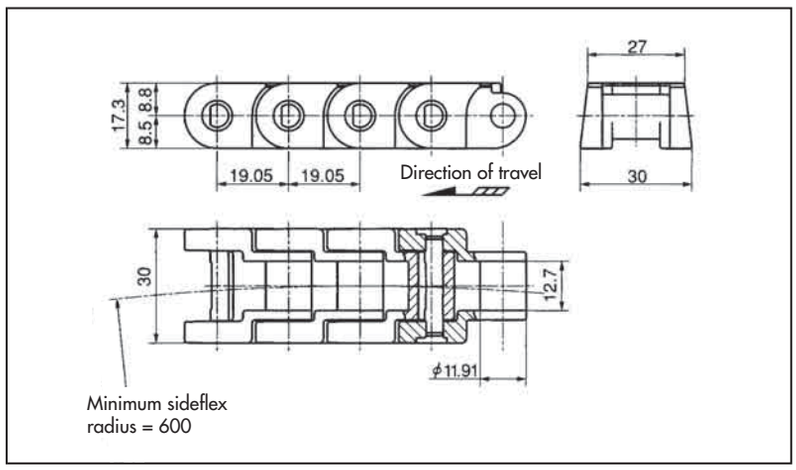
RSP-CU Plastic Block Chain

Plastic Pins & Stainless Steel Pins

Sideflexing

Features

● RSP60-CU chain designed for use in sideflexing conveyors.



● Chain Numbering

Chain type	Chain size	Plastic pin	–	Chain type	–	Chain material
RSP	**60**	**P**	**–**	**CU**	**–**	**LFB**

Note: For stainless steel pins, omit the "P" in the chain number that indicates plastic pins.

● Chain Information

Tsubaki chain no.	Chain pitch	Link width	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}	Number of links per 10 ft
RSP60-CU	19.05	30	304 stainless steel	0.7 (0.60/0.88)*1	3048 {10}	160
RSP60P-CU			Special engineering plastic	0.5 (0.59)*2		

Note: *1: Mass shown in ( ) is for DIA/DIY.
*2: Mass shown in ( ) is for DIY.
• Tsubaki original chain

● Material

RSP60-CU	RSP60P-CU	Material	Material mark	Link color	Max. allowable load kN {kgf}		Operating temperature range °C	Max. allowable speed m/min	
					RSP60-CU	RSP60P-CU		With lube	No lube
●	★	Standard	–	White	0.83 {85}	0.44 {45}	Stainless steel pins: -20 to 80 Plastic pins: -20 to 60 (80)	60	60
★	★	Low Friction	LFB	Brown					
★	★		LFG	Green					
★	★		LFW	White					
★	–	Chemical Resistant	Y	Mat white	0.42 {42}	–			
★	★	Electroconductive	E	Black	0.58 {59}	0.31 {31}			
★	–	Impact Resistant	DIA	Cream	0.64 {65}	0.33 {34}		–	
★	★		DIY	Green				60	
★	★	Antibacterial/Mold Resistant	MWS	Cream	0.83 {85}	0.44 {45}			

Note: Operating temperature of (80) is for dry conditions (no lubrication). (For plastic pins)
● = Standard material ★ = Made-to-order material – = Not available

● Sprockets

Standard ANSI #60 sprockets can be used (minimum no. of teeth is 14).

Wearstrips
See page 137

Return-Way Parts
See page 147

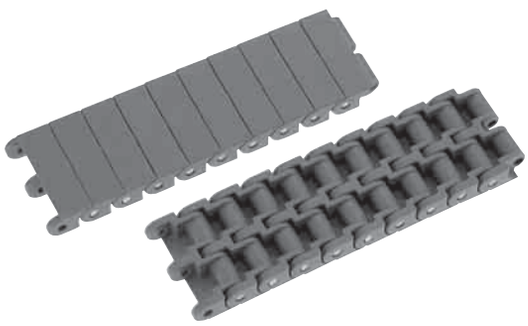
RSP-2 Plastic Block Chain

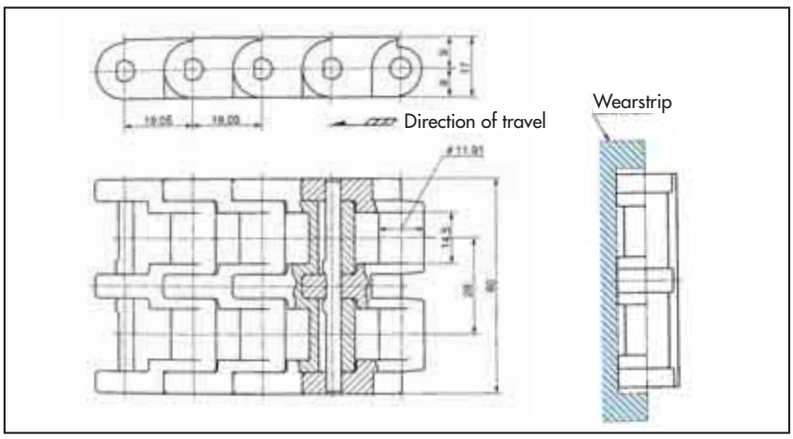
Stainless Steel Pins

Straight Running

Features

- Link width is double that of RSP60 chain. Suitable for conveying wider goods.
- Approx. 40% higher maximum allowable load than RSP60 plastic chain. Ideal for higher applied load conditions.





Chain Numbering

Chain type	Chain size	–	Chain material	–	Chain type
RSP	60	–	LFB	–	2

Chain Information

Tsubaki chain no.	Chain pitch	Link width	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}	Number of links per 10 ft
RSP60-2	19.05	60	304 stainless steel	1.5 (1.2/1.65/1.4)	3048 {10}	160

Note: 1. Mass shown in ( ) is for DIA/DIY/MPD. 2. Plastic pins are not available. 3. Tsubaki original chain.

Material

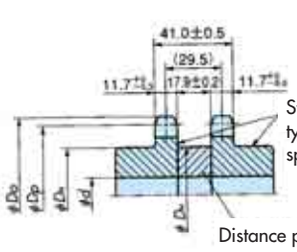
	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	Gray	1.27 {130}	-20 to 80	60	60
★	Low Friction	LFB	Brown	1.27 {130}	-20 to 80	60	60
★		LFG	Green				
★		LFW	White				
★	Ultra Low Friction	ULF	Blue				
★	Chemical Resistant	Y	Mat white	0.64 { 65}			
★	Electroconductive	E	Black	0.89 { 91}			
★	Impact Resistant	DIA	Cream	0.98 {100}		–	
★		DIY	Green			60	
★	Antibacterial/Mold Resistant	MWS	Cream	1.27 {130}			
★	Metal Detectable	MPD	Black	0.98 {100}		–	60

● = Standard material ★ = Made-to-order material

Sprockets (RSP60-2 and RSP60-CU-2)

1. Two standard ANSI type B (machined) sprockets are combined for use with RSP60-2 and RSP60-CU-2 chains.
2. Adjust the width between the two sprockets by inserting a distance piece.

Note: 1. Standard ANSI double-strand sprockets cannot be used.
2. Teeth on the two sprockets must be aligned with one another.
3. No. of sprocket teeth is at least 12 teeth.



Wearstrips See page 137
Return-Way Parts See page 147

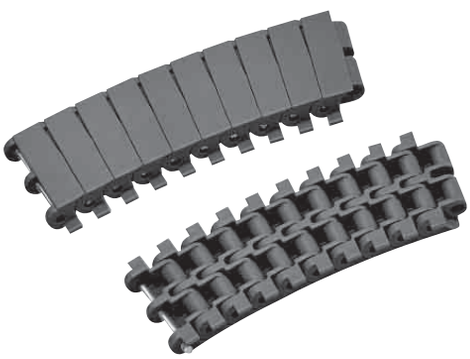
RSP-CU-2 Plastic Block Chain

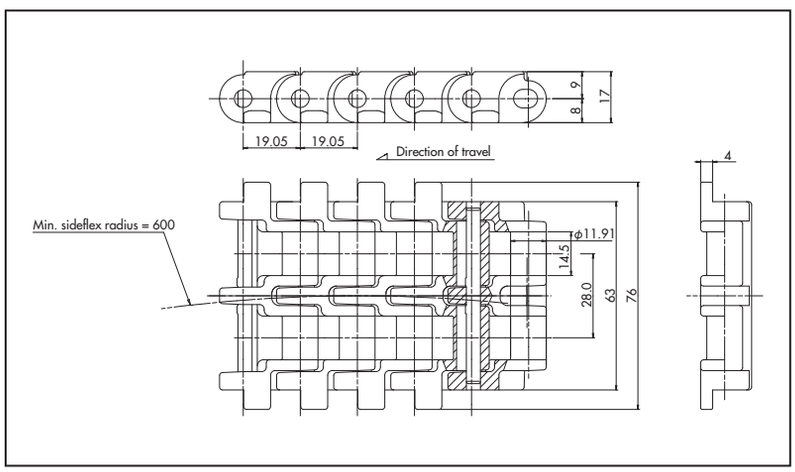
Stainless Steel Pins

Sideflexing

Features

- RSP60-CU-2 chain designed for use in sideflexing conveyors. Suitable for conveying wider goods.
- Approx. 30% higher maximum allowable load than RSP60CU chain. Ideal for higher applied load conditions.
- Equipped with float-preventive tabs. Keeps the chain securely in position.





Chain Numbering

Chain type	Chain size	–	Chain type	–	Chain material	–	Chain type
RSP	60	–	CU	–	LFB	–	2

Chain Information

Tsubaki chain no.	Chain pitch	Link width	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}	Number of links per 10 ft
RSP60-CU-2	19.05	76	304 stainless steel	1.5 (1.28/1.88/1.4)	3048 {10}	160

Note: 1. Mass shown in ( ) is for DIA/DIY/MPD. 2. Plastic pins are not available. 3. Tsubaki original chain.

Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	Gray	1.08 {110}	-20 to 80	60	60
★	Low Friction	LFB	Brown	1.08 {110}	-20 to 80	60	60
★		LFG	Green				
★		LFW	White				
★	Ultra Low Friction	ULF	Blue				
★	Chemical resistant	Y	Mat white	0.54 { 55}			
★	Electroconductive	E	Black	0.76 { 77}			
★	Impact Resistant	DIA	Cream	0.83 { 85}		–	
★		DIY	Green			60	
★	Antibacterial/Mold Resistant	MWS	Cream	1.08 {110}			
★	Metal Detectable	MPD	Black	0.83 { 85}		–	60

● = Standard material ★ = Made-to-order material

Sprockets

Sprockets are the same as for RSP60-2 chain (see page 87).

Wearstrips See page 137
Return-Way Parts See page 147

Snap Cover Chain

Straight Running

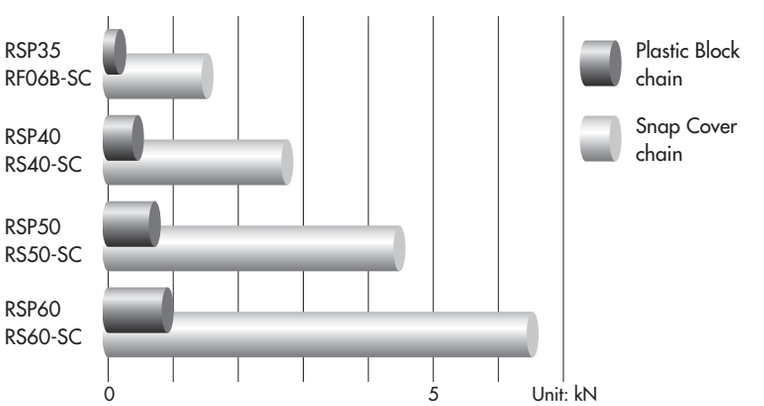
Features

- Higher maximum allowable load than Plastic Block chain (type RS60-SC approx. seven times higher than RSP60 chain). Ideal for long, heavy-load conveyors.
- Plastic covers provide safety for both conveyed goods and people.
- Six different chain pitches available, suitable for a diverse range of applications.

Tsubaki chain no.	Base chain type	Plastic cover
RF06B RS40 RS50 RS60 RS80 RS100	Standard NP (nickel-plated) Lambda (lube-free) SS (304SS)	**Standard** Material: Polyacetal (white) Used for general applications  Material: Polyacetal (light blue) * Enables easy identification of the connecting section **Electroconductive**  Material: Electroconductive polyacetal (black) Used in applications where dust build-up from static, electrical noise and sparks must be avoided (volume specific resistance 1 X $10^6 \Omega \cdot cm$)

Note: Various surface-treated chains are also available. Consult Tsubaki for details.
* Cannot be used with electroconductive plastic covers as it will impede electroconductivity.

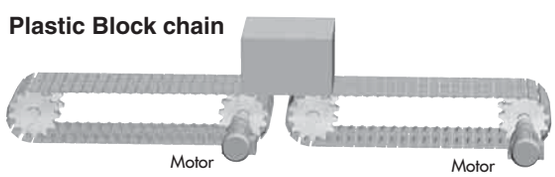
■ Allowable Load Comparison with Plastic Block Chain*



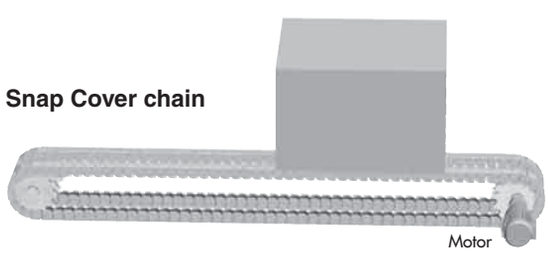
* No comparison of RS80-SC and RS100-SC chains as there are no corresponding Plastic Block chains.

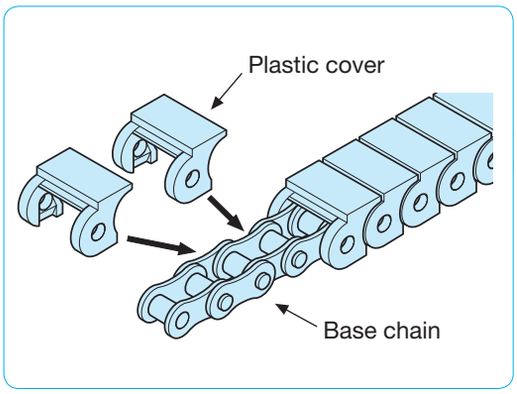
■ Location of Motors

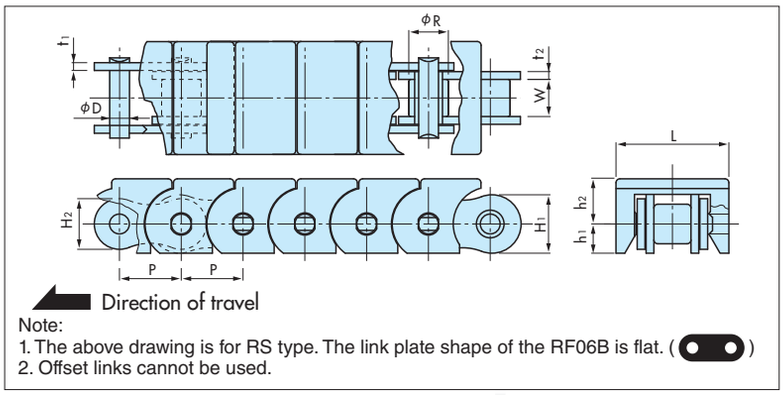
Plastic Block chain



Snap Cover chain



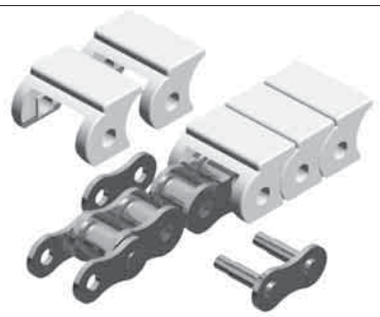




Note:
1. The above drawing is for RS type. The link plate shape of the RF06B is flat. ( )
2. Offset links cannot be used.

Tsubaki chain no.	Approx. mass kg/m	No. of links per standard length	Chain Type			
			Standard	NP	Lambda	SS
RF06B-SC	0.55	320	★	★	★	★
RS40-SC	0.8	240	●	●	★	★
RS50-SC	1.3	192	●	●	★	★
RS60-SC	1.9	160	●	●	★	★
RS80-SC	2.9	120	★	★	★	★
RS100-SC	4.4	96	★	★	★	★
RF06B-SC	Max. allowable load kN {kgf}		1.47 { 150}			0.26 {26.5}
RS40-SC			2.65 { 270}			0.44 {45 }
RS50-SC			4.31 { 440}			0.69 {70 }
RS60-SC			6.28 { 640}			1.03 {105 }
RS80-SC			10.7 {1090}			1.77 {180 }
RS100-SC			17.1 {1740}			2.55 {260 }

● = Standard ★ = Made-to-order



Special Connecting Links
A special connecting link makes it possible to hold the detachable plate by attaching the plastic snap cover. Note that standard connecting links with cotters and spring clips for standard roller chains cannot be used.

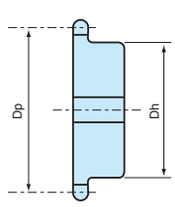
Unit: mm

Tsubaki chain no.	Pitch P	Roller diameter R	Width between inner link plates W	Pin diameter D	Plate				Plastic cover		
					Thickness t1	Thickness t2	Width H1	Width H2	Height h1	Height h2	Width L
RF06B-SC	9.525	6.35	5.72	3.28	1.0	1.27	8.2	8.2	4.2	7.6	17.5
RS40-SC	12.70	7.92	7.95	3.97	1.5	1.5	12.0	10.4	6.2	9.3	23.5
RS50-SC	15.875	10.16	9.53	5.09	2.0	2.0	15.0	13.0	7.7	11.8	29.0
RS60-SC	19.05	11.91	12.70	5.96	2.4	2.4	18.1	15.6	8.5	13.7	35.0
RS80-SC	25.40	15.88	15.88	7.94	3.2	3.2	24.1	20.8	11.5	18.0	42.5
RS100-SC	31.75	19.05	19.05	9.54	4.0	4.0	30.1	26.0	14.7	21.3	49.5

- Operating temperature range: -10°C to 80°C
- Maximum allowable speed: 60 m/min

■ Sprockets

- Sprockets must have at least 13 teeth.
- RF06B chains are BS (ISO B) DIN standard chains, which require 06B sprockets.
- Standard ANSI sprockets can be used for chains RS40 to RS100. However, note that, the maximum diameter of the sprocket hub for a given number of teeth, as shown in the table below, must be kept to prevent interference between the bottom plate of the engineering plastic cover and the sprocket hub. (No additional processing is reguired for other sizes.)



Max. hub diameter
Dh ≦ Dp - 2S

■ Sprockets

Unit: mm

No. of teeth / Tsubaki sprocket no.	13	14	15	16	17	18	19	20	21	22	23
RS40	–	41	45	49	53	–	61	65	69	73	–
RS60	54										

Unit: mm

	RS 06B	RS 40	RS 50	RS 60	RS 80	RS 100
2S	14	16	19	22	29	37

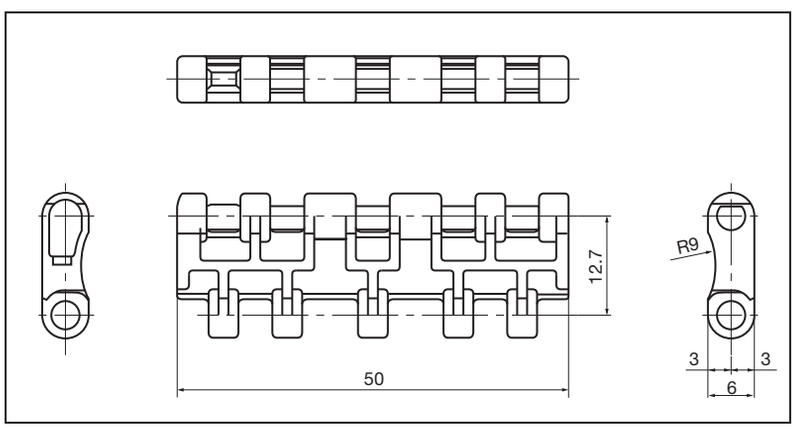
BTC4-M Beltop Chain

Plastic Pins

Closed Type: Straight Running

Features

- Small chain pitch of 12.7mm is ideal for conveying small, lightweight containers.
- Underside of links is curved, allowing the chain to wrap around an 18mm diameter shaft and effectively reducing the dead space between conveyors.
- Unique multi-hinge link construction ensures smooth accumulation and smooth transition between conveyors.
- Antistatic properties are added to standard link material to make this chain effective in countering the static electricity that often accumulates on mini-bottles and small containers under dry conditions.
- All-plastic construction means the chain is lightweight and easy to handle, and eliminates the need to sort and separate for waste disposal. The chain can also be used in application that use metal detectors.



Chain Numbering

Chain type	Chain pitch	–	Plate width	–	Chain type	–	Chain material
BTC	4	–	500	–	M	–	LFB

4 = 12.7mm 500 = 50.0mm

Chain Information

Tsubaki chain no.	Chain pitch	Link width	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}	Number of links per 10 ft
BTC4-500-M	12.7	50	Special engineering plastic	0.25 (0.2/0.3)	3048 {10}	240

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. The connecting pin is colored orange so as to distinguish it from base-chain pins (colored white).
3. Tsubaki original chain.

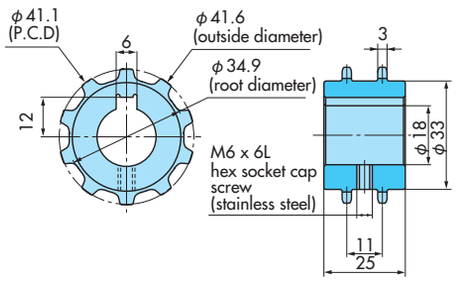
Material

	Material	Material mark	Link color	Max. allowable load kN{kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	Gray	0.49 {50}	-20 to 60 (80)	50	50
★	Low Friction	LFB	Brown	0.49 {50}	-20 to 60 (80)	50	50
★		LFG	Green				
★		LFW	White				
★	Ultra Low Friction	ULF	Blue				
★	Electroconductive	E	Black	0.34 {35}			
★	Impact Resistant	DIA	Cream	0.39 {40}		–	
★		DIY	Green			50	
★	Antibacterial/Mold Resistant	MWS	Cream	0.49 {50}			

Note: Operating temperature of (80) is for dry conditions (no lubrication).
● = Standard material ★ = Made-to-order material

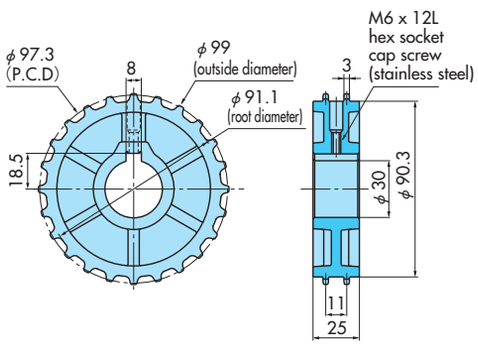
● Engineering Plastic Sprockets

• BTC4-10T18 (10 Teeth) Applicable chain: BTC4-M



BTC4-10T18 (17mm dia. bore) sprocket can also be manufactured. Consult Tsubaki for details.
- Material (main body): Reinforced polyamide
- Outside color: Light gray
- Operating temperature range: –20°C to 80°C

• BTC4-24T30 (24 Teeth) Applicable chain: BTC4-M



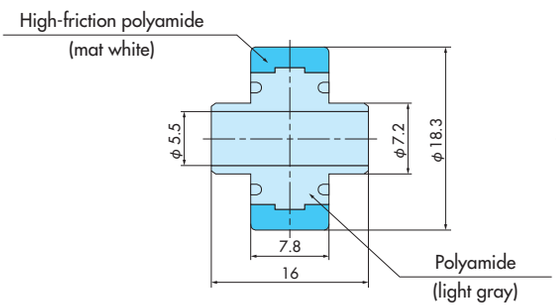
- Material (main body): Reinforced polyamide
- Outside color: Light gray
- Operating temperature range: –20°C to 80°C

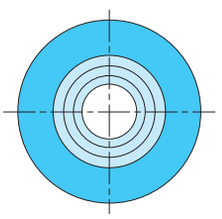
● Return Rollers

• TP-IR18 (for Dry Conditions)

Note: Should not be used under wet conditions.

Operating temperature range: -20°C to 80°C





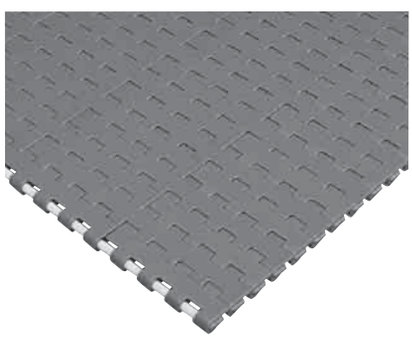
WT1505K Widetop Chain

Plastic Pins

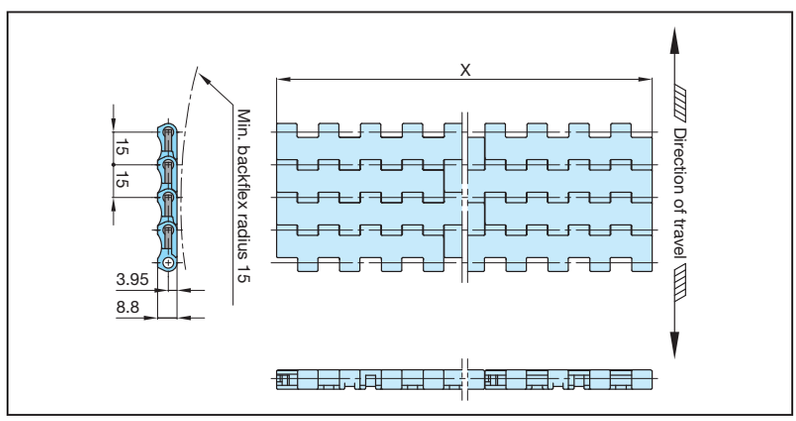
Closed Type: Straight Running

Features

- Small chain pitch of 15mm and flat top surface.
- Original design featuring curved bottom-fit nosebar to make conveyor ends smaller; virtually eliminates tipping and hang-up problems in straight transfers and right-angle transfers.
- Plug pin retention system allows easy installation and maintenance.



U.S. Patent 6196381B1
U.S. Patent 6050397



Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	15	Blue	2	10.5 {1070}	6.7	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
UL		Green					

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT1505K03-ULF	WT1505K03-UL	76.2
WT1505K06-ULF	WT1505K06-UL	152.4
WT1505K09-ULF	WT1505K09-UL	228.6
WT1505K12-ULF	WT1505K12-UL	304.8
WT1505K15-ULF	WT1505K15-UL	381.0
WT1505K18-ULF	WT1505K18-UL	457.2
WT1505K21-ULF	WT1505K21-UL	533.4

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT1505K24-ULF	WT1505K24-UL	609.6
WT1505K27-ULF	WT1505K27-UL	685.8
WT1505K30-ULF	WT1505K30-UL	762.0
WT1505K33-ULF	WT1505K33-UL	838.2
WT1505K36-ULF	WT1505K36-UL	914.4
WT1505K48-ULF	WT1505K48-UL	1219.2
WT1505K60-ULF	WT1505K60-UL	1524.0

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
5. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
★	Low Friction	LFB	Brown	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
●	Low Friction	UL	Green	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
★	Electroconductive	E	Black	6.7	8.0 { 816}	-20 to 80 (60)	120 (50)	50 (30)
	Middle Friction	MF	Yellow	6.7	7.8 { 796}	-20 to 80 (60)	120 (50)	50 (30)

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. Maximum allowable speeds in ( ) are for when using a nose bar. In addition, values shown are those for nose bar material of MC nylon for dry conditions and UHMW-PE for lubricated conditions.
3. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 100/147

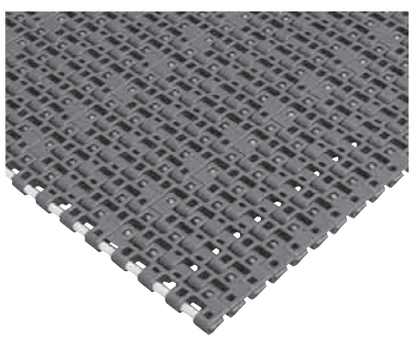
WT1506K Widetop Chain

Plastic Pins

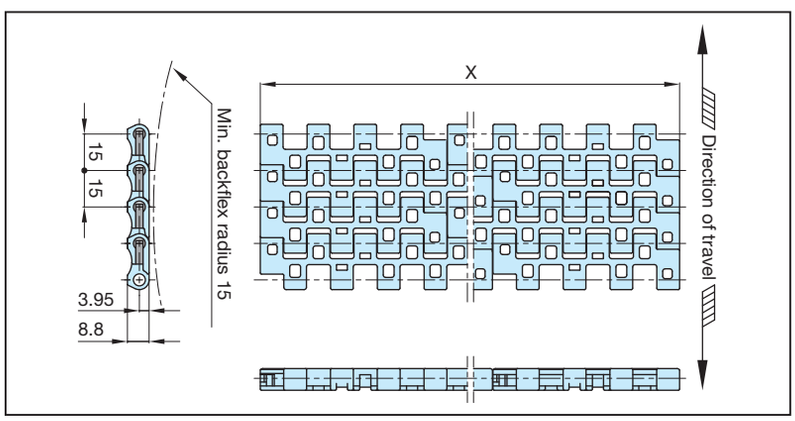
Open Type: Straight Running

Features

- Small chain pitch of 15mm and perforated top surface, which allows drainage of water or airflow.
- Original design featuring curved bottom-fit nosebar to make conveyor ends smaller; virtually eliminates tipping and hang-up problems in straight transfers and right-angle transfers.
- Plug pin retention system allows easy installation and maintenance.



U.S. Patent 6196381B1
U.S. Patent 6050397



Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	15	Blue	26	10.5 {1070}	6.7	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
UL		Green					

Tsubaki chain no.		Chain width X mm
ULF	UL	
WT1506K03-ULF	WT1506K03-UL	76.2
WT1506K06-ULF	WT1506K06-UL	152.4
WT1506K09-ULF	WT1506K09-UL	228.6
WT1506K12-ULF	WT1506K12-UL	304.8
WT1506K15-ULF	WT1506K15-UL	381.0
WT1506K18-ULF	WT1506K18-UL	457.2
WT1506K21-ULF	WT1506K21-UL	533.4

Tsubaki chain no.		Chain width X mm
ULF	UL	
WT1506K24-ULF	WT1506K24-UL	609.6
WT1506K27-ULF	WT1506K27-UL	685.8
WT1506K30-ULF	WT1506K30-UL	762.0
WT1506K33-ULF	WT1506K33-UL	838.2
WT1506K36-ULF	WT1506K36-UL	914.4
WT1506K48-ULF	WT1506K48-UL	1219.2
WT1506K60-ULF	WT1506K60-UL	1524.0

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
5. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
★	Low Friction	LFB	Brown	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
●	Low Friction	UL	Green	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
	Electroconductive	E	Black	6.7	8.0 { 816}	-20 to 80 (60)	120 (50)	50 (30)
★	Heat Resistant	HTW	White	4.0	4.25 { 434}	5 to 105	80 (50)	40 (30)
	Middle Friction	MF	Yellow	6.7	7.8 { 796}	-20 to 80 (60)	120 (50)	50 (30)

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. Maximum allowable speeds in ( ) are for when using a nose bar. In addition, values shown are those for nose bar material of MC nylon for dry conditions and UHMW-PE for lubricated conditions.
3. ● : Standard material ▲ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 100/147

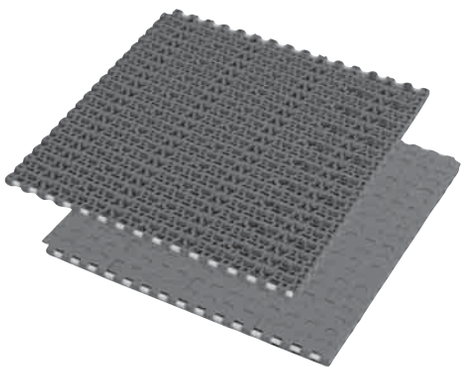
WT1505GK Widetop Chain

Plastic Pins

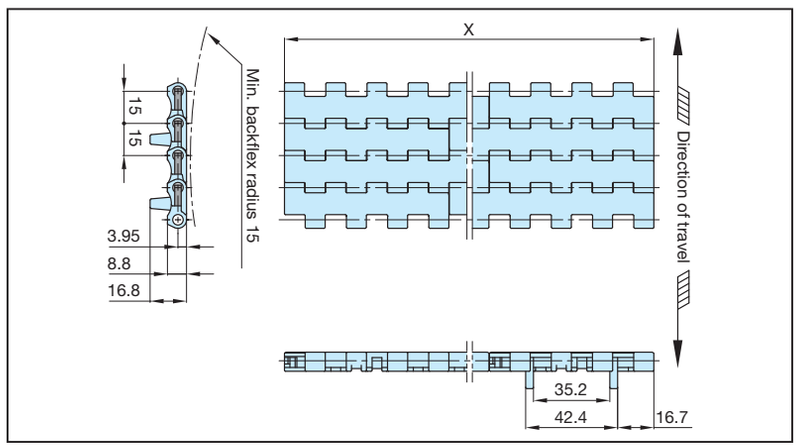
Closed Type with Tab Guides: Straight Running

Features

- Small chain pitch of 15mm and flat top surface.
- Tab guides keep the chain securely in position to allow smooth side transfer.
- Plug pin retention system allows easy installation and maintenance.



U.S. Patent 6196381B1
U.S. Patent 6050397



Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	15	Blue	2	10.5 {1070}	6.7	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
UL		Green					

Tsubaki chain no.		Chain width X mm
ULF	UL	
WT1505GK06-ULF	WT1505GK06-UL	152.4
WT1505GK09-ULF	WT1505GK09-UL	228.6
WT1505GK12-ULF	WT1505GK12-UL	304.8
WT1505GK15-ULF	WT1505GK15-UL	381.0
WT1505GK18-ULF	WT1505GK18-UL	457.2
WT1505GK21-ULF	WT1505GK21-UL	533.4
WT1505GK24-ULF	WT1505GK24-UL	609.6

Tsubaki chain no.		Chain width X mm
ULF	UL	
WT1505GK27-ULF	WT1505GK27-UL	685.8
WT1505GK30-ULF	WT1505GK30-UL	762.0
WT1505GK33-ULF	WT1505GK33-UL	838.2
WT1505GK36-ULF	WT1505GK36-UL	914.4
WT1505GK39-ULF	WT1505GK39-UL	990.6
WT1505GK48-ULF	WT1505GK48-UL	1219.2
WT1505GK60-ULF	WT1505GK60-UL	1524.0

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Cannot be used with N1500/12T-30R solid sprockets.
5. Cannot be used with nose bars and nose rollers.
6. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
7. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	6.7	10.5 {1070}	-20 to 80 (60)	120	50
★	Low Friction	LFB	Brown	6.7	10.5 {1070}	-20 to 80 (60)	120	50
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	6.7	10.5 {1070}	-20 to 80 (60)	120	50
●	Low Friction	UL	Green	6.7	10.5 {1070}	-20 to 80 (60)	120	50
★	Electroconductive	E	Black	6.7	8.0 { 816}	-20 to 80 (60)	120	50
	Middle Friction	MF	Yellow	6.7	7.8 { 796}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

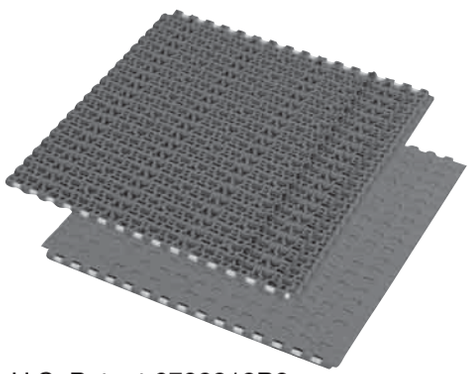
Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 147

WT1505GTOK Widetop Chain **Plastic Pins**

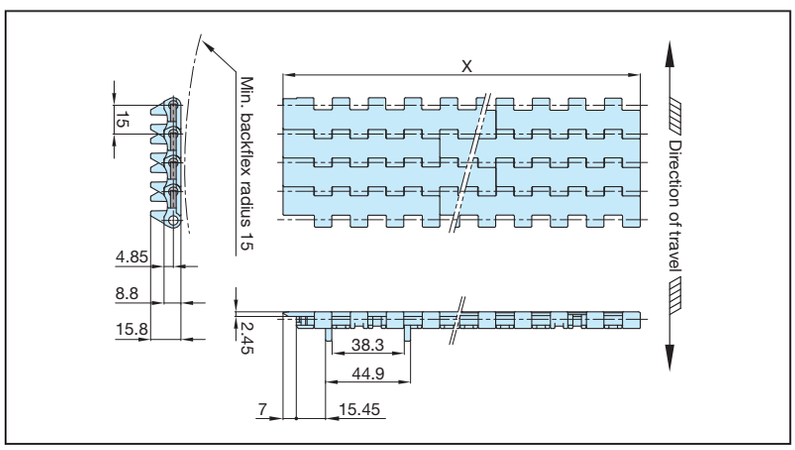
Closed Type with Tab Guides and Extended Plate Edges: Straight Running

Features

- Small chain pitch of 15mm and flat top surface.
- Extended plate edges promote smoother transover 90.
- Plug pin retention system allows easy installation and maintenance.



U.S. Patent 6708818B2
U.S. Patent 6196381B1
U.S. Patent 6050397



Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	15	Blue	2	10.5 {1070}	6.7	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
UL		Green					

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT1505GTOK09-ULF	WT1505GTOK09-UL	235.6
WT1505GTOK12-ULF	WT1505GTOK12-UL	311.8
WT1505GTOK15-ULF	WT1505GTOK15-UL	388.0
WT1505GTOK18-ULF	WT1505GTOK18-UL	464.2
WT1505GTOK21-ULF	WT1505GTOK21-UL	540.4
WT1505GTOK24-ULF	WT1505GTOK24-UL	616.6
WT1505GTOK27-ULF	WT1505GTOK27-UL	692.8

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT1505GTOK30-ULF	WT1505GTOK30-UL	769.0
WT1505GTOK33-ULF	WT1505GTOK33-UL	845.2
WT1505GTOK36-ULF	WT1505GTOK36-UL	921.4
WT1505GTOK39-ULF	WT1505GTOK39-UL	997.6
WT1505GTOK42-ULF	WT1505GTOK42-UL	1073.8
WT1505GTOK48-ULF	WT1505GTOK48-UL	1226.2
WT1505GTOK60-ULF	WT1505GTOK60-UL	1531.0

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,531mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Cannot be used with N1500/12T-30R solid sprockets.
5. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
6. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
★	Low Friction	LFB	Brown	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
●	Low Friction	UL	Green	6.7	10.5 {1070}	-20 to 80 (60)	120 (50)	50 (30)
★	Electroconductive	E	Black	6.7	8.0 { 816}	-20 to 80 (60)	120 (50)	50 (30)
	Middle Friction	MF	Yellow	6.7	7.8 { 796}	-20 to 80 (60)	120 (50)	50 (30)

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. Maximum allowable speeds in ( ) are for when using a nose bar. In addition, values shown are those for nose bar material of MC nylon for dry conditions and UHMW-PE for lubricated conditions.
3. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 100/147

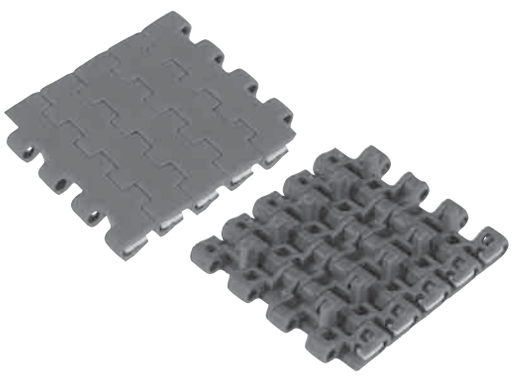
WT1505GM Widetop Chain

Plastic Pins

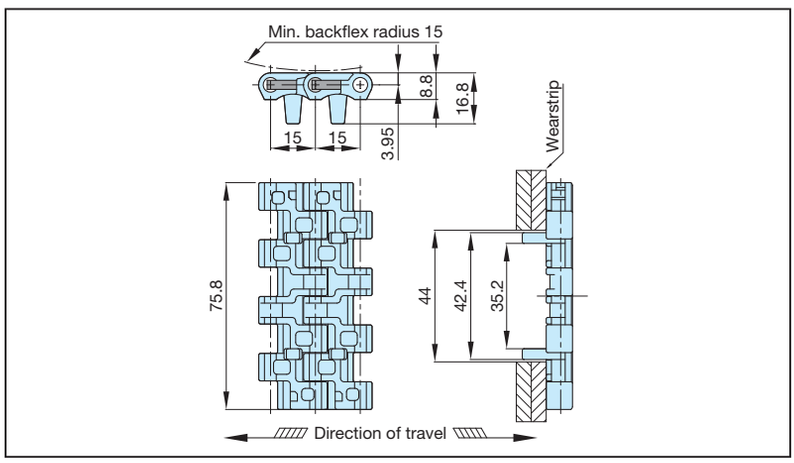
Closed Type with Tab Guides: Straight Running

Features

- Small chain pitch of 15mm and flat top surface.
- Tab guides keep the chain securely in position to allow smooth side transfer.
- Plug pin retention system allows easy installation and maintenance.



U.S. Patent 6196381B1
U.S. Patent 6050397



Material	Ultra Low Friction	Low Friction	Open area %	Top plate width mm	Max. allowable load kN {kgf}	Approx. mass kg/m	Pin material
Material mark	ULF	UL					
Link color	Blue	Green					
Tsubaki chain no.	WT1505GM300-ULF	WT1505GM300-UL	2	75.8	0.8 {81.1}	0.6	Special engineering plastic

Note: 1. Values for maximum allowable load are at ambient temperature (20°C).
2. Cannot be used with nose bars and nose rollers.
3. Cannot be used with N1500/12T-30R solid sprockets.
4. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	0.6	0.8 {81.1}	-20 to 80 (60)	120	50
★	Low Friction	LFB	Brown	0.6	0.8 {81.1}	-20 to 80 (60)	120	50
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	0.6	0.8 {81.1}	-20 to 80 (60)	120	50
●	Low Friction	UL	Green	0.6	0.8 {81.1}	-20 to 80 (60)	120	50
★	Electroconductive	E	Black	0.6	0.6 {61.2}	-20 to 80 (60)	120	50
	Middle Friction	MF	Yellow	0.6	0.59 {60.2}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

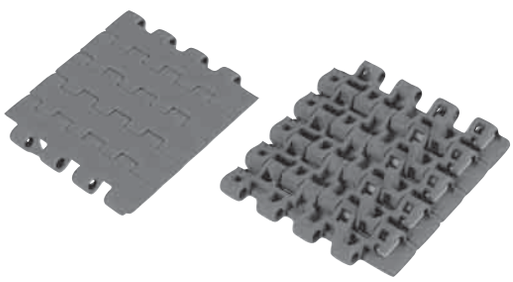
Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 147

WT1505GTOM Widetop Chain **Plastic Pins**

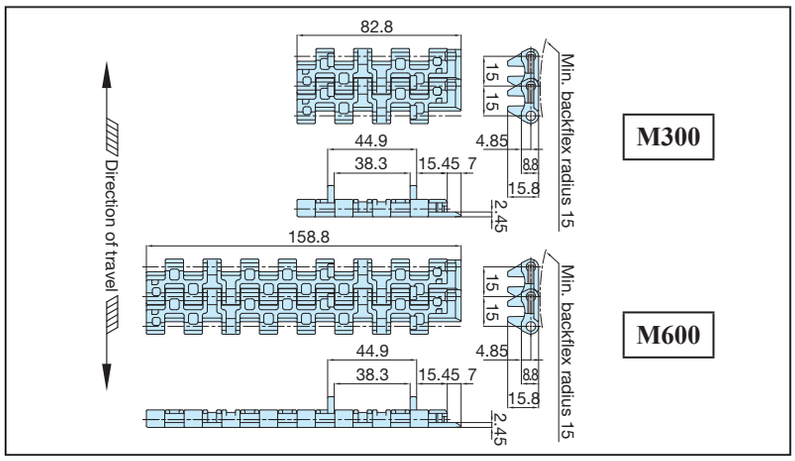
Closed Type: For Right-Angle Transfers

Features

- Small chain pitch of 15mm and flat top surface.
- Extended plate edges promote smoother transover 90.
- Plug pin retention system allows easy installation and maintenance.



U.S. Patent 6708818B2
U.S. Patent 6196381B1
U.S. Patent 6050397



Material	Ultra Low Friction	Low Friction	Open area %	Top plate width mm	Max. allowable load kN {kgf}	Approx. mass kg/m	Pin material
Material mark	ULF	UL					
Link color	Blue	Green					
Tsubaki chain no.	WT1505GTOM300-ULF	WT1505GTOM300-UL	2	82.8	0.8 { 81.1}	0.6	Special engineering plastic
	WT1505GTOM600-ULF	WT1505GTOM600-UL		158.8	1.6 {163.0}	1.2	

Note: 1. Values for maximum allowable load are at ambient temperature (20°C).
2. Cannot be used with N1500/12T-30R solid sprockets.

● Material

	Material	Material mark	Link color	Chain mass kg/m²		Max. allowable load kN {kgf}		Operating temperature range °C	Max. allowable speed m/min	
				M300	M600	M300	M600		With lube	No lube
	Standard	–	Gray	0.6	1.2	0.8 {81.1}	1.6 {162.2}	-20 to 80 (60)	120 (50)	50 (30)
★	Low Friction/Anti-Wear	LFB	Brown	0.6	1.2	0.8 {81.1}	1.6 {162.2}	-20 to 80 (60)	120 (50)	50 (30)
		LFG	Green							
		LFW	White							
●	Ultra Low Friction	ULF	Blue	0.6	1.2	0.8 {81.1}	1.6 {162.2}	-20 to 80 (60)	120 (50)	50 (30)
●	Low Friction	UL	Green	0.6	1.2	0.8 {81.1}	1.6 {162.2}	-20 to 80 (60)	120 (50)	50 (30)
★	Electroconductive	E	Black	0.6	1.2	0.6 {61.2}	1.2 {122.4}	-20 to 80 (60)	120 (50)	50 (30)
	Middle Friction	MF	Yellow	0.6	1.2	0.59 {60.2}	1.18 {120.4}	-20 to 80 (60)	120 (50)	50 (30)

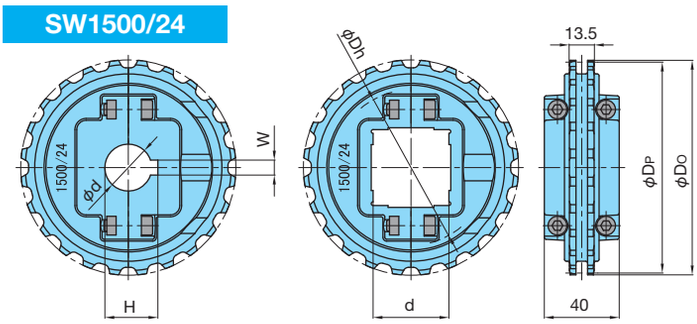
Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. Maximum allowable speeds in ( ) are for when using a nose bar. In addition, values shown are those for nose bar material of MC nylon for dry conditions and UHMW-PE for lubricated conditions.
3. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 100/147

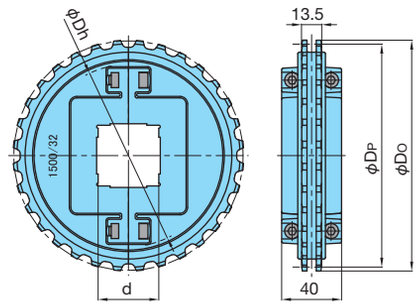
SW1500 Split Sprockets

Applicable chain: WT1500/3000 Series Widetop Chain

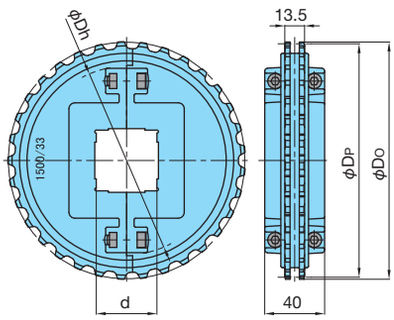
SW1500/24



SW1500/32



SW1500/33

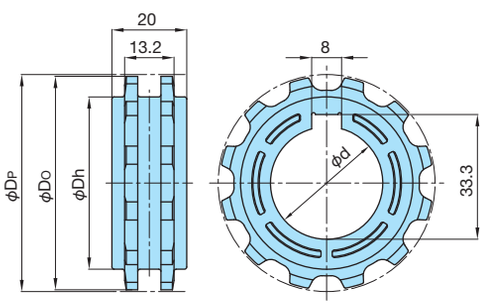


Tsubaki sprocket no.	Teeth	Pitch diameter *DP*	Outside diameter *DO*	Bore shape	Bore diameter *d*	Keyway *W*	Keyway *H*	Hub diameter *Dh*	Approx. mass kg	Material: Body
SW1500/24-25R	24	114.9	115.5	Round	25	8	28.3	83	0.3	Reinforced polyamide (black)
SW1500/24-30R					30	8	33.3			
SW1500/24-35R					35	10	38.3			
SW1500/24-40R					40	12	43.3			
SW1500/24-40S				Square	40	–	–			
SW1500/32-40S	32	153	154.8	Square	40	–	–	121.5	0.4	
SW1500/32-60S					60	–	–			
SW1500/33-40S	33	157.8	158.6	Square	40	–	–	126	0.4	
SW1500/33-65S					65	–	–			

Note: 1. Bolt tightening torque: 5.7 N·m
2. When assembling the sprockets, do not mix the pairs.
3. Bolts and nuts are made of stainless steel.
4. Operating temperature range: -20°C to 80°C

N1500 Solid Sprockets (Molded)

Applicable chain: WT1500 Series Widetop Chain

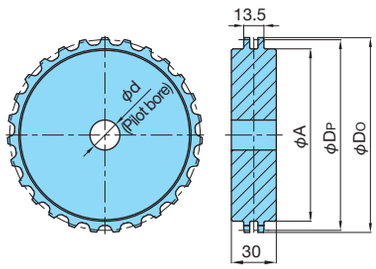


Tsubaki sprocket no.	Teeth	Pitch diameter *DP*	Outside diameter *DO*	Bore shape	Bore diameter *d*	Hub diameter *Dh*	Approx. mass g	Material
N1500/12T-30R	12	57.96	57	Round	30	46	27	Reinforced polyamide (black)

Note: 1. Cannot be used with 1505G, 1505GTO, 1505TOD, or 3000 series chains.
2. This sprocket is intended for use only as an idler sprocket. Please consult Tsubaki for use as a drive sprocket.
3. Operating temperature range: -20°C to 80°C

S1500 Solid Sprockets

Applicable chain: WT1500/3000 Series Widetop Chain



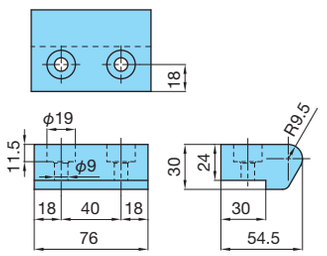
Tsubaki sprocket no.	Teeth	Pitch diameter *DP*	Outside diameter *DO*	A	Bore shape	Bore diameter *d*	Material
S1500/24	24	114.9	115	100	Bore shapes and size will be fabricated on receipt of order.		Ultra high molecular weight polyethylene (green)
S1500/25	25	119.7	120	105			
S1500/27	27	129.2	130	115			
S1500/31	31	148.3	149	134			
S1500/32	32	153	154	138			
S1500/33	33	157.8	158.6	144			

Note: Sprockets can also be fabricated with other shapes and number of teeth than noted above.

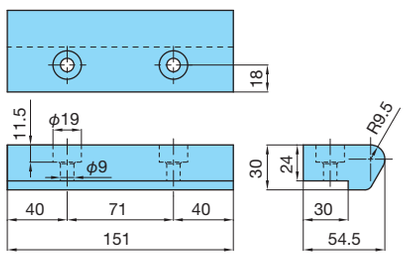
NB-76/151/302 Nose Bars

Applicable chain: WT1500 Series Widetop Chain

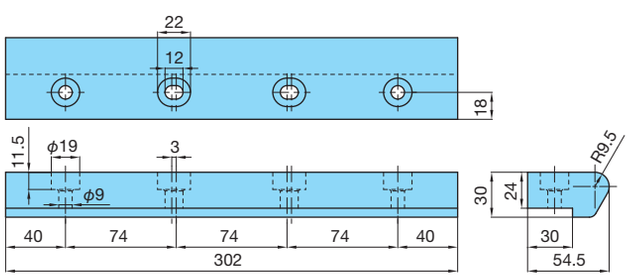
NB-76



NB-151



NB-302



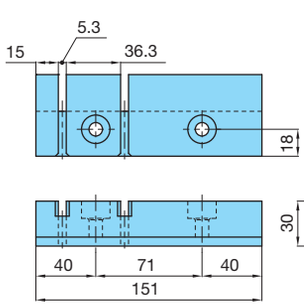
Tsubaki nose bar no.	Material	Color	Application
NB-76 (10-301)	Ultra high molecular weight polyethylene	Green	Ideal for use with water lubricant or under other wet running conditions.
NB-76 (10-100M9)	Ultra high molecular weight polyethylene (oil impregnated)	White	Ideal for use under light load, low speed, dry running conditions.
NB-76 (SJ-CNO)	MC nylon	Gray	Ideal for use under heavy load, high speed, dry running conditions.
NB-151 (10-301)	Ultra high molecular weight polyethylene	Green	Ideal for use with water lubricant or under other wet running conditions.
NB-151 (10-100M9)	Ultra high molecular weight polyethylene (oil impregnated)	White	Ideal for use under light load, low speed, dry running conditions.
NB-151 (SJ-CNO)	MC nylon	Gray	Ideal for use under heavy load, high speed, dry running conditions.
NB-302 (10-301)	Ultra high molecular weight polyethylene	Green	Ideal for use with water lubricant or under other wet running conditions.
NB-302 (10-100M9)	Ultra high molecular weight polyethylene (oil impregnated)	White	Ideal for use under light load, low speed, dry running conditions.
NB-302 (SJ-CNO)	MC nylon	Gray	Ideal for use under heavy load, high speed, dry running conditions.

Note: Cannot be used with 1505GM300 or 1505GK series chains.

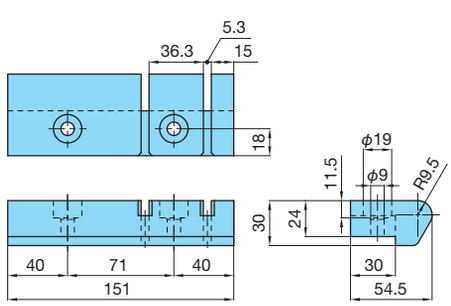
NB-151TOL/151TOR Nose Bars

Applicable chain: WT1505GTO Series Widetop Chain

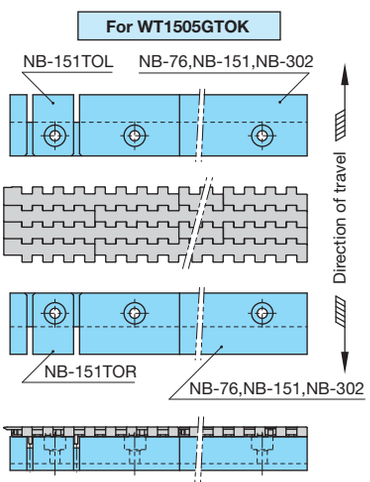
NB-151TOL



NB-151TOR



For WT1505GTOK



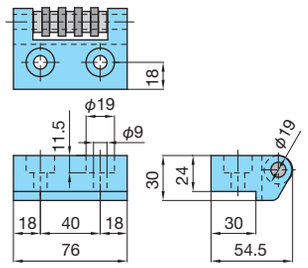
Tsubaki nose bar no.	Material	Color
NB-151TOL (10-301)	Ultra high molecular weight polyethylene	Green
NB-151TOL (10-100M9)	Ultra high molecular weight polyethylene (oil impregnated)	White
NB-151TOL (SJ-CNO)	MC nylon	Gray
NB-151TOR (10-301)	Ultra high molecular weight polyethylene	Green
NB-151TOR (10-100M9)	Ultra high molecular weight polyethylene (oil impregnated)	White
NB-151TOR (SJ-CNO)	MC nylon	Gray

Note: 1. Made-to-order items.
2. Cannot be used with 1505GM300 or 1505GK series chains.

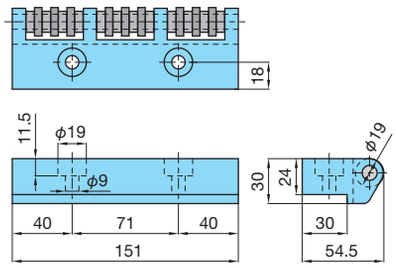
NR-76/151/76TO Nose Rollers

Applicable chain: WT1500 Series Widetop Chain

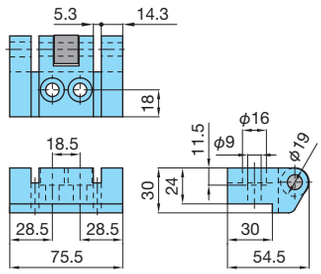
NR-76



NR-151



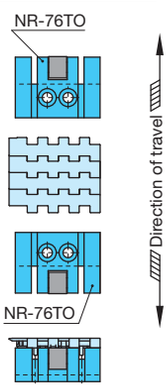
NR-76TO



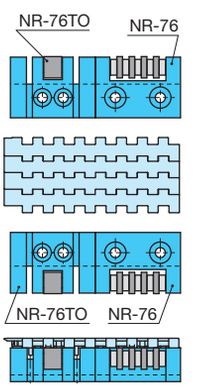
Tsubaki nose roller no.	Main body material	Color	Bearing	Shaft material
NR-76	Ultra high molecular weight polyethylene	Green	Ball	Stainless steel
NR-151			Ball	
NR-76TO			Needle	

Note: 1. Made-to-order items.
2. Cannot be used with 1505GM300 or 1505GK series chains.
3. Standard bearing material is steel.

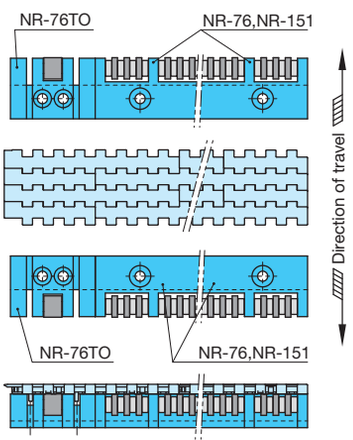
For WT1505GTOM300



For WT1505GTOM600



For WT1505GTOK



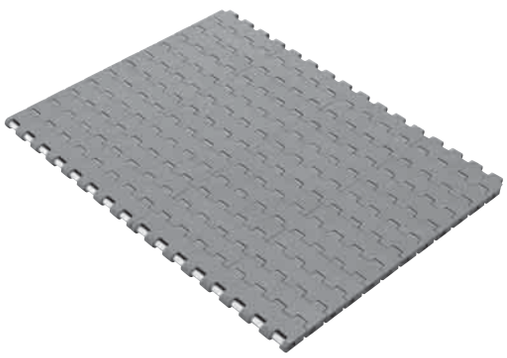
BTC6 Beltop Chain

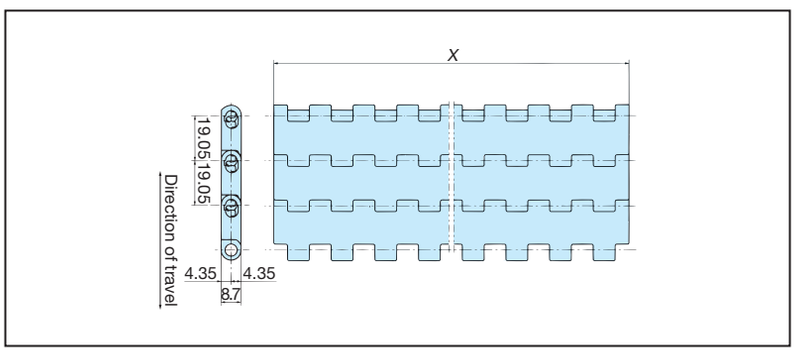
Plastic Pins

Closed Type: Straight Running

Features

- Small chain pitch of 19.05mm is ideal for conveying small objects such as cans.
- All-plastic construction. Lightweight and easy to handle.





Material mark	Link color	Chain pitch mm	Open area %	Max. allowable load kN/m {kgf/m}	Approx. mass kg/m²	Operating temperature range °C	Pin material
LFB	Brown	19.05	3	12.8 {1300}	6.56	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
ULF	Blue						
KV250	Black				13.12	-20 to 250	Stainless steel

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X
BTC6-762-LFB	BTC6-762-ULF	76.2
BTC6-1524-LFB	BTC6-1524-ULF	152.4
BTC6-2286-LFB	BTC6-2286-ULF	228.6
BTC6-3048-LFB	BTC6-3048-ULF	304.8
BTC6-3810-LFB	BTC6-3810-ULF	381.0
BTC6-4572-LFB	BTC6-4572-ULF	457.2
BTC6-5334-LFB	BTC6-5334-ULF	533.4
BTC6-6096-LFB	BTC6-6096-ULF	609.6
BTC6-6858-LFB	BTC6-6858-ULF	685.8
BTC6-7620-LFB	BTC6-7620-ULF	762.0

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X
BTC6-8382-LFB	BTC6-8382-ULF	838.2
BTC6-9144-LFB	BTC6-9144-ULF	914.4
BTC6-9906-LFB	BTC6-9906-ULF	990.6
BTC6-10668-LFB	BTC6-10668-ULF	1066.8
BTC6-11430-LFB	BTC6-11430-ULF	1143.0
BTC6-12192-LFB	BTC6-12192-ULF	1219.2
BTC6-12954-LFB	BTC6-12954-ULF	1295.4
BTC6-13716-LFB	BTC6-13716-ULF	1371.6
BTC6-14478-LFB	BTC6-14478-ULF	1447.8
BTC6-15240-LFB	BTC6-15240-ULF	1524.0

Note: 1. When plastic pins are replaced with stainless steel pins, the chain can be used in temperatures 60°C to 80°C in wet conditions. In this case, initial chain length will be approx. 1% longer. Chain mass is identical to KV250 chain.
2. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
3. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
4. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
5. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Low Friction	LFB	Brown	12.8 {1300}	-20 to 60 (80)	50	50
●	Ultra Low Friction	ULF	Blue				
★	Standard	–	Gray	12.8 {1300}	-20 to 60 (80)	50	50
★	Low Friction	LFG	Green				
★		LFW	White				
★	Heat Resistant/High Speed	KV150	Black		-20 to 150	–	
★		KV250			-20 to 250	50	
★	Electroconductive	E	Black	9.0 { 910}	-20 to 60 (80)		
★	Impact Resistant	DIA	Cream	9.8 {1000}	-20 to 80	–	
★		DIY	Green		-20 to 60 (80)	50	
★	Antibacterial/Mold Resistant	MWS	Cream	12.8 {1300}			
★	Low Temperature	LTW	White	4.22 { 430}	-70 to 60	15	15

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. ● : Standard material ★ : Made-to-order material
3. KV150 and KV250 use stainless steel pins.

Sprockets See page 105
Wearstrips See page 137
Return-Way Parts See page 147

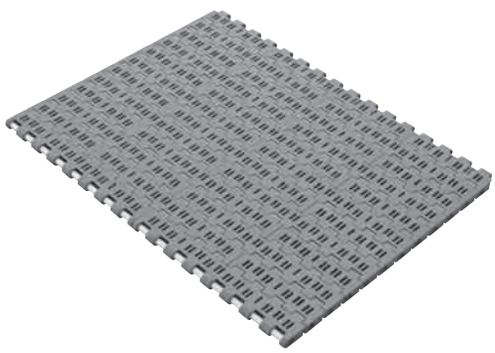
BTO6 Beltop Chain

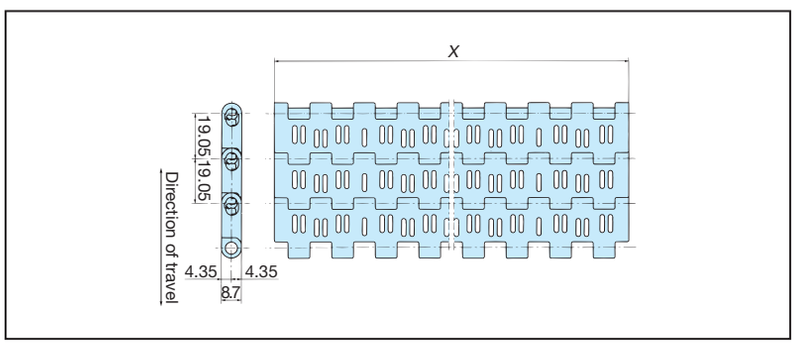
Plastic Pins

Open Type: Straight Running

Features

- Small chain pitch of 19.05mm is ideal for conveying small objects such as cans.
- Open type with perforations in the conveying surface. Can be used for water drainage or for vacuum conveyors.
- All-plastic construction. Lightweight and easy to handle.





Material mark	Link color	Chain pitch mm	Open area %	Max. allowable load kN/m {kgf/m}	Approx.mass kg/m²	Operating temperature range °C	Pin material
LFB	Brown	19.05	17	12.8 {1300}	6.56	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
ULF	Blue						

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X mm
BTO6-762-LFB	BTO6-762-ULF	76.2
BTO6-1524-LFB	BTO6-1524-ULF	152.4
BTO6-2286-LFB	BTO6-2286-ULF	228.6
BTO6-3048-LFB	BTO6-3048-ULF	304.8
BTO6-3810-LFB	BTO6-3810-ULF	381.0
BTO6-4572-LFB	BTO6-4572-ULF	457.2
BTO6-5334-LFB	BTO6-5334-ULF	533.4
BTO6-6096-LFB	BTO6-6096-ULF	609.6
BTO6-6858-LFB	BTO6-6858-ULF	685.8
BTO6-7620-LFB	BTO6-7620-ULF	762.0

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X mm
BTO6-8382-LFB	BTO6-8382-ULF	838.2
BTO6-9144-LFB	BTO6-9144-ULF	914.4
BTO6-9906-LFB	BTO6-9906-ULF	990.6
BTO6-10668-LFB	BTO6-10668-ULF	1066.8
BTO6-11430-LFB	BTO6-11430-ULF	1143.0
BTO6-12192-LFB	BTO6-12192-ULF	1219.2
BTO6-12954-LFB	BTO6-12954-ULF	1295.4
BTO6-13716-LFB	BTO6-13716-ULF	1371.6
BTO6-14478-LFB	BTO6-14478-ULF	1447.8
BTO6-15240-LFB	BTO6-15240-ULF	1524.0

Note: 1. When plastic pins are replaced with stainless steel pins, the chain can be used in temperatures 60°C to 80°C in wet conditions. In this case, initial chain length will be approx. 1% longer. Chain mass is identical to BT6C KV250 chain.
2. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
3. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
4. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
5. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Low Friction	LFB	Brown	12.8 {1300}	-20 to 60 (80)	50	50
●	Ultra Low Friction	ULF	Blue				
★	Standard	–	Gray	12.8 {1300}	-20 to 60 (80)	50	50
★	Low Friction	LFG	Green				
★		LFW	White				
★	Electroconductive	E	Black	9.0 { 910}	-20 to 60 (80)		
★	Impact Resistant	DIA	Cream	9.8 {1000}	-20 to 80	–	
★		DIY	Green		-20 to 60 (80)	50	
★	Antibacterial/Mold Resistant	MWS	Cream	12.8 {1300}			

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 105
Wearstrips See page 137
Return-Way Parts See page 147

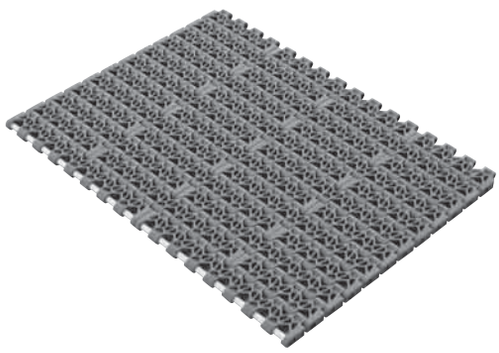
BTN6 Beltop Chain

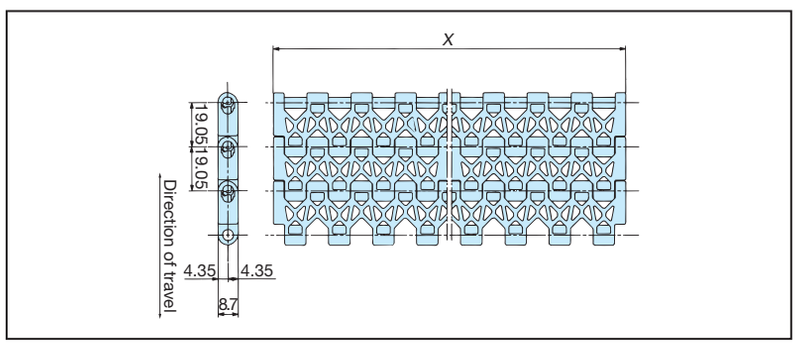
Plastic Pins

Net Type: Straight Running

Features

- Small chain pitch of 19.05mm is ideal for conveying small objects such as cans.
- Low Friction resistance type. Has the highest open area ratio in the BT6 Series, and is ideal for applications requiring water drainage or when keeping drag resistance to a minimum is desirable.
- All-plastic construction. Lightweight and easy to handle.





Material mark	Link color	Chain pitch mm	Open area %	Max. allowable load kN/m {kgf/m}	Approx. mass kg/m²	Operating temperature range °C	Pin material
LFB	Brown	19.05	53	11.6 {1180}	5.58	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
ULF	Blue						

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X mm
BTN6-762-LFB	BTN6-762-ULF	76.2
BTN6-1524-LFB	BTN6-1524-ULF	152.4
BTN6-2286-LFB	BTN6-2286-ULF	228.6
BTN6-3048-LFB	BTN6-3048-ULF	304.8
BTN6-3810-LFB	BTN6-3810-ULF	381.0
BTN6-4572-LFB	BTN6-4572-ULF	457.2
BTN6-5334-LFB	BTN6-5334-ULF	533.4
BTN6-6096-LFB	BTN6-6096-ULF	609.6
BTN6-6858-LFB	BTN6-6858-ULF	685.8
BTN6-7620-LFB	BTN6-7620-ULF	762.0

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X mm
BTN6-8382-LFB	BTN6-8382-ULF	838.2
BTN6-9144-LFB	BTN6-9144-ULF	914.4
BTN6-9906-LFB	BTN6-9906-ULF	990.6
BTN6-10668-LFB	BTN6-10668-ULF	1066.8
BTN6-11430-LFB	BTN6-11430-ULF	1143.0
BTN6-12192-LFB	BTN6-12192-ULF	1219.2
BTN6-12954-LFB	BTN6-12954-ULF	1295.4
BTN6-13716-LFB	BTN6-13716-ULF	1371.6
BTN6-14478-LFB	BTN6-14478-ULF	1447.8
BTN6-15240-LFB	BTN6-15240-ULF	1524.0

Note: 1. When plastic pins are replaced with stainless steel pins, the chain can be used in temperatures 60°C to 80°C in wet conditions. In this case, initial chain length will be approx. 1% longer and chain mass heavier. Be sure to consult Tsubaki before use.
2. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
3. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
4. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
5. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Low Friction	LFB	Brown	11.6 {1180}	-20 to 60 (80)	50	50
●	Ultra Low Friction	ULF	Blue				
★	Standard	–	Gray	11.6 {1180}	-20 to 60 (80)	50	50
★	Low Friction	LFG	Green				
★		LFW	White				
★	Electroconductive	E	Black	8.1 { 830}			
★	Impact Resistant	DIA	Cream	8.83 { 900}	-20 to 80	–	
★		DIY	Green		-20 to 60 (80)	50	
★	Antibacterial/Mold Resistant	MWS	Cream	11.6 {1180}			
★	Low Temperature	LTW	White	3.82 { 390}	-70 to 60	15	15

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 105
Wearstrips See page 137
Return-Way Parts See page 147

Sprockets for BT6 Beltop Chain

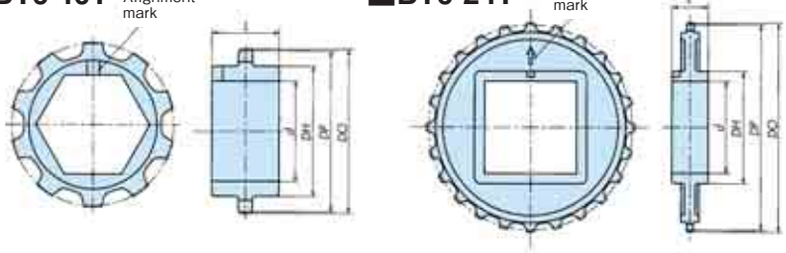
Applicable chain: BTC6, BTO6, BTN6

BT6-10T

BT6-24T

■**BT6-10T** Alignment mark

■**BT6-24T** Alignment mark



● Sprockets for LFB, ULF, LFG, LFW, E, DIA, DIY, and MWS

Tsubaki sprocket no.	Teeth	Pitch diameter *DP*	Outside diameter *DO*	Hub		Bore diameter *d*	Approx. mass g	Shaft	Material (color)
				Diameter *DH*	Length *L*				
BT6-10T-38H	10	61.65	62.5	50	25.4	38	30	Hexagonal 38 polished steel bar	Reinforced polyamide (black)
BT6-24T-40S	24	145.95	148.0	80	25.4	40	260	Square 40 polished steel bar	
BT6-24T-50S	24	145.95	148.0	80	25.4	50	230	Square 50 polished steel bar	
BT6-24T-65S	24	145.95	148.0	80	25.4	65	170	Square 65 polished steel bar	

Note: 1. Operating temperature range: –20°C to 80°C
2. The BT6-10T sprocket can reduce the dead space in conveyors and work to make the conveyor more compact.
3. The BT6-24T sprocket can minimize chain-speed variations resulting from chordal action, ensuring smooth conveyance.
4. BT6 sprockets are made to fit loosely on the shaft to absorb differences in thermal expansion between the chain and conveyor, and alignment errors between the sprocket and chain.
5. BT6 sprockets have an alignment mark for phase matching.
6. The number of BT6 sprockets installed, and positions where BT6 sprockets are installed, will vary depending on load conditions. Refer to the text on sprocket selection.

● Sprockets for KV150 and KV250

Tsubaki sprocket no.	Teeth	Bore diameter *d*	Shaft	Material	Operating temperature range
BT6-KV-10T-38H	10	38	Hexagonal 38 polished steel bar	Special engineering plastic	80°C to 200°C
BT6-KV-24T-50S	24	50	Square 50 polished steel bar	Special engineering plastic	

Note: 1. Materials and sizes for KV Series sprockets will vary depending on operating temperatures. Be sure to consult Tsubaki before use.
2. Sprockets having numbers of teeth other than those above can also be manufactured.
3. Sprockets for the LFB and ULF Series can be used when operating temperature is in the range from –20°C to 80°C.

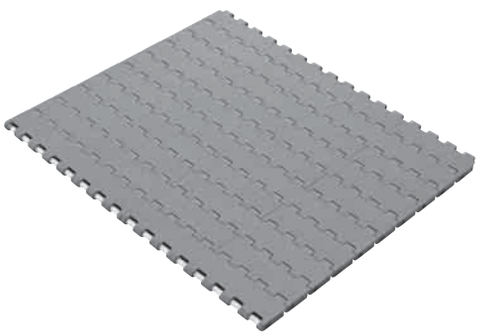
BTC8 Beltop Chain

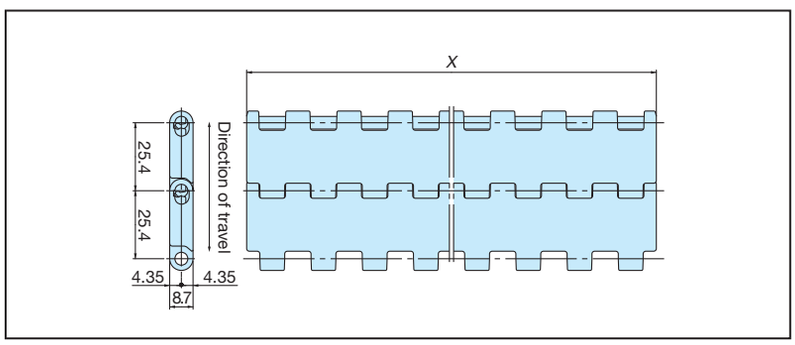
Plastic Pins

Closed Type: Straight Running

Features

- Chain pitch of 25.4mm. Designed for general applications; suitable for a wide range of conveyed objects.
- All-plastic construction. Lightweight and easy to handle.





Material mark	Link color	Chain pitch mm	Open area %	Max. allowable load kN/m {kgf/m}	Approx. mass kg/m²	Operating temperature range °C	Max. allowable speed m/min	Pin material
LFB	Brown	25.4	2.5	12.8 {1300}	5.9	Dry: -20 to 80 Wet: 60 max.	50	Special engineering plastic
ULF	Blue							

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X mm
BTC8-762-LFB	BTC8-762-ULF	76.2
BTC8-1524-LFB	BTC8-1524-ULF	152.4
BTC8-2286-LFB	BTC8-2286-ULF	228.6
BTC8-3048-LFB	BTC8-3048-ULF	304.8
BTC8-3810-LFB	BTC8-3810-ULF	381.0
BTC8-4572-LFB	BTC8-4572-ULF	457.2
BTC8-5334-LFB	BTC8-5334-ULF	533.4
BTC8-6096-LFB	BTC8-6096-ULF	609.6
BTC8-6858-LFB	BTC8-6858-ULF	685.8
BTC8-7620-LFB	BTC8-7620-ULF	762.0

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X mm
BTC8-8382-LFB	BTC8-8382-ULF	838.2
BTC8-9144-LFB	BTC8-9144-ULF	914.4
BTC8-9906-LFB	BTC8-9906-ULF	990.6
BTC8-10668-LFB	BTC8-10668-ULF	1066.8
BTC8-11430-LFB	BTC8-11430-ULF	1143.0
BTC8-12192-LFB	BTC8-12192-ULF	1219.2
BTC8-12954-LFB	BTC8-12954-ULF	1295.4
BTC8-13716-LFB	BTC8-13716-ULF	1371.6
BTC8-14478-LFB	BTC8-14478-ULF	1447.8
BTC8-15240-LFB	BTC8-15240-ULF	1524.0

Note: 1. When plastic pins are replaced with stainless steel pins, the chain can be used in temperatures 60°C to 80°C in wet conditions. In this case, initial chain length will be slightly longer and chain mass heavier. Be sure to consult Tsubaki before use.
2. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
3. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
4. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
5. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Low Friction	LFB	Brown	12.8 {1300}	-20 to 60 (80)	50	50
●	Ultra Low Friction	ULF	Blue				
★	Standard	–	Gray	12.8 {1300}	-20 to 60 (80)	50	50
★	Low Friction	LFG	Green				
★		LFW	White				
★	Heat Resistant/High Speed	KV250	Black		-20 to 250		
★	Electroconductive	E	Black	9.0 { 910}	-20 to 60 (80)		
★	Impact Resistant	DIA	Cream	9.8 {1000}	-20 to 80	–	
★		DIY	Green		-20 to 60 (80)	50	
★	Antibacterial/Mold Resistant	MWS	Cream	12.8 {1300}			
★	Low Temperature	LTW	White	4.22 { 430}	-70 to 60	15	15

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 108
Wearstrips See page 137
Return-Way Parts See page 147

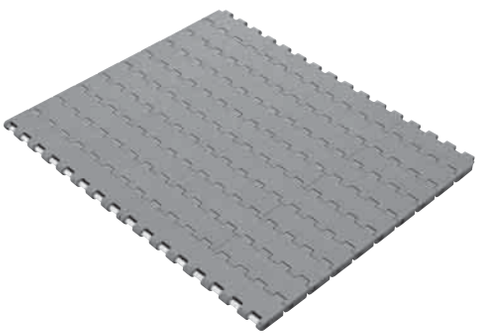
BTC8-A Beltop Chain

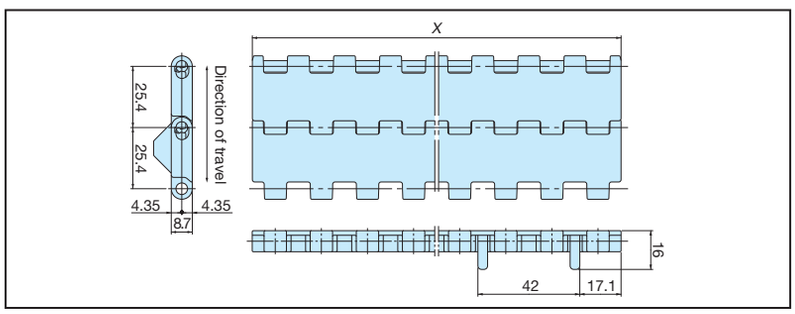
Plastic Pins

Closed Type with Tab Guides: Straight Running

Features

- Chain pitch of 25.4mm. Designed for general applications; suitable for a wide range of conveyed objects.
- Tab guide attachments make this chain ideal for layouts with lateral transitions between conveyors.
- All-plastic construction. Lightweight and easy to handle.





Material mark	Link color	Chain pitch mm	Open area %	Max. allowable load kN/m {kgf/m}	Approx. mass kg/m²	Operating temperature range °C	Pin material
LFB	Brown	25.4	2.5	12.8 {1300}	5.9	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
ULF	Blue						

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X mm
BTC8-762-A-LFB	BTC8-762-A-ULF	76.2
BTC8-1524-A-LFB	BTC8-1524-A-ULF	152.4
BTC8-2286-A-LFB	BTC8-2286-A-ULF	228.6
BTC8-3048-A-LFB	BTC8-3048-A-ULF	304.8
BTC8-3810-A-LFB	BTC8-3810-A-ULF	381.0
BTC8-4572-A-LFB	BTC8-4572-A-ULF	457.2
BTC8-5334-A-LFB	BTC8-5334-A-ULF	533.4
BTC8-6096-A-LFB	BTC8-6096-A-ULF	609.6
BTC8-6858-A-LFB	BTC8-6858-A-ULF	685.8
BTC8-7620-A-LFB	BTC8-7620-A-ULF	762.0

Tsubaki chain no. LFB	Tsubaki chain no. ULF	Chain width X mm
BTC8-8382-A-LFB	BTC8-8382-A-ULF	838.2
BTC8-9144-A-LFB	BTC8-9144-A-ULF	914.4
BTC8-9906-A-LFB	BTC8-9906-A-ULF	990.6
BTC8-10668-A-LFB	BTC8-10668-A-ULF	1066.8
BTC8-11430-A-LFB	BTC8-11430-A-ULF	1143.0
BTC8-12192-A-LFB	BTC8-12192-A-ULF	1219.2
BTC8-12954-A-LFB	BTC8-12954-A-ULF	1295.4
BTC8-13716-A-LFB	BTC8-13716-A-ULF	1371.6
BTC8-14478-A-LFB	BTC8-14478-A-ULF	1447.8
BTC8-15240-A-LFB	BTC8-15240-A-ULF	1524.0

Note: 1. When plastic pins are replaced with stainless steel pins, the chain can be used in temperatures 60°C to 80°C in wet conditions. In this case, initial chain length will be slightly longer and chain mass heavier. Be sure to consult Tsubaki before use.
2. BTC8-A (with tab guide attachments) mass will be 0.5 kg/m heavier. Tab guide attachments are attached to every second link on one side of the chain.
3. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
4. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
5. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
6. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Low Friction	LFB	Brown	12.8 {1300}	-20 to 60 (80)	50	50
●	Ultra Low Friction	ULF	Blue				
★	Standard	–	Gray	12.8 {1300}	-20 to 60 (80)	50	50
★	Low Friction	LFG	Green				
★		LFW	White				
★	Heat Resistant/High Speed	KV150	Black		-20 to 150		
★		KV250			-20 to 250		
★	Electroconductive	E	Black	9.0 { 910}	-20 to 60 (80)		
★	Impact Resistant	DIA	Cream	9.8 {1000}	-20 to 80	–	
★		DIY	Green		-20 to 60 (80)	50	
★	Antibacterial/Mold Resistant	MWS	Cream	12.8 {1300}			

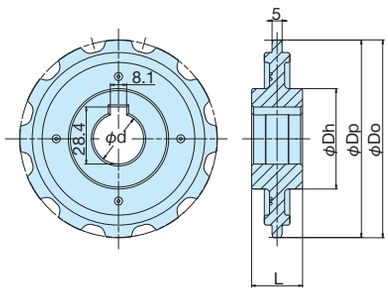
Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 108
Wearstrips See page 137
Return-Way Parts See page 147

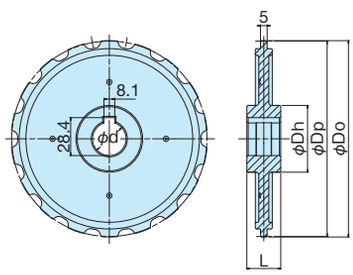
Sprockets for BTC8 Beltop Chain

Applicable chain: BTC8, BTC8-A

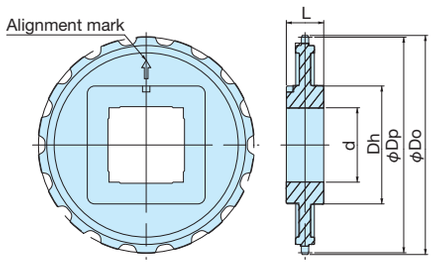
● BT8-12T-25



● BT8-18T-25



● BT8-18T-40S, 50S, 65S



Tsubaki sprocket no.	Teeth	Pitch diameter *Dp*	Outside diameter *Do*	Hub		Bore diameter *D*	Keyway		Approx. mass g	Shaft	Material (color)	Type
				Diameter *Dh*	Length *L*		*W*	*H*				
BT8-12T-25	12	98.14	98.5	φ50	25.4	φ25.1	8.1	28.4	90	Round 25 polished steel bar	Reinforced polyamide (black)	Solid
BT8-18T-25	18	146.27	147.0	φ50	25.4	φ25.1	8.1	28.4	190	Round 25 polished steel bar		
BT8-18T-40S	18	146.27	147.0	80.0	25.4	40	–	–	250	Square 40 polished steel bar		
BT8-18T-50S	18	146.27	147.0	80.0	25.4	50	–	–	225	Square 50 polished steel bar		
BT8-18T-65S	18	146.27	147.0	80.0	25.4	65	–	–	165	Square 65 polished steel bar		

Note: 1. Operating temperature range: –20°C to 80°C
2. BT8 sprockets are made to fit loosely on the shaft to absorb differences in thermal expansion between the chain and conveyor, and alignment errors between the sprocket and chain.
3. BT8 sprockets (square bore) have an alignment mark for phase matching.
4. The number of BT8 sprockets installed, and positions where BT8 sprockets are installed, will vary depending on load conditions. Refer to the text on sprocket selection.
5. Cannot be used with BTO8-M chain.
6. Made-to-order items.
7. Please contact Tsubaki when considering BT8-12T25 or BT8-18T25 sprockets.

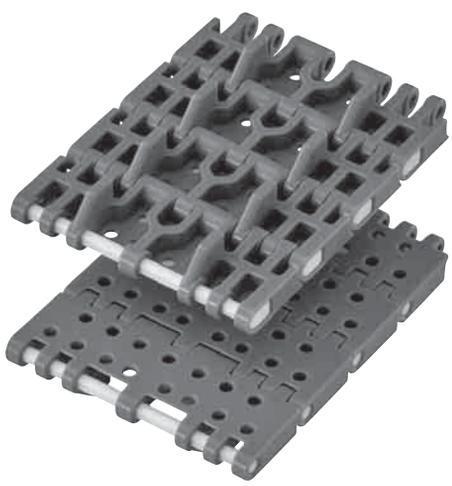
BTO8-M Beltop Chain

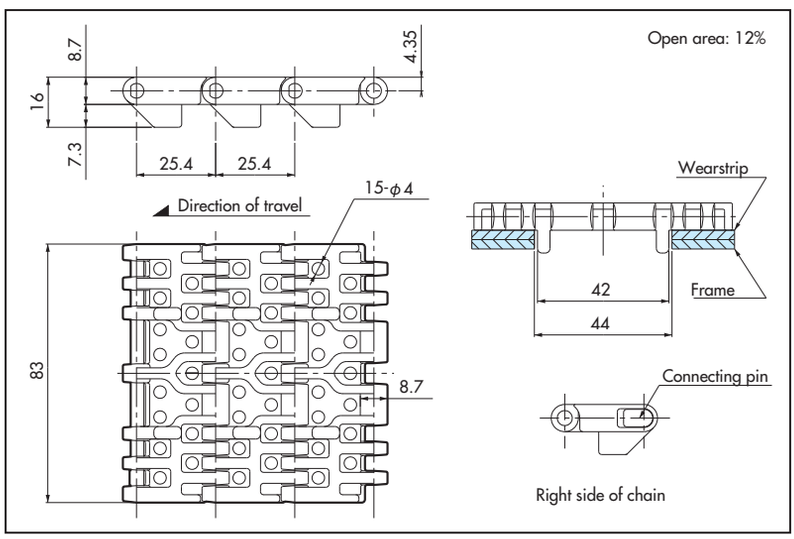
Plastic Pins

Open Type: Straight Running

Features

- Unique multi-hinge link construction ensures stable conveyance of small items and smooth transitions between conveyors.
- Plates are perforated with numerous drainage holes that effectively remove excess lubricant and water remaining on plate surface.
- All-plastic construction. Lightweight and easy to handle.





Chain Numbering

Chain type	Chain pitch	–	Plate width	–	Chain type	–	Chain material
BTO	**8**	**–**	**830**	**–**	**M**	**–**	**LFB**

830 = 83.0mm

Chain Information

Tsubaki chain no.	Chain pitch	Link width	Connecting pin material	Approx. mass kg/m	Standard chain length mm {ft}	Number of Links per 10ft
BTO8-830-M	25.4	83	Special engineering plastic	0.7 (0.5/0.8)	3048 {10}	120

Note: 1. Mass shown in ( ) is for DIA/DIY.
2. The connecting pin is colored orange so as to distinguish it from base-chain pins (colored white).
3. Tsubaki original chain.

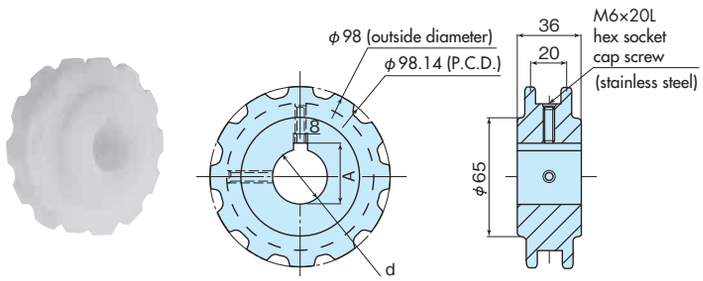
Material

	Material	Material mark	Link color	Max.allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	Standard	–	Gray	1.08 {110}	-20 to 60 (80)	50	50
★	Low Friction	LFB	Brown	1.08 {110}	-20 to 60 (80)	50	100
★		LFG	Green				
★		LFW	White				
★	Ultra Low Friction	ULF	Blue				
★	Electroconductive	E	Black	0.76 {77}			
★	Impact Resistant	DIA	Cream	0.78 {80}		–	
★		DIY	Green			50	
★	Antibacterial / Mold Resistant	MWS	Cream	1.08 {110}			

Note: 1. Operating temperature of (80) is for dry conditions (no lubrication).
2. ● : Standard material ★ : Made-to-order material

● Engineering Plastic Sprockets

• BTO8-12T (12 teeth) Applicable chain: BTO8-M

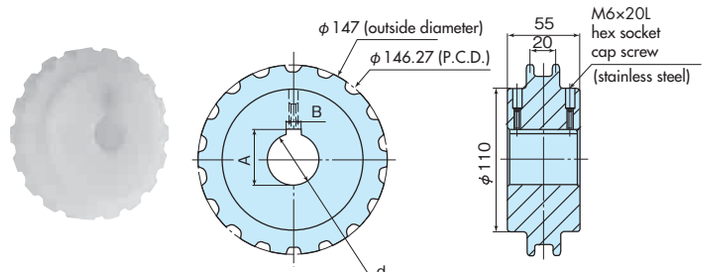


Dimensions in mm

Tsubaki sprocket no.	Bore dimensions		Approx. mass g
	d	A	
BTO8-12T25	25	28.3	200
BTO8-12T30	30	33.3	

- Material (main body): UHMW-PE
- Outside color: White
- Operating temperature range: -20°C to 60°C
- Cannot be used with BTC8 chain.

• BTO8-18T (18 teeth) Applicable chain: BTO8-M



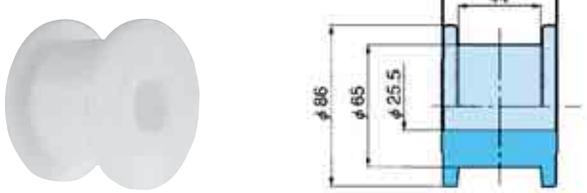
Dimensions in mm

Tsubaki sprocket no.	Bore dimensions			Approx. mass g
	d	A	B	
BTO8-18T30	30	33.3	8	520
BT8O-18T40	40	33.3	12	

- Material (main body): UHMW-PE
- Outside color: White
- Operating temperature range: -20°C to 60°C
- Cannot be used with BTC8 chain.

● Engineering Plastic Idler Wheels

• BTO8-12T25-IW (Equivalent to 12T Sprocket)



- Material (main body): UHMW-PE
- Outside color: White
- Operating temperature range: -20°C to 60°C

• Idler Wheels (Equivalent to 18T Sprocket)

Tsubaki idler wheel no.	Shaft diameter	Material (color)
TP-C12200BT-IW	25	Polyamide (black)
TP-C12201BT-IW	30	
TP-C12203BT-IW	40	
TP-C12077BT-IW	25	
TP-C12078BT-IW	30	
TP-C12079BT-IW	35	
TP-C12080BT-IW	40	

- Operating temperature range: −20°C to 80°C

Note: See page 22 for more information.

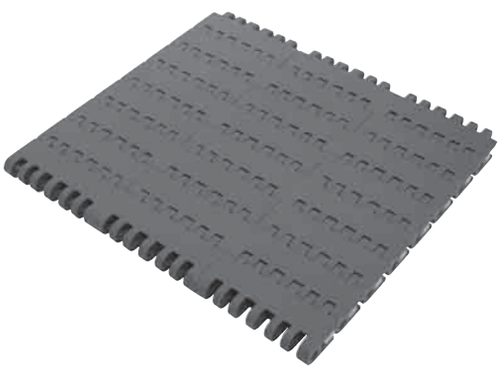
WT2505K Widetop Chain

Plastic Pins

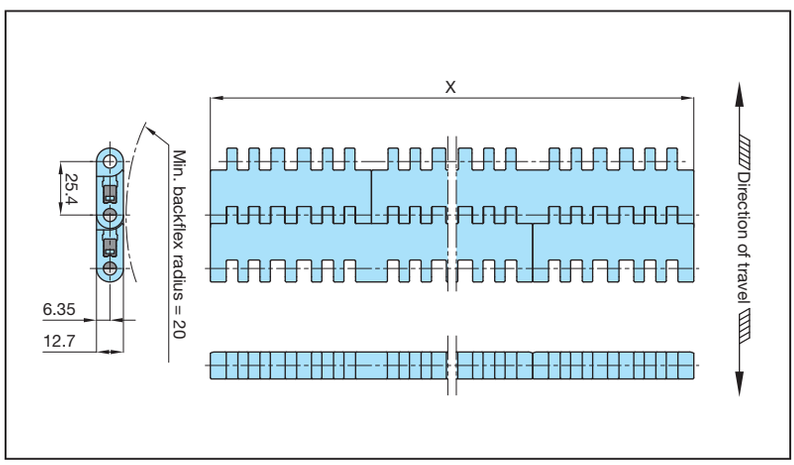
Closed Type: Straight Running

Features

- Chain pitch of 25.4mm and flat top surface.
- High mechanical strength for heavy-duty applications.
- Slide lock pin retention system allows easy installation and maintenance.



U.S. Patent 6308825B1



Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	25.4	Blue	3	29.4 {3000}	12.6	Dry: -20 to 80 Wet: 60 max.	Polypropylene
LFG		Green					

Tsubaki chain no.		Chain width X mm
ULF	LFG	
WT2505K09-ULF	WT2505K09-LFG	228.6
WT2505K12-ULF	WT2505K12-LFG	304.8
WT2505K15-ULF	WT2505K15-LFG	381.0
WT2505K18-ULF	WT2505K18-LFG	457.2
WT2505K24-ULF	WT2505K24-LFG	609.6
WT2505K30-ULF	WT2505K30-LFG	762.0

Tsubaki chain no.		Chain width X mm
ULF	LFG	
WT2505K36-ULF	WT2505K36-LFG	914.4
WT2505K48-ULF	WT2505K48-LFG	1219.2
WT2505K60-ULF	WT2505K60-LFG	1524.0
WT2505K72-ULF	WT2505K72-LFG	1828.8
WT2505K96-ULF	WT2505K96-LFG	2438.4
WT2505K120-ULF	WT2505K120-LFG	3048.0

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 3,048mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contqraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
5. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
★	Standard	–	Gray	12.6	29.4 {3000}	-20 to 80 (60)	120	50
	Low Friction	LFB	Brown	12.6	29.4 {3000}	-20 to 80 (60)	120	50
●		LFG	Green					
★		LFW	White					
●	Ultra Low Friction	ULF	Blue	12.6	29.4 {3000}	-20 to 80 (60)	120	50
★	Low Friction	UL	Green	12.6	29.4 {3000}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 115
Wearstrips See page 137
Return-Way Parts See page 147

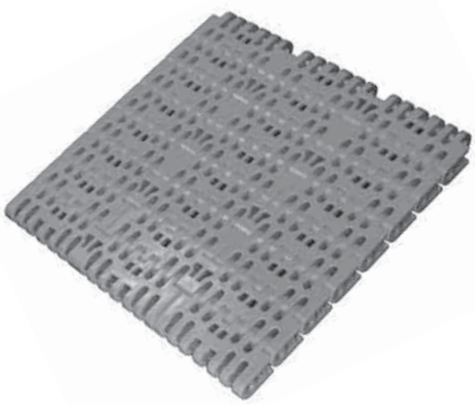
WT2506K Widetop Chain

Plastic Pins

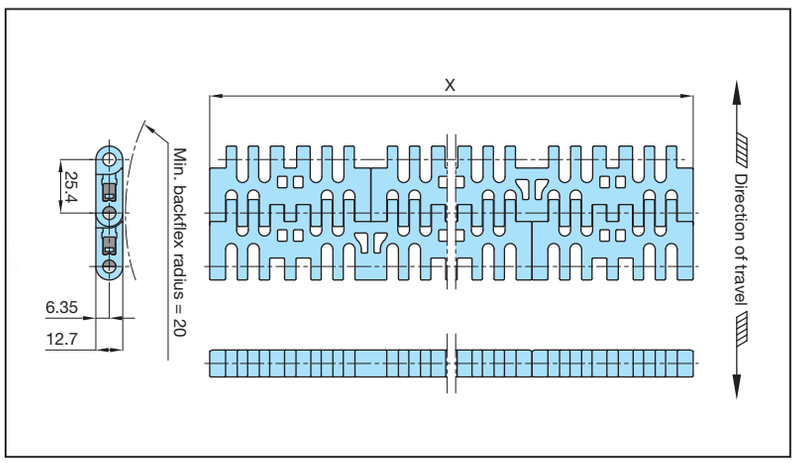
Open Type: Straight Running

Features

- Chain pitch of 25.4mm and perforated top surface, which allows drainage of water or airflow.
- Operating temperature range of 5°C to 105°C for cool, warm, or pasteurizer applications.
- Slide lock pin retention system allows easy installation and maintenance.



U.S. Patent 6308825B1



Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
HTW	25.4	White	16	26.2 {2675}	8.1	5 to 105	Polypropylene

Tsubaki chain no. HTW	Chain width X mm
WT2506K09-HTW	228.6
WT2506K12-HTW	304.8
WT2506K15-HTW	381.0
WT2506K18-HTW	457.2

Tsubaki chain no. HTW	Chain width X mm
WT2506K24-HTW	609.6
WT2506K30-HTW	762.0
WT2506K36-HTW	914.4
WT2506K48-HTW	1219.2

Tsubaki chain no. HTW	Chain width X mm
WT2506K60-HTW	1524.0
WT2506K72-HTW	1828.8
WT2506K96-HTW	2438.4
WT2506K120-HTW	3048.0

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
5. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
●	High Temperature	HTW	White	8.1	26.2 {2675}	5 to 105	80	40

Note: 1. ● : Standard material
2. Available only in HTW material.

Sprockets
See page 115
Wearstrips
See page 137

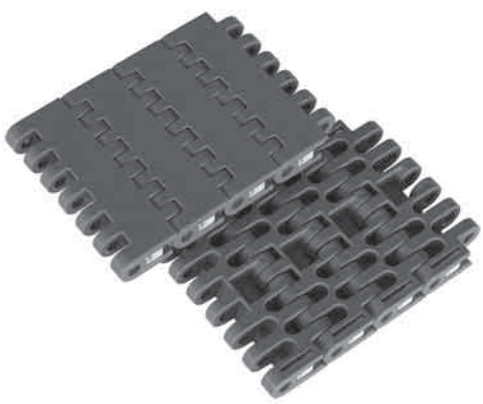
WT2505M Widetop Chain

Plastic Pins

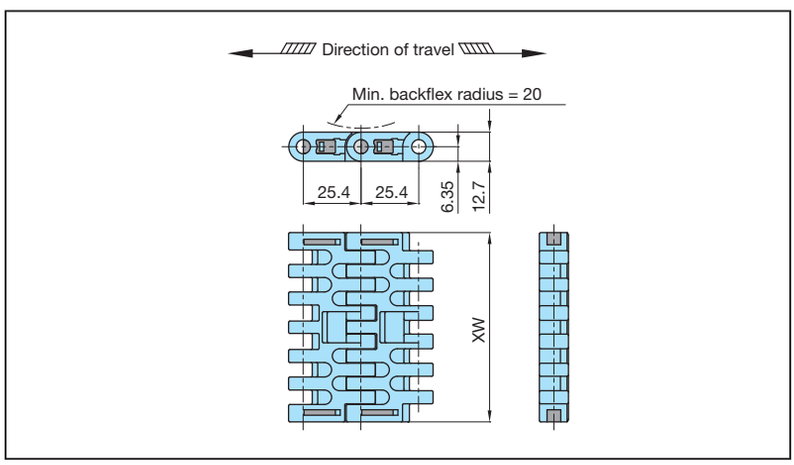
Closed Type: Straight Running

Features

- Chain pitch of 25.4mm and flat top surface.
- High mechanical strength for heavy-duty applications.
- Slide lock pin retention system allows easy installation and maintenance.



U.S. Patent 6308825B1



Material	Ultra Low Friction	Low Friction	Open area %	Top plate width *XW* mm	Max. allowable load kN {kgf}	Approx. mass kg/m	Pin material
Material mark	ULF	LFG					
Link color	Blue	Green					
Tsubaki chain no.	WT2505M325-ULF	WT2505M325-LFG	3	82.6	3.0 {306}	1.0	Polypropylene
	WT2505M450-ULF	WT2505M450-LFG		114.3	4.5 {459}	1.4	

Note: 1. Values for maximum allowable load are at ambient temperature (20°C).
2. Tsubaki original chain

● Material

	Material	Material mark	Link color	Chain mass kg/m		Max. allowable load kN {kgf}		Operating temperature range °C	Max. allowable speed m/min	
				M325	M450	M325	M450		With lube	No lube
★	Standard	–	Gray	1.0	1.4	3.0 {306}	4.5 {459}	-20 to 80 (60)	120	50
	Low Friction	LFB	Brown	1.0	1.4	3.0 {306}	4.5 {459}	-20 to 80 (60)	120	50
●		LFG	Green							
★		LFW	White							
●	Ultra Low Friction	ULF	Blue	1.0	1.4	3.0 {306}	4.5 {459}	-20 to 80 (60)	120	50
★	Low Friction	UL	Green	1.0	1.4	3.0 {306}	4.5 {459}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 115
Wearstrips See page 137
Return-Way Parts See page 147

WT2505GM Widetop Chain

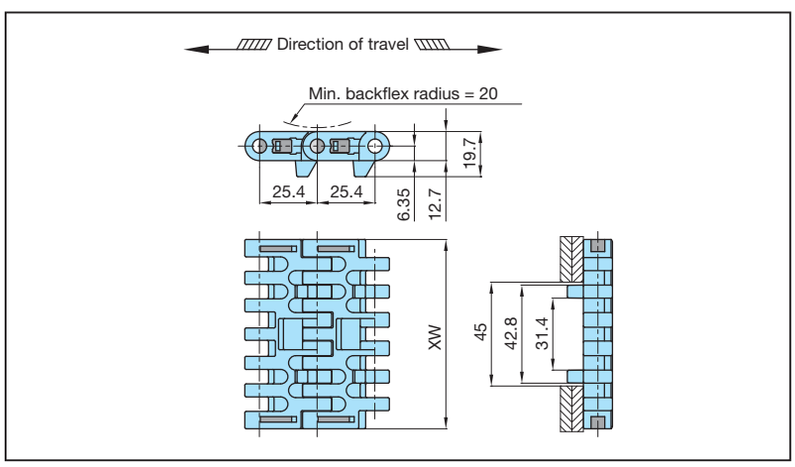
Plastic Pins

Closed Type with Tab Guides: Straight Running

Features

- Chain pitch of 25.4mm and flat top surface.
- High mechanical strength for heavy-duty applications.
- Tab guides keep the chain securely in position to allow smooth side transfer.
- Slide lock pin retention system allows easy installation and maintenance.

U.S. Patent 6308825B1



Material	Ultra Low Friction	Low Friction	Open area %	Top plate width *XW* mm	Max. allowable load kN {kgf}	Approx. mass kg/m	Pin material
Material mark	ULF	LFG					
Link color	Blue	Green					
Tsubaki chain no.	WT2505GM325-ULF	WT2505GM325-LFG	3	82.6	3.0 {306}	1.1	Polypropylene
	WT2505GM450-ULF	WT2505GM450-LFG		114.3	4.5 {459}	1.5	

Note: 1. Values for maximum allowable load are at ambient temperature (20°C).
2. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m		Max. allowable load kN {kgf}		Operating temperature range °C	Max. allowable speed m/min	
				M325	M450	M325	M450		With lube	No lube
★	Standard	–	Gray	1.1	1.5	3.0 {306}	4.5 {459}	-20 to 80 (60)	120	50
	Low Friction	LFB	Brown	1.1	1.5	3.0 {306}	4.5 {459}	-20 to 80 (60)	120	50
●		LFG	Green							
★		LFW	White							
●	Ultra Low Friction	ULF	Blue	1.1	1.5	3.0 {306}	4.5 {459}	-20 to 80 (60)	120	50
★	Low Friction	UL	Green	1.1	1.5	3.0 {306}	4.5 {459}	-20 to 80 (60)	120	50

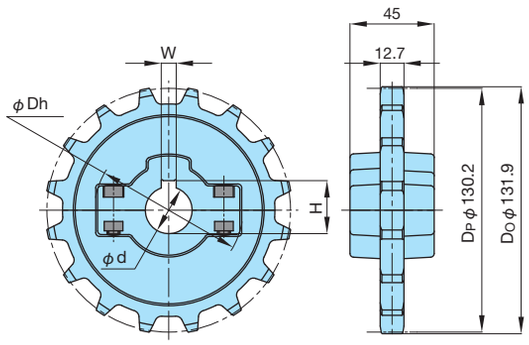
Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 115
Wearstrips See page 137
Return-Way Parts See page 147

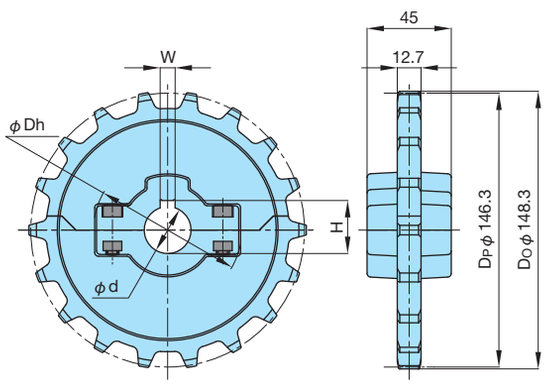
SW2500 Split Sprockets

Applicable chain: WT2500 Series Widetop Chain

SW2500/16



SW2500/18



Tsubaki sprocket no.	Teeth	Pitch diameter *DP*	Outside diameter *DO*	Bore shape	Bore diameter *d*	Keyway		Hub diameter *Dh*	Approx. mass kg	Material
						W	*H*			Body
SW2500/16-25R	16	130.2	131.9	Round	25	8	28.3	82	0.3	Reinforced polyamide (black)
SW2500/16-30R					30	8	33.3			
SW2500/16-35R					35	10	38.3			
SW2500/16-40R					40	12	43.3			
SW2500/18-25R	18	146.3	148.3	Round	25	8	28.3	82	0.3	
SW2500/18-30R					30	8	33.3			
SW2500/18-35R					35	10	38.3			
SW2500/18-40R					40	12	43.3			

Note: 1. Bolt tightening torque: 5.7 N·m
2. When assembling the sprockets, do not mix the pairs.
3. Bolts and nuts are made of stainless steel.
4. Operating temperature range: -20°C to 80°C

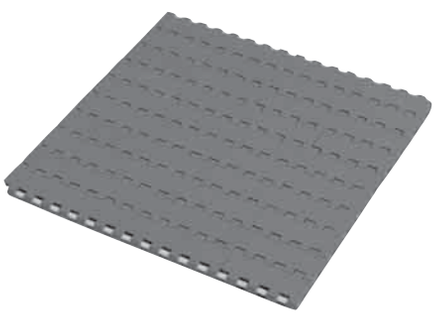
WT3005K Widetop Chain

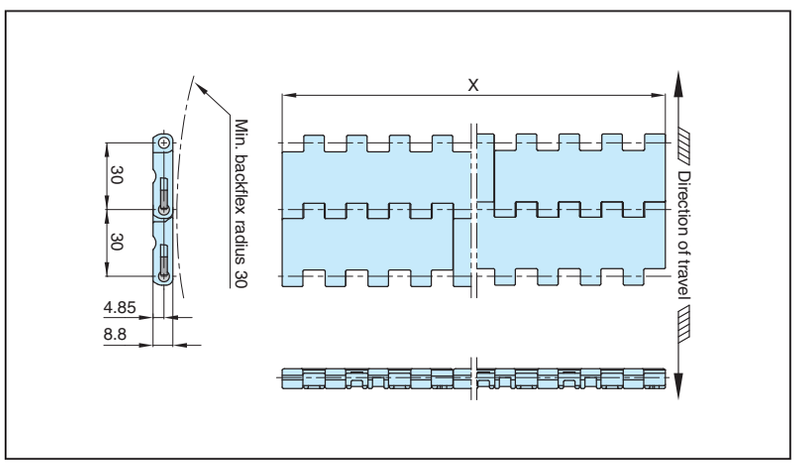
Plastic Pins

Closed Type: Straight Running

Features

- Chain pitch of 30mm and flat top surface.
- Driven by the same sprockets as the WT1500 series.
- Plug pin retention system allows easy installation and maintenance.





Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	30	Blue	4	10.5 {1070}	6.3	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
UL		Green					

Tsubaki chain no.		Chain width X mm
ULF	UL	
WT3005K03-ULF	WT3005K03-UL	76.2
WT3005K06-ULF	WT3005K06-UL	152.4
WT3005K09-ULF	WT3005K09-UL	228.6
WT3005K12-ULF	WT3005K12-UL	304.8
WT3005K15-ULF	WT3005K15-UL	381.0
WT3005K18-ULF	WT3005K18-UL	457.2
WT3005K21-ULF	WT3005K21-UL	533.4

Tsubaki chain no.		Chain width X mm
ULF	UL	
WT3005K24-ULF	WT3005K24-UL	609.6
WT3005K27-ULF	WT3005K27-UL	685.8
WT3005K30-ULF	WT3005K30-UL	762.0
WT3005K33-ULF	WT3005K33-UL	838.2
WT3005K36-ULF	WT3005K36-UL	914.4
WT3005K48-ULF	WT3005K48-UL	1219.2
WT3005K60-ULF	WT3005K60-UL	1524.0

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Cannot be used with N1500/12T-30R solid sprockets.
5. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
6. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	6.3	10.5 {1070}	-20 to 80 (60)	120	50
★	Low Friction	LFB	Brown	6.3	10.5 {1070}	-20 to 80 (60)	120	50
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	6.3	10.5 {1070}	-20 to 80 (60)	120	50
●	Low Friction	UL	Green	6.3	10.5 {1070}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 147

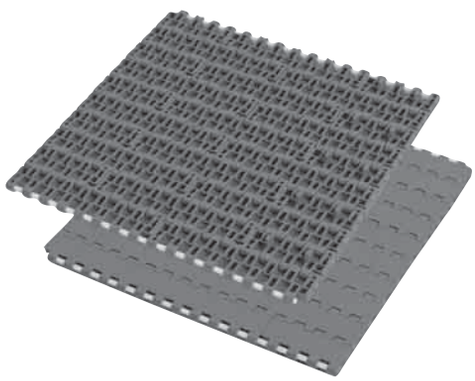
WT3005GK Widetop Chain

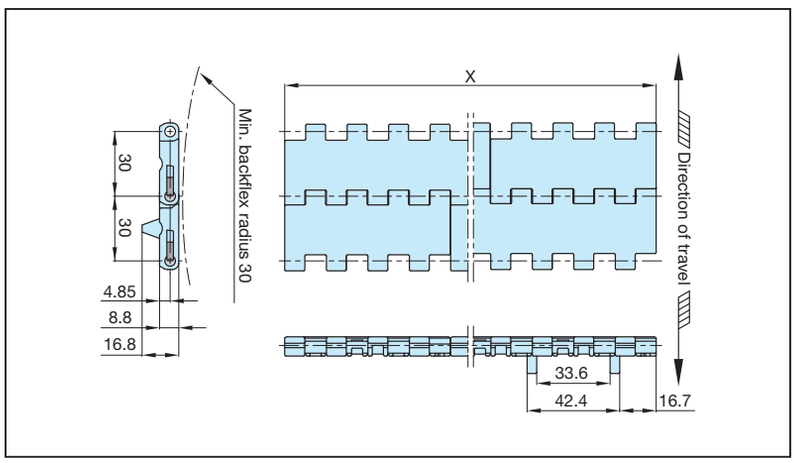
Plastic Pins

Closed Type with Tab Guides: Straight Running

Features

- Chain pitch of 30mm and flat top surface.
- Driven by the same sprockets as the WT1500 series.
- Tab guides keep the chain securely in position to allow smooth side transfer.
- Plug pin retention system allows easy installation and maintenance.





Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	30	Blue	4	10.5 {1070}	6.3	Dry: -20 to 80 Wet: 60 max.	Special engineering plastic
UL		Green					

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT3005GK06-ULF	WT3005GK06-UL	152.4
WT3005GK09-ULF	WT3005GK09-UL	228.6
WT3005GK12-ULF	WT3005GK12-UL	304.8
WT3005GK15-ULF	WT3005GK15-UL	381.0
WT3005GK18-ULF	WT3005GK18-UL	457.2
WT3005GK21-ULF	WT3005GK21-UL	533.4
WT3005GK24-ULF	WT3005GK24-UL	609.6

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT3005GK27-ULF	WT3005GK27-UL	685.8
WT3005GK30-ULF	WT3005GK30-UL	762.0
WT3005GK33-ULF	WT3005GK33-UL	838.2
WT3005GK36-ULF	WT3005GK36-UL	914.4
WT3005GK39-ULF	WT3005GK39-UL	990.6
WT3005GK48-ULF	WT3005GK48-UL	1219.2
WT3005GK60-ULF	WT3005GK60-UL	1524.0

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 3 inches (76.2mm). Custom chain widths, and widths greater than 1,524mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Cannot be used with N1500/12T-30R solid sprockets.
5. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
6. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	6.3	10.5 {1070}	-20 to 80 (60)	120	50
★	Low Friction	LFB	Brown	6.3	10.5 {1070}	-20 to 80 (60)	120	50
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	6.3	10.5 {1070}	-20 to 80 (60)	120	50
●	Low Friction	UL	Green	6.3	10.5 {1070}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 147

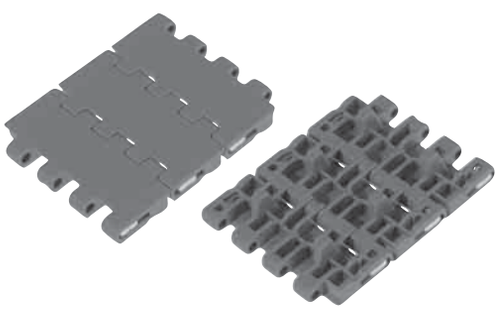
WT3005GM Widetop Chain

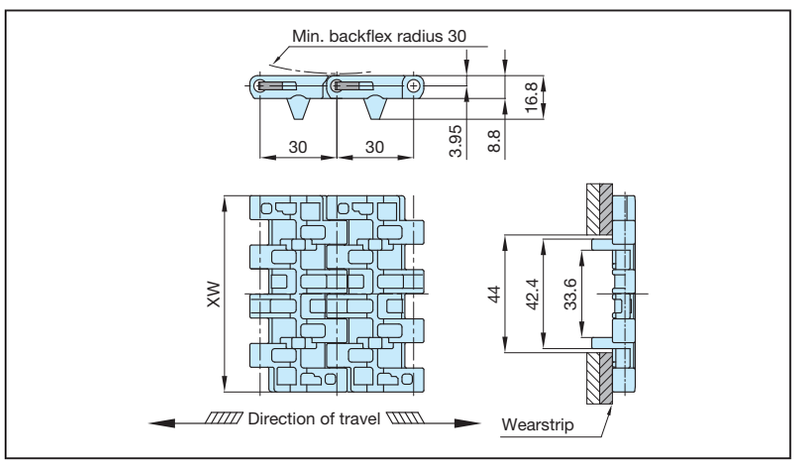
Plastic Pins

Closed Type with Tab Guides: Straight Running

Features

- Chain pitch of 30mm and flat top surface.
- Driven by the same sprockets as the WT1500 series.
- Tab guides keep the chain securely in position to allow smooth side transfer.
- Plug pin retention system allows easy installation and maintenance.





Material	Ultra Low Friction	Low Friction	Open area %	Top plate width XW mm	Max. allowable load kN {kgf}	Approx. mass kg/m	Pin material
Material mark	ULF	UL					
Link color	Blue	Green					
Tsubaki chain no.	WT3005GM300-ULF	WT3005GM300-UL	4	75.8	0.8 { 81.1}	0.6	Special engineering plastic
	WT3005GM450-ULF	WT3005GM450-UL		113.8	1.2 {122.0}	0.8	

Note: 1. Values for maximum allowable load are at ambient temperature (20°C).
2. Cannot be used with N1500/12T-30R solid sprockets.
3. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m		Max. allowable load kN {kgf}		Operating temperature range °C	Max. allowable speed m/min	
				M300	M450	M300	M450		With lube	No lube
	Standard	–	Gray	0.6	0.8	0.8 {81.1}	1.2 {122.0}	-20 to 80 (60)	120	50
★	Low Friction	LFB	Brown	0.6	0.8	0.8 {81.1}	1.2 {122.0}	-20 to 80 (60)	120	50
		LFG	Green							
		LFW	White							
●	Ultra Low Friction	ULF	Blue	0.6	0.8	0.8 {81.1}	1.2 {122.0}	-20 to 80 (60)	120	50
●	Low Friction	UL	Green	0.6	0.8	0.8 {81.1}	1.2 {122.0}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 147

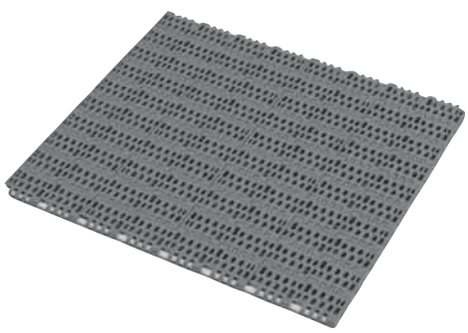
WT3086K Widetop Chain

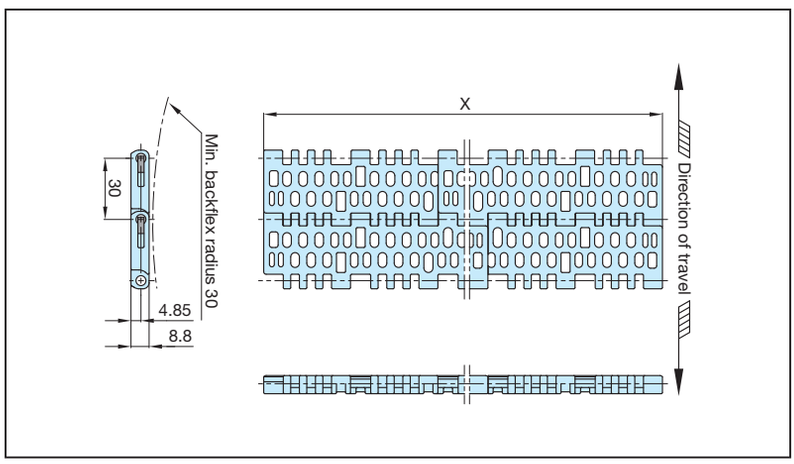
Plastic Pins

Open Type: Straight Running

Features

- Chain pitch of 30mm and perforated top surface, which allows drainage of water or airflow.
- Driven by the same sprockets as the WT1500 series.
- Plug pin retention system allows easy installation and maintenance.





Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	30	Blue	27	10.5 {1070}	6.0	Dry: -20 to 80 Wet: 60 max.	Polypropylene
UL		Green					

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT3086K170-ULF	WT3086K170-UL	170
WT3086K255-ULF	WT3086K255-UL	255
WT3086K340-ULF	WT3086K340-UL	340
WT3086K425-ULF	WT3086K425-UL	425
WT3086K510-ULF	WT3086K510-UL	510
WT3086K595-ULF	WT3086K595-UL	595
WT3086K680-ULF	WT3086K680-UL	680

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT3086K765-ULF	WT3086K765-UL	765
WT3086K850-ULF	WT3086K850-UL	850
WT3086K935-ULF	WT3086K935-UL	935
WT3086K1020-ULF	WT3086K1020-UL	1020
WT3086K1190-ULF	WT3086K1190-UL	1190
WT3086K1360-ULF	WT3086K1360-UL	1360
WT3086K1530-ULF	WT3086K1530-UL	1530

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width 85mm. Custom chain widths, and widths greater than 1,530mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Cannot be used with N1500/12T-30R solid sprockets.
5. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
6. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	6.0	10.5 {1070}	-20 to 80 (60)	120	50
★	Low Friction	LFB	Brown	6.0	10.5 {1070}	-20 to 80 (60)	120	50
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	6.0	10.5 {1070}	-20 to 80 (60)	120	50
●	Low Friction	UL	Green	6.0	10.5 {1070}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 147

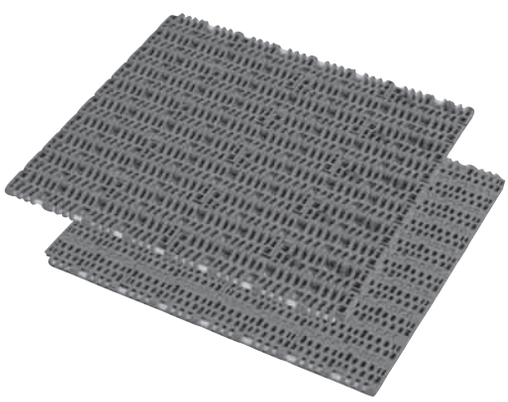
WT3086GK Widetop Chain

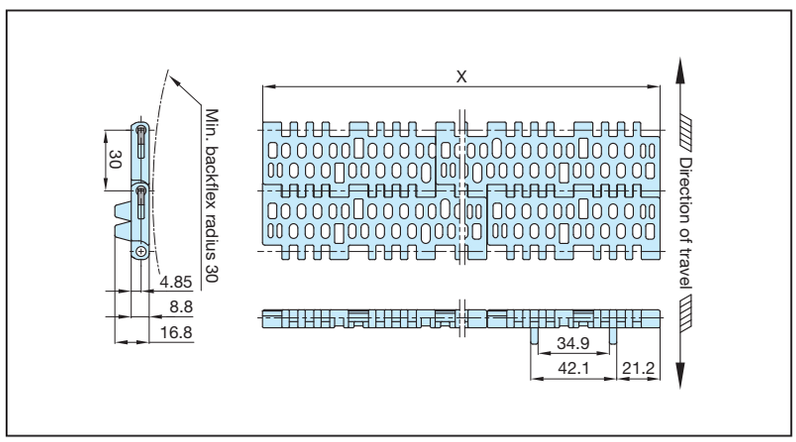
Plastic Pins

Open Type with Tab Guides: Straight Running

Features

- Chain pitch of 30mm and perforated top surface, which allows drainage of water or airflow.
- Driven by the same sprockets as the WT1500 series.
- Tab guides keep the chain securely in position to allow smooth side transfer.
- Plug pin retention system allows easy installation and maintenance.





Material mark	Chain pitch mm	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
ULF	30	Blue	27	10.5 {1070}	6.0	Dry: -20 to 80 Wet: 60 max.	Polypropylene
UL		Green					

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT3086GK170-ULF	WT3086GK170-UL	170
WT3086GK255-ULF	WT3086GK255-UL	255
WT3086GK340-ULF	WT3086GK340-UL	340
WT3086GK425-ULF	WT3086GK425-UL	425
WT3086GK510-ULF	WT3086GK510-UL	510
WT3086GK595-ULF	WT3086GK595-UL	595
WT3086GK680-ULF	WT3086GK680-UL	680

Tsubaki chain no.		Chain width *X* mm
ULF	UL	
WT3086GK765-ULF	WT3086GK765-UL	765
WT3086GK850-ULF	WT3086GK850-UL	850
WT3086GK935-ULF	WT3086GK935-UL	935
WT3086GK1020-ULF	WT3086GK1020-UL	1020
WT3086GK1190-ULF	WT3086GK1190-UL	1190
WT3086GK1360-ULF	WT3086GK1360-UL	1360
WT3086GK1530-ULF	WT3086GK1530-UL	1530

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (m) in width.
2. Standard chain width is 85mm. Custom chain widths, and widths greater than 1,530mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C operating temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Cannot be used with N1500/12T-30R solid sprockets.
5. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
6. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m²	Max. allowable load kN/m {kgf/m}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	6.0	10.5 {1070}	-20 to 80 (60)	120	50
★	Low Friction	LFB	Brown	6.0	10.5 {1070}	-20 to 80 (60)	120	50
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	6.0	10.5 {1070}	-20 to 80 (60)	120	50
●	Low Friction	UL	Green	6.0	10.5 {1070}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 147

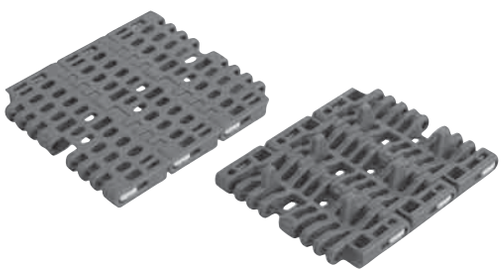
WT3086GM Widetop Chain

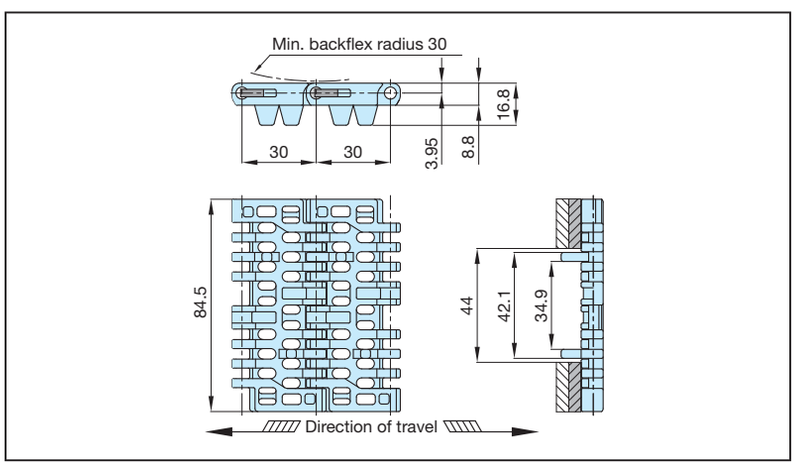
Plastic Pins

Open Type with Tab Guides: Straight Running

Features

- Chain pitch of 30mm and perforated top surface, which allows drainage of water or airflow.
- Driven by the same sprockets as the WT1500 series.
- Tab guides keep the chain securely in position to allow smooth side transfer.
- Plug pin retention system allows easy installation and maintenance.





Material	Ultra Low Friction	Low Friction	Open area %	Top plate width mm	Max. allowable load kN {kgf}	Approx. mass kg/m	Pin material
Material mark	ULF	UL					
Link color	Blue	Green					
Tsubaki chain no.	WT3086GM85-ULF	WT3086GM85-UL	27	84.5	0.9 {90.4}	0.6	Polypropylene

Note: 1. Values for maximum allowable load are at ambient temperature (20°C).
2. Cannot be used with N1500/12T-30R solid sprockets.
3. Tsubaki original chain.

● Material

	Material	Material mark	Link color	Chain mass kg/m	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	0.6	0.9 {90.4}	-20 to 80 (60)	120	50
★	Low Friction	LFB	Brown	0.6	0.9 {90.4}	-20 to 80 (60)	120	50
		LFG	Green					
		LFW	White					
●	Ultra Low Friction	ULF	Blue	0.6	0.9 {90.4}	-20 to 80 (60)	120	50
●	Low Friction	UL	Green	0.6	0.9 {90.4}	-20 to 80 (60)	120	50

Note: 1. Operating temperature of (60) is for wet conditions (with lubrication).
2. ● : Standard material ★ : Made-to-order material

Sprockets See page 99
Wearstrips See page 137
Return-Way Parts See page 147

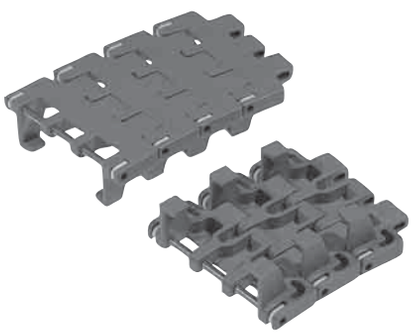
WT3085C325 Widetop Chain

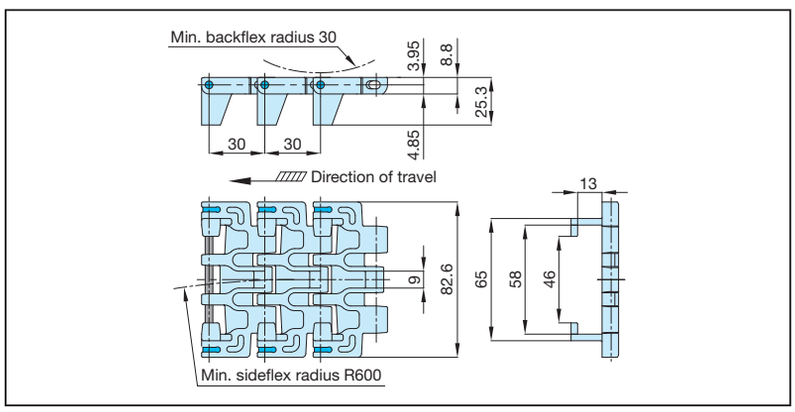
Stainless Steel Pins

Closed Type: Side Flexing

Features

- Chain pitch is 30mm; chain can be driven using the same shafts as the WT1500 and WT3000 series.
- Because the height of the chain rails and conveying surface are the same as the WT1500 and WT3000 series, the height of the chain rail surfaces can be made the same as for the WT1500 and WT3000 series.





Material	Low Friction	High Speed	Top plate width mm	Max. allowable load kN {kgf}		Approx. mass kg/m		Pin material
Material mark	UL	HS						
Link color	Green	Cream		UL	HS	UL	HS	
Tsubaki chain no.	WT3085C325-UL	WT3085C325-HS	82.6	0.55 {56}	0.50 {51}	0.9	0.8	Stainless steel

Note: 1. Values for maximum allowable load are at ambient temperature (20°C).
2. HS chain should be used under dry conditions.
3. Tsubaki original chain.

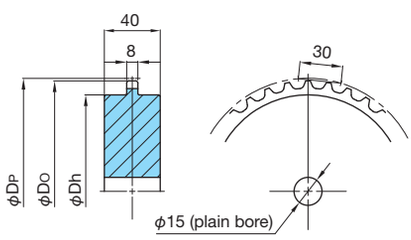
● Material

	Material	Material mark	Link color	Chain mass kg/m	Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
	Standard	–	Gray	0.9	0.55 {56}	-20 to 80 (80)	100	50
★	Low Friction/Anti-Wear	LFB	Brown	0.9	0.55 {56}	-20 to 80 (65)	100	50
		LFG	Green					
		LFW	White					
	Ultra Low Friction	ULF	Light blue	0.9	0.55 {56}	-20 to 80 (65)	100	50
●	Low Friction	UL	Green	0.9	0.55 {56}	-20 to 80 (80)	100	50
★	High Speed	HS	Cream	0.8	0.50 {51}	-20 to 50 (dry conditions only)	–	230*

Note: 1. Operating temperature in ( ) is for wet conditions (with lubrication).
2. * When used at chain speeds greater than 50 meters/minute, wearstrip must be MC nylon or stainless steel (polished).
3. ● : Standard material ★ : Made-to-order material

SP-3085C3 Solid Sprockets

Applicable chain: WT3085C325 Widetop Chain



Tsubaki sprocket no.	Effective teeth	Teeth	Pitch diameter D_P	Outside diameter D_O	Hub diameter D_h	Approx. mass kg	Material
SP-3085C3-13-1/2	13-1/2	27	129.7	129	105	0.3	Ultra high molecular weight polyethylene
SP-3085C3-14-1/2	14-1/2	29	139.0	139	115	0.4	
SP-3085C3-15-1/2	15-1/2	31	148.5	148	125	0.5	
SP-3085C3-16-1/2	16-1/2	33	158.0	158	135	0.6	
SP-3085C3-17-1/2	17-1/2	35	167.5	168	145	0.7	
SP-3085C3-18-1/2	18-1/2	37	176.9	177	155	0.8	

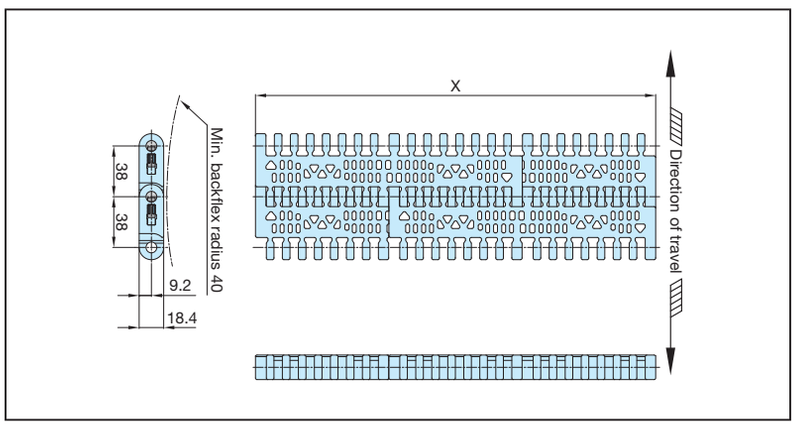
WT3816K Widetop Chain

Plastic Pins

Open Type: Straight Running

Features

- Plates are perforated with numerous drainage holes that effectively remove excess lubricant and water remaining on the plate surface.
- Operating temperature range of 5° to 105°C. Ideal for applications involving warm or hot water.
- Sliding-type plugs in the pin-disconnect prevention mechanism make it easy to disconnect and reconnect the chain. This design shortens maintenance time required to replace chain parts.



Material mark	Chain pitch	Link color	Open area %	Max. allowable load kN/m {kgf/m}	Chain mass kg/m²	Operating temperature range °C	Pin material
HTW	38	White	28	30 {3058}	9.8	5 to 105	Polypropylene

Tsubaki chain no. HTW	Chain width *X* mm
WT3816K200-HTW	200
WT3816K300-HTW	300
WT3816K400-HTW	400
WT3816K500-HTW	500
WT3816K600-HTW	600

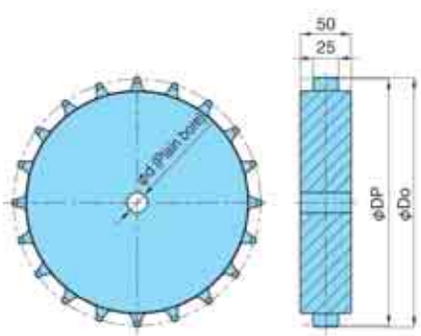
Tsubaki chain no. HTW	Chain width *X* mm
WT3816K700-HTW	700
WT3816K800-HTW	800
WT3816K900-HTW	900
WT3816K1000-HTW	1000
WT3816K1500-HTW	1500

Tsubaki chain no. HTW	Chain width *X* mm
WT3816K2000-HTW	2000
WT3816K2500-HTW	2500
WT3816K3000-HTW	3000
WT3816K3500-HTW	3500

Note: 1. Values for max. allowable load are at ambient temperature (20°C) and are for chain that is one meter (1m) in width.
2. Standard chain width is 100mm. Custom chain widths, and widths greater than 3,500mm are available upon request.
3. Chain width *X* shown is a nominal width. Actual width range is $^{+0}_{-0.7\%}$ at 20°C ambient temperature. Chain width is subject to expansion or contraction with changes in temperature. Expansion/contraction rate is 0.00015/°C based on reference temperature of 20°C.
4. Available only in HTW material.
5. Values for max. allowable load assume that tension acts uniformly over the entire chain width.
6. Tsubaki original chain.

S3816 Solid Sprockets

Applicable chain: WT3816



Tsubaki sprocket no.	Teeth	Pitch diameter *DP*	Outside diameter *Do*	Approx. mass kg	Bore shape	Bore diameter *d*	Type	Material
S3816/18	18	218.8	221.6	1.5	Bore shapes and size will be fabricated on receipt of order.		Solid	Ultra high molecular weight polyethylene (green)
S3816/20	20	242.9	245.9	1.8				
S3816/24	24	291.1	294.3	2.8				

Note: Sprockets can also be fabricated with other shapes and number of teeth than noted above.

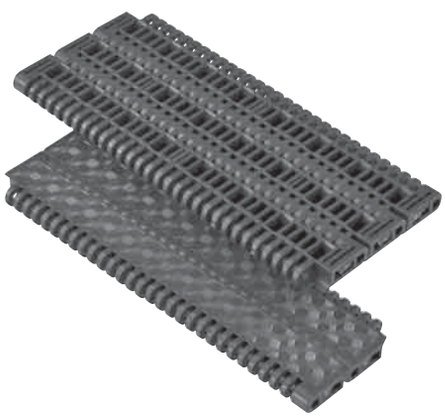
BTH16 Beltop Chain

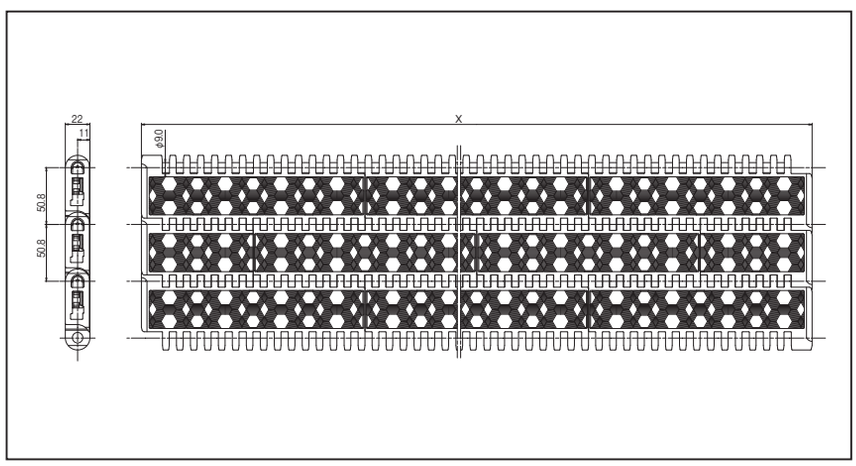
Plastic Pins

High-Strength Type: Straight Running

Features

- High-rigidity chain provides the highest maximum allowable load for Beltop Chain (62 kN/m). Suitable for conveying bulk quantities or heavy objects.
- A special relief pattern embossed on the top surface of the chain provides an anti-slip effect. Its design acts to minimize slippage and works to prevent objects from becoming snagged on the chain surface. Ideal for people conveyors such as moving walkways.
- Slide lock pin retention system allows easy installation and maintenance.





Chain Numbering

Chain type	Link shape	Chain pitch	–	Chain width
BT	**H**	**16**	**–**	**15000**
	H = High-strength type	16 = 50.8mm		15000 = 1500mm

Note: Chain width is indicated as an integer including the first place after the decimal point.

Chain Information

Tsubaki chain no.	Chain pitch mm	Chain width	Connecting pin material	Approx. mass kg/m^2	Standard chain length mm {ft}
BTH16	50.8	400mm (min. width); chain width can be expanded in units of 100mm	Special engineering plastic	21.7	1016 {3.3}

Tsubaki chain no.	Max.allowable load kN/m {kgf/m}	Operating temperature range	Link color
BTH16	62 {6330}	-20°C to 80°C	Blue

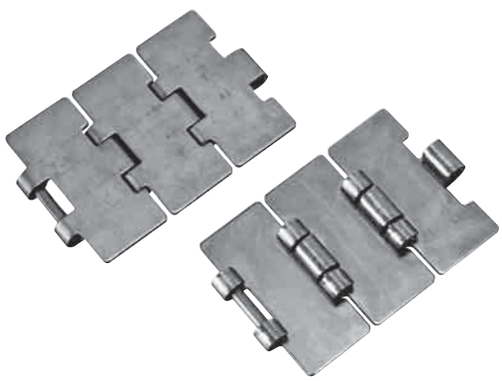
Note: 1.When considering the use of this chain, please contact your Tsubaki representative to review usage conditions (nature of the application, objects to be conveyed, conveyor length, type of environment, speed, operating temperature, etc.).
2.Values for max. allowable load assume that tension acts uniformly over the entire chain width. Values for max. allowable load in the table above are for chain that is one meter (1m) in width. To calculate values for other chain widths, multiply the “chain width in question” by the “max. allowable load for 1-meter wide chain”.

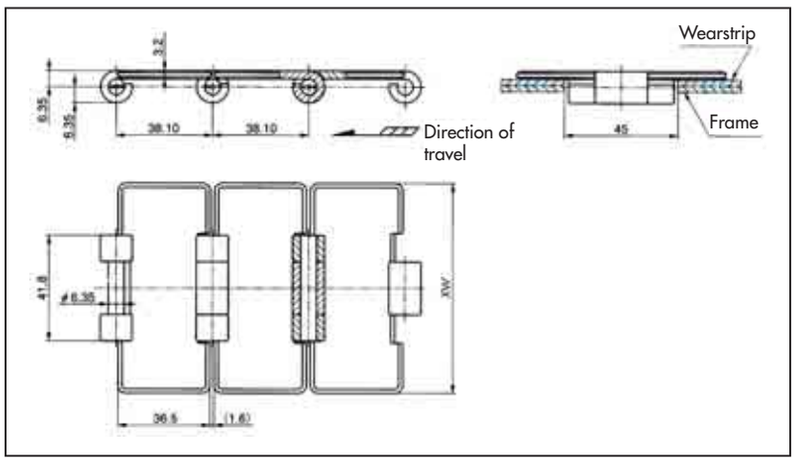
T T Stainless Steel Top Chain

Straight Running

Features

- Worldwide standard shape. All parts are made of stainless steel.
- All edges of the top plates are smoothly chamfered, ensuring smooth lateral plate-to-plate transfers between adjacent chains.
- Top plates are smoothly polished with a grinder.





Chain Information

Tsubaki chain no.	Top plate width XW mm	Approx. mass kg/m	Type		Max. allowable load kN {kgf}	Operating temperature range °C	Max. allowable speed m/min	
			N	SS			With lube	No lube
TT635	63.5	2.3	●	●	2.16 {220}	-20 to 400	100	60
TT762	76.2	2.6	●	●				
TT826	82.6	2.7	●	●				
TT1016	101.6	3.2	●	●				
TT1143	114.3	3.5	●	●				
TT1270	127.0	3.8	●	●				
TT1524	152.4	4.4	●	●				
TT1905	190.5	5.3	●	●				

● : Available

Note: 1. Standard chain length is 3,048mm (10 feet, 80 links).
2. Type 815 chain.

Chain Numbering

Chain type	Plate width	–	Type
TT	**826**	**–**	**N**

826 = 82.6mm

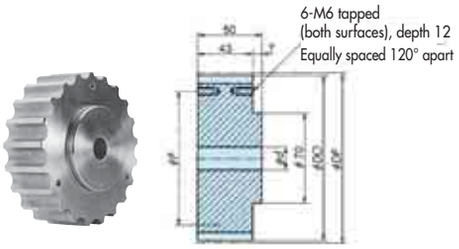
Chain Type

1. N type
General-use type priced lower than SS type (all parts are type 304 stainless steel or equivalent). All parts are made of martensitic stainless steel.

2. SS type
All parts are type 304 stainless steel or equivalent. Highly resistant to corrosion and is clean and sanitary.

● Steel Sprockets and Guide Rings Applicable chain: TT

• Sprockets (with Plain Bore)

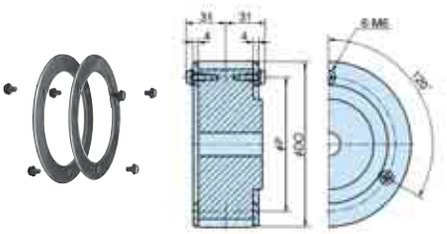


Dimensions in mm

Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter *DP*	Outside diameter *DO*	*P*	Bore diameter *d*		Approx. mass kg	Material
						Plain bore	Max.		
TT912T	19	9½	117.34	117	92	18	40	2.8	Carbon steel
TT1012T	21	10½	129.26	129	104			3.7	
TT1112T	23	11½	141.22	141	116			4.3	
TT1212T	25	12½	153.20	153	128			5.0	

Note: Teeth on all sprockets have not been hardened.

• Guide Rings



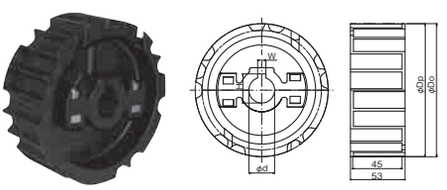
Dimensions in mm

Tsubaki ring no.	Applicable sprocket no.	Outside diameter *DO*	Installed pitch diameter *P*	Approx. mass kg
TT912G	TTP912T TT912T	116	92	0.17
TT1012G	TTP1012T TT1012T	128	104	0.19
TT1112G	TTP1112T TT1112T	140	116	0.21
TT1212G	TTP1212T TT1212T	152	128	0.23

Note: One set consists of two (2) guide rings and six (6) mounting bolts.

● Engineering Plastic Sprockets

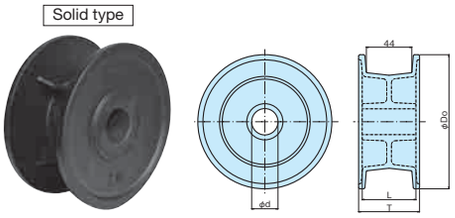
Applicable chain: TT



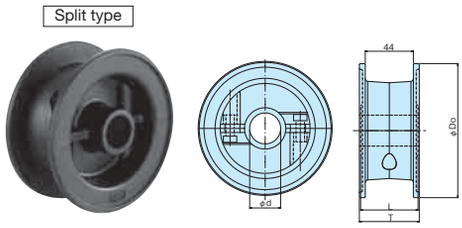
Tsubaki ring no.	Actual teeth	Effective teeth	Pitch diameter *Dp*	Outside diameter *Do*	Bore diameter *d*	Keyway *W*	Keyway *H*	Approx. mass kg	Material	Type
TP-C12053NT-SPR	21	10½	129.26	129	25	8	28.3	0.50	Nut: Brass + nickel plating Bolt: Stainless steel Body: Reinforced polyamide (color: black)	Split type. Keyway specifications: DIN 6885 key seat
TP-C12054NT-SPR					30	8	33.3	0.49		
TP-C12055NT-SPR					35	10	38.3	0.48		
TP-C12056NT-SPR					40	12	43.3	0.46		
TP-C12099NT-SPR	23	11½	141.22	142	25	8	28.3	0.53		
TP-C12100NT-SPR					30	8	33.3	0.50		
TP-C12101NT-SPR					35	10	38.3	0.50		
TP-C12102NT-SPR					40	12	43.3	0.53		
TP-C12065NT-SPR	25	12½	153.20	154	25	8	28.3	0.66		
TP-C12066NT-SPR					30	8	33.3	0.64		
TP-C12067NT-SPR					35	10	38.3	0.63		
TP-C12068NT-SPR					40	12	43.3	0.62		

● Engineering Plastic Idler Wheels

Solid type



Split type



Tsubaki idler wheel no.	No. of equivalent teeth	Outside diameter *Do*	Shaft diameter *d*	Hub length *L*	Width *T*	Approx. mass kg	Material	Type
TP-C12200BT-IW	21	129.8	25	52	58	0.21	Polyamide (color: black)	Solid
TP-C12201BT-IW			30			0.21		
TP-C12203BT-IW			40			0.19		
TP-C12204BT-IW	25	154.7	25	52	58	0.23		
TP-C12205BT-IW			30			0.23		
TP-C12207BT-IW			40			0.25		
TP-C12077BT-IW	21	129.8	25	61	58	0.26	Bolt & nut: Stainless steel Body: Polyamide (color: black)	Split
TP-C12078BT-IW			30			0.25		
TP-C12079BT-IW			35			0.28		
TP-C12080BT-IW			40			0.25		
TP-C121928BT-IW	23	142.2	25	61	58	0.29		
TP-C121929BT-IW			30			0.27		
TP-C121930BT-IW			35			0.30		
TP-C121931BT-IW			40			0.27		
TP-C12081BT-IW	25	154.7	25	61	58	0.32		
TP-C12082BT-IW			30			0.30		
TP-C12083BT-IW			35			0.32		
TP-C12084BT-IW			40			0.30		

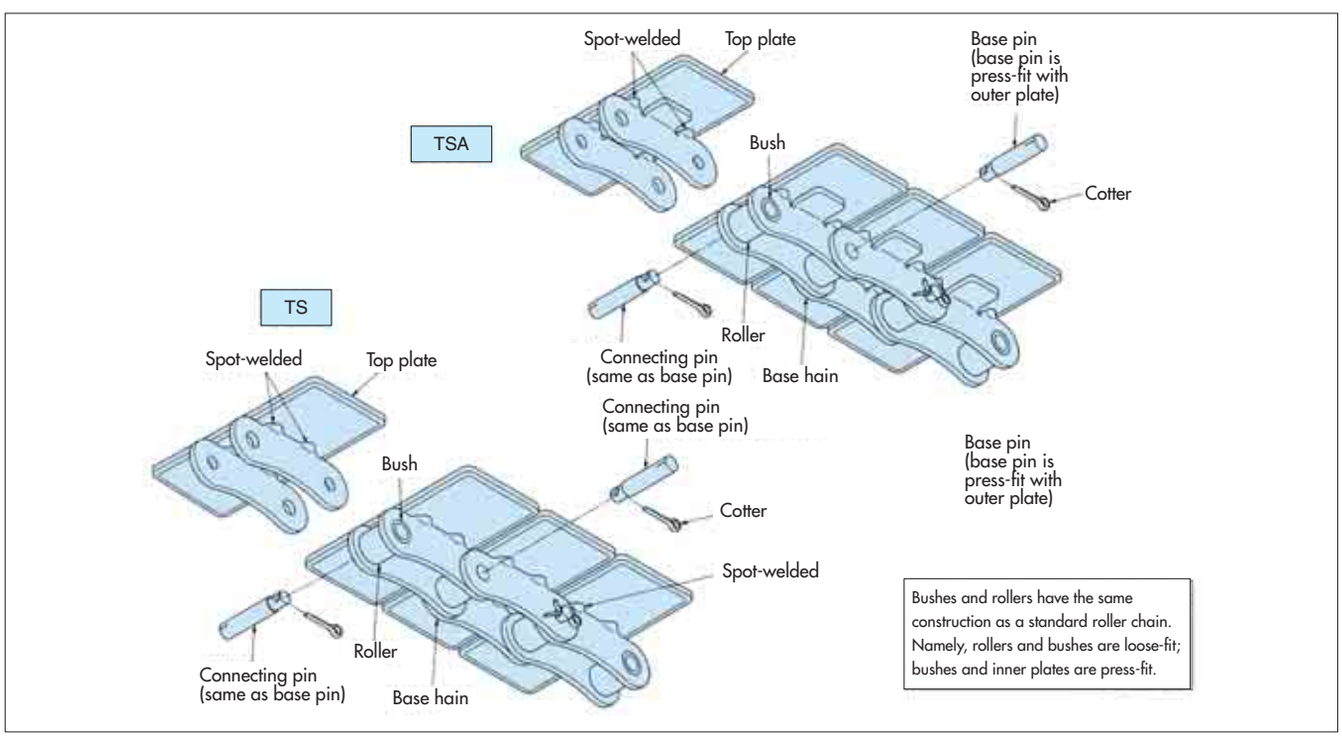
Wearstrips
See page 137
Return-Way Parts
See page 150

TS/TSA Stainless Steel Top Chain

Straight Running

Features

- Stainless steel conveyor chain with top plates attached to ANSI double pitch chain. Standard sprockets for ANSI double pitch chains can be used.
- Base chain can be made in NP (nickel-plated), NP-Lambda or SS (all stainless steel) specifications.
- Available in type TS for single-strand applications and in type TSA for multi-strand applications.
- Available in a wide variety of special finishes to suit various applications and work environments. Includes hard chromium plated, buffed top plates, and heat-treated top plates for improved wear resistance.



Chain Type

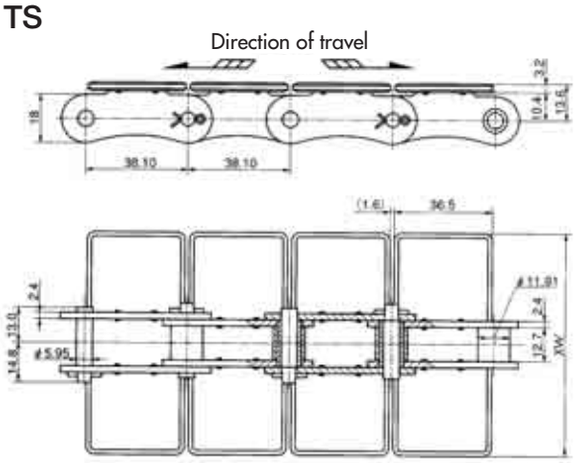
1. Standard type
Base chain is normal steel roller chain. The top plate is made of 430 stainless steel.

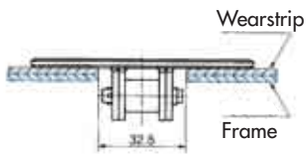
2. NP type
Base chain is nickel-plated, providing a modest level of corrosion resistance. The top plate is made of 430 stainless steel.

3. NP-Lambda type
Nickel-plated Lambda lube-free base chain uses oil-impregnated sintered bushes. The top plate is made of 430 stainless steel.

4. SS type
All parts are 304 stainless steel for high corrosion resistance.

• TS





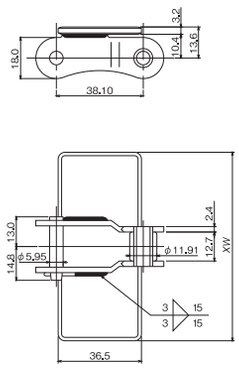
Note

TS

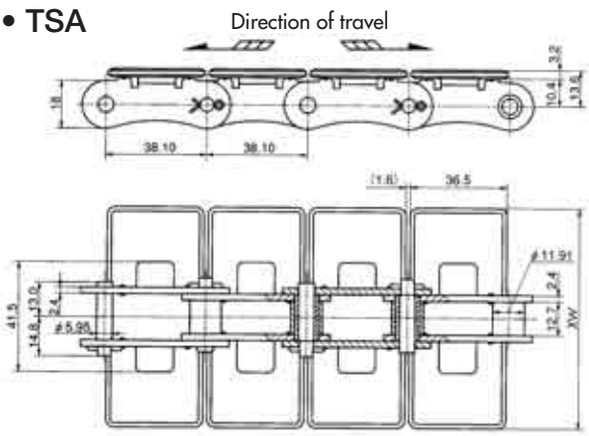
TSA

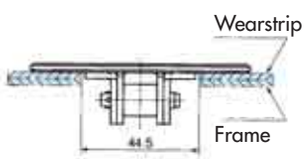
Shape of SS base chain plates differs slightly from other P-type plates.

• Offset Link



• TSA





● Chain Information

• TS

Tsubaki chain no.	Top plate width XW mm	Approx. mass kg/m	Type			
			Standard	NP	NP-Lambda	SS
TS550	55.0	2.5	●	★	★	★
TS635	63.5	2.7	●	★	★	★
TS762	76.2	3.0	●	★	★	★
TS826	82.6	3.2	●	★	★	★
TS950	95.0	3.5	●	★	★	★
TS1016	101.6	3.7	●	★	★	★
TS1100	110.0	3.9	●	★	★	★
TS1143	114.3	4.0	●	★	★	★
TS1270	127.0	4.3	●	★	★	★
TS1524	152.4	4.9	●	★	★	★
TS1905	190.5	5.8	●	★	★	★
Max. allowable load kN {kgf}			2.94 {300}			1.03 {105}
Operating temperature range °C			-10 to 150			-20 to 400
Max. allowable speed m/min		With lube	120		–	70
		No lube	60			45

• TSA

Tsubaki chain no.	Top plate width XW mm	Approx. mass kg/m	Type			
			Standard	NP	NP-Lambda	SS
TSA550	55.0	2.8	★	★	★	★
TSA635	63.5	3.0	●	●	★	★
TSA762	76.2	3.3	★	★	★	★
TSA826	82.6	3.5	●	●	★	★
TSA950	95.0	3.8	●	●	★	★
TSA1016	101.6	4.0	★	★	★	★
TSA1100	110.0	4.2	●	★	★	★
TSA1143	114.3	4.3	●	★	★	★
TSA1270	127.0	4.6	★	★	★	★
TSA1524	152.4	5.2	●	●	★	★
TSA1905	190.5	6.1	●	●	★	★
Max. allowable load kN {kgf}			2.94 {300}			1.03 {105}
Operating temperature range °C			-10 to 150			-20 to 400
Max. allowable speed m/min		With lube	120		–	70
		No lube	60			45

● : Available ★ : Made to order

Note: 1. SS-P base chain plates differ slightly in shape (see above).
2. Standard chain length is 3,048mm (10 feet, 80 links).
3. Tsubaki original chain.

● Chain Numbering

Chain type	Plate width	–	Type
TSA	**826**	**–**	**NP**

826 = 82.6mm

No symbol: Standard
NP: NP type
LMC-NP: NP-Lambda type
SS: SS type

● Sprockets

RF2060S sprockets with at least 19 teeth can be used.

Wearstrips
See page 137

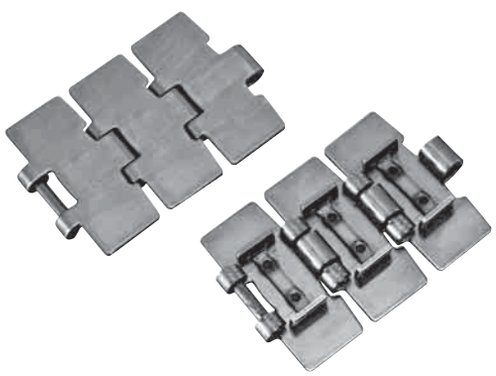
Return-Way Parts
See page 150

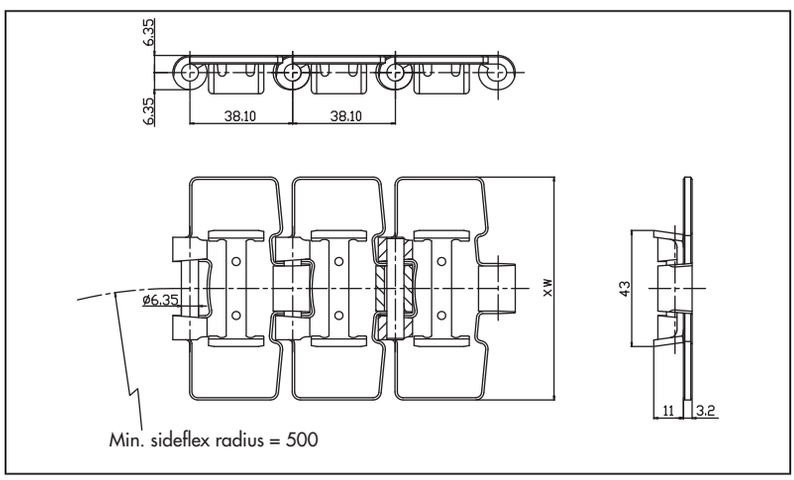
TTU Stainless Steel Top Chain

Sideflexing

Features

- Standard stainless steel chain designed for use in sideflexing conveyors. All parts are made of martensitic stainless steel.
- The shape of the top surface, which laps the hinge area and top plates, provides stable transport of conveyed goods.
- Top plates are smoothly polished with a grinder.





Chain Information

	Tsubaki chain no.	Top plate width XW mm	Max. allowable load kN {kgf}	Min. side-flex radius R mm	Approx. mass kg/m	Operating temperature range °C	Max. allowable speed m/min	
							With lube	No lube
★	TTU762-N	76.2	2.16 {220}	500	2.8	-20 to 400	80	50
●	TTU826-N	82.6			2.9			
●	TTU1143-N	114.3			3.6			
●	TTU1905-N	190.5			5.3			

Note: 1. Standard chain length is 3,048mm (10 feet, 80 links).
2. TTU-N top chain cannot be linked to old type TTU chain. The entire strand of an old-type chain must be replaced.
3. Depending on the minimum sideflex radius being used, TTU-N top chain may not be compatible with conveyors using old-type TTU chain. Be sure to check the minimum sideflex radius of the previous conveyor in advance.
4. Type 8810 chain.

● : Available ★ : Made to order

Chain Numbering

Chain type	Plate width	–	Type
TTU	**826**	**–**	**N**

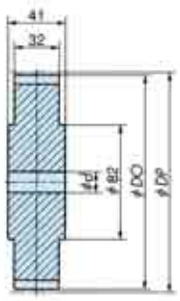
826 = 82.6mm

Chain Type

N type
General-use type priced lower than type SS (all parts are type 304 stainless steel or equivalent). All parts are made of martensitic stainless steel.

● Steel Sprockets and Guide Rings Applicable chain: TTU

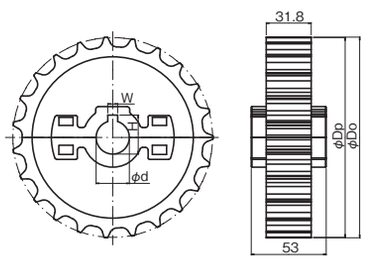
• Sprockets (with Plain Bore)



Dimensions in mm

Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter *DP*	Outside diameter *DO*	Bore diameter *d*		Approx. mass kg	Material
					Plain bore	Max.		
TTU1012T	21	10½	129.26	129	16	55	3.3	Carbon steel
TTU1112T	23	11½	141.22	141			3.9	
TTU1212T	25	12½	153.20	153			4.6	

● Engineering Plastic Sprockets Applicable chain: TTU



Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter *Dp*	Outside diameter *Do*	Bore diameter *d*	Keyway		Approx. mass kg	Material	Type
						W	*H*			
TP-C12061NT-SPR	21	10½	129.26	129	25	8	28.3	0.42	Nut: Brass + nickel plating Bolt: Stainless steel Body: Reinforced polyamide (color: black)	Split type. Keyway specifications: DIN 6885 key seat
TP-C12062NT-SPR					30	8	33.3	0.41		
TP-C12063NT-SPR					35	10	38.3	0.39		
TP-C12064NT-SPR					40	12	43.3	0.39		
TP-C12109NT-SPR	23	11½	141.22	142	25	8	28.3	0.43		
TP-C12110NT-SPR					30	8	33.3	0.41		
TP-C12111NT-SPR					35	10	38.3	0.44		
TP-C12112NT-SPR					40	12	43.3	0.39		
TP-C12073NT-SPR	25	12½	153.20	154	25	8	28.3	0.45		
TP-C12074NT-SPR					30	8	33.3	0.43		
TP-C12075NT-SPR					35	10	38.3	0.42		
TP-C12076NT-SPR					40	12	43.3	0.42		

Wearstrips
See page 137

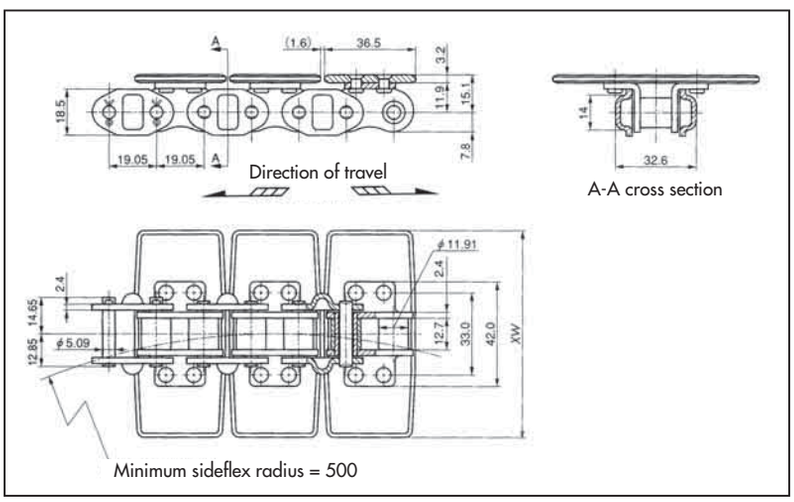
Return-Way Parts
See page 150

TTKU Stainless Steel Top Chain

Sideflexing

Features

- Sideflexing chain with protrusions on the outer plates to guide sideflexing movement. Larger allowable load than TTU stainless steel top chain.
- The chain can be detached from the wearstrip at curved sections to facilitate maintenance.
- Suitable for light loads at slow speeds. (The chain may lift up at corner turns when transporting large loads at high speeds.)



Chain Information

	Tsubaki chain no.	Top plate width XW mm	Max. allowable load kN {kgf}	Approx. mass kg/m	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
●	TTKU826	82.6	2.84 {280}	3.8	-10 to 150	45	45
★	TTKU1100	110.0		4.5			

Note: 1. Standard chain length is 3,048mm (10 feet, 160 links).
2. SS-type chain with max. allowable load of 0.69 kN {70 kgf} can also be manufactured.
● : Available ★ : Made to order

Chain Numbering

Chain type	Plate width
TTKU	**826**

826 = 82.6mm

Material

Chain type	Standard
Top plates	430 stainless steel
Base chain	Normal steel
Rivets	13-Cr

Sprockets

Standard ANSI #60 sprockets having at least 12 teeth can be used.

⚠ Caution

Be sure to specify chain length using the number of links in the base chain. One TTKU top plate is attached to every other link of the base chain, which means that the number of links in the chain is twice the number of top plates.

Wearstrips

See page 137

Return-Way Parts

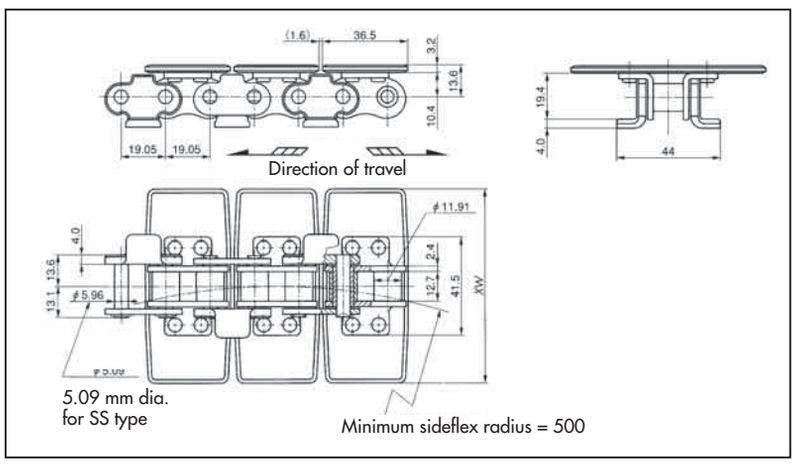
See page 150

TRU Stainless Steel Top Chain

Sideflexing

Features

- Sideflexing chain equipped with float-preventive tabs. Larger allowable load than TTU stainless steel top chain.



Chain Information

Tsubaki chain no.	Top plate width XW mm	Approx. mass kg/m	Type	
			Standard	SS
TRU762-T	76.2	3.9	★	★
TRU826-T	82.6	4.1	●	★
TRU1016-T	101.6	4.6	★	★
TRU1100-T	110.0	4.8	★	★
TRU1143-T	114.3	4.9	★	★
TRU1270-T	127.0	5.2	★	★
Max. allowable load kN {kgf}			4.02 {410}	0.69 {70}
Operating temperature range °C			-10 to 150	-20 to 400
Max. allowable speed m/min		With lube	100	70
		No lube	60	45

● : Available ★ : Made to order

Note: Standard chain length is 3,048mm (10 feet, 160 links).

Chain Numbering

Chain type	Plate width	–	Tab	–	type
TRU	**826**	**–**	**T**	**–**	**SS**

826 = 82.6mm

Material

Chain type	Standard	SS
Top plates	430 stainless steel	304 stainless steel
Base chain	Normal steel	304 stainless steel
Rivets	Stainless steel	304 stainless steel

Sprockets

Standard ANSI #60 sprockets having at least 19 teeth can be used.

⚠ Caution

Be sure to specify chain length using the number of links in the base chain. One TRU top plate is attached to every other link of the base chain, which means that the number of links in the chain is twice the number of top plates.

Wearstrips
See page 137

Return-Way Parts
See page 150

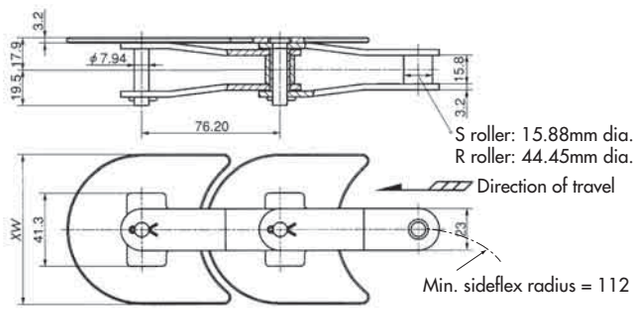
TO Stainless Steel Top Chain

Sideflexing

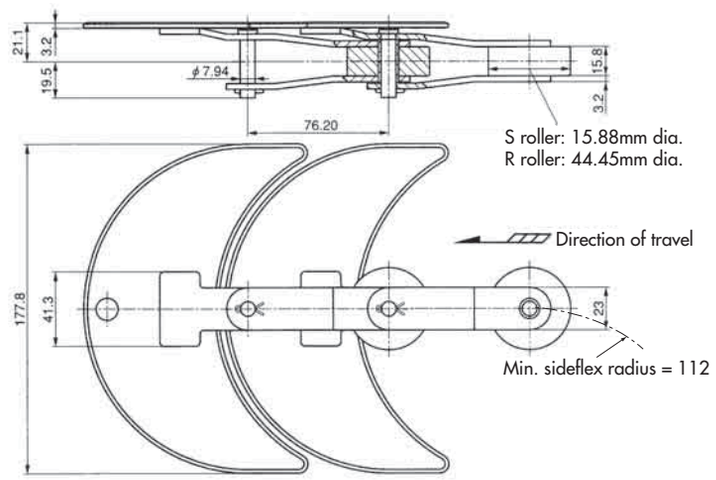
Features

● Stainless steel chain designed for use in horizontal conveyors. Ideal for conveyance in tight spaces.

TOS (R) 826,1143



TOS (R) 1778



● Chain Information

	Tsubaki chain no.		Top plate width XW mm	Max. allowable load kN {kgf}	Approx. mass kg/m		Operating temperature range °C	Max. allowable speed m/min	
	S roller	R roller			S roller	R roller		With lube	No lube
★	TOS826	TOR826	82.6	2.94 {300}	4.1	5.9	-10 to 150	60	60
★	TOS1143	TOR1143	114.3		4.8	6.9			
★	TOS1778	TOR1778	177.8		6.3	8.1			

Note: 1. Standard chain length is 3,048mm (10 feet, 40 links).
2. SS-type chain with max. allowable load of 1.77 kN {180 kgf} can also be manufactured.
★ : Made-to-order

● Chain Numbering

Chain type	Roller	Plate width
TO	**S**	**826**

826 = 82.6mm

● Material

Chain type	Standard
Top plates	430 stainless steel
Base chain	Normal steel

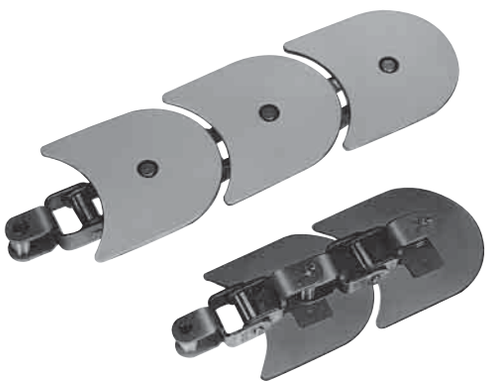
Sprockets
See page 135
Wearstrips
See page 137

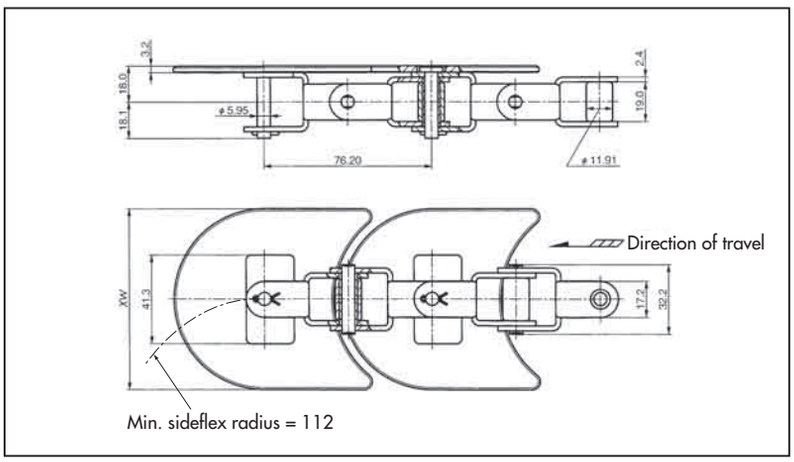
TU Stainless Steel Top Chain

Sideflexing

Features

- Stainless steel chain designed for use in horizontal conveyors. Can be bent vertically, providing more flexibility in the layout of conveyor lines, including three-dimensional layouts.





Chain Information

	Tsubaki chain no.	Top plate width XW mm	Max. allowable load kN {kgf}	Approx. mass kg/m	Operating temperature range °C	Max. allowable speed m/min	
						With lube	No lube
★	TU826	82.6	0.98 {100}	3.8	-10 to 150	60	60
★	TU1143	114.3		4.5			
★	TU826-SS	82.6		3.8	-20 to 400		
★	TU1143-SS	114.3		4.5			

Note: 1. Standard chain length is 3,048mm (10 feet, 40 links).
2. SS-type chain with max. allowable load of 0.98 kN {100 kgf} can also be manufactured.
★ : Made-to-order

Chain Numbering

Chain type	Plate width	–	Type
TU	**826**	**–**	**SS**

826 = 82.6mm

Material

Chain type	Standard	SS
Top plates	430 stainless steel	304 stainless steel
Base chain	Normal steel	304 stainless steel

Sprockets

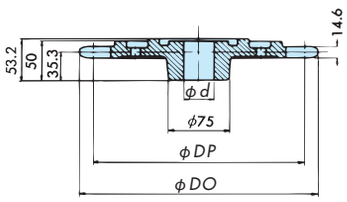
See page 135

Wearstrips

See page 137

Sprockets for TO/TU Top Chain

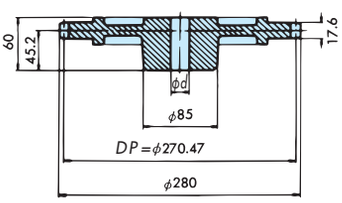
• **Sprockets for TO Stainless Steel Top Chain** (Plain Bore)



Dimensions in mm

Applicable chain	Tsubaki sprocket no.	Actual teeth	Effective teeth	Pitch diameter *DP*	Outside diameter *DO*	Bore diameter *d*		Approx. mass kg	Material
						Plain bore	Max.		
Type TOS	TOS1013T	31	10⅓	254.59	269	23	45	7.2	FC250
Type TOR	TOR1100T	11	11	270.47	305			7.6	

• **Sprockets for TU Stainless Steel Top Chain** (Plain Bore)



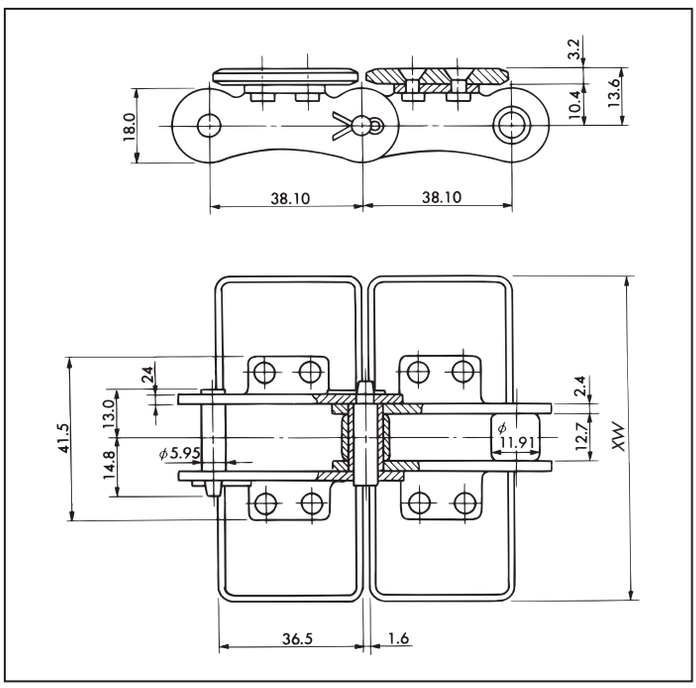
Dimensions in mm

Tsubaki sprocket no.	Actual teeth	Effective teeth	Bore diameter *d*		Approx. mass kg	Material
			Plain bore	Max.		
TU1100T	11	11	23	50	7.4	FC250

Heat Treated Top Plates Model Code: HTP

Design Stock

The carbon steel top plate is heat treated for improved resistance to damage.



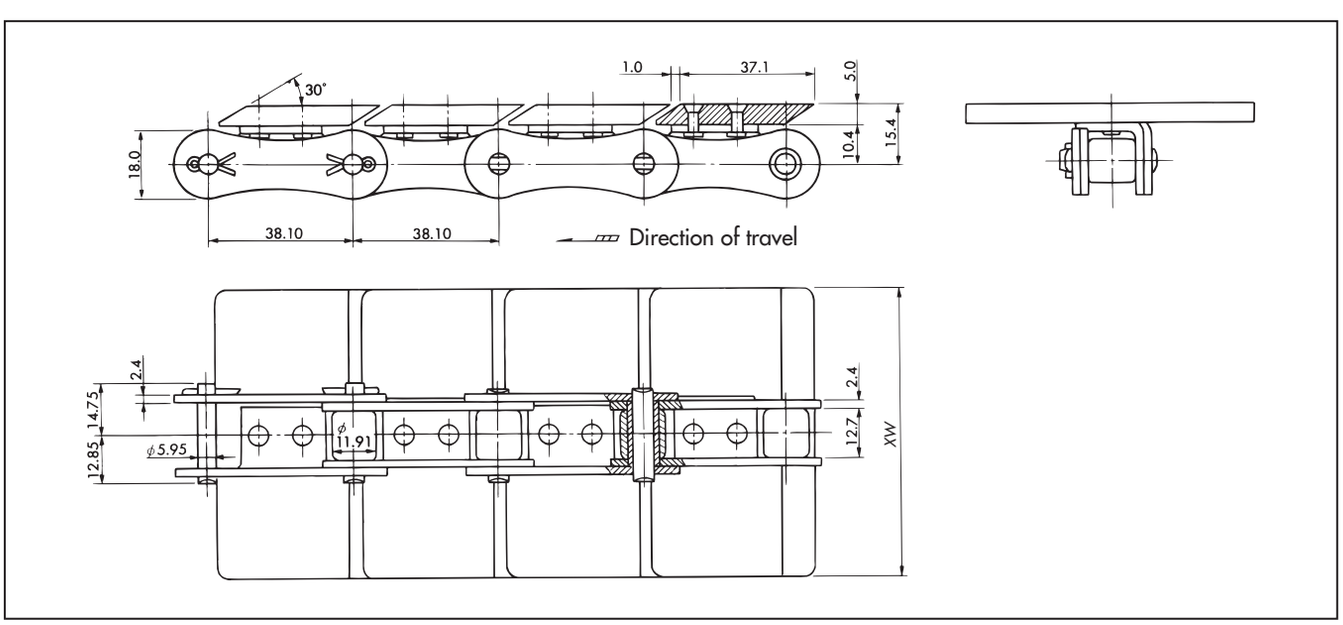
Tsubaki chain no.	Top plate width XW mm
TS550-HTP	55.0
TS635-HTP	63.5
TS762-HTP	76.2
TS826-HTP	82.6
TS950-HTP	95.0
TS1016-HTP	101.6

Top plates hardened to HRC 40+ (base chain standard carbon steel).
Top plates are riveted to base chain.

30° Inclined Top Plates Model Code: CTP

Design Stock

Front and back edges of top plates are inclined at a 30° angle to minimize the gap between the top plate slats.



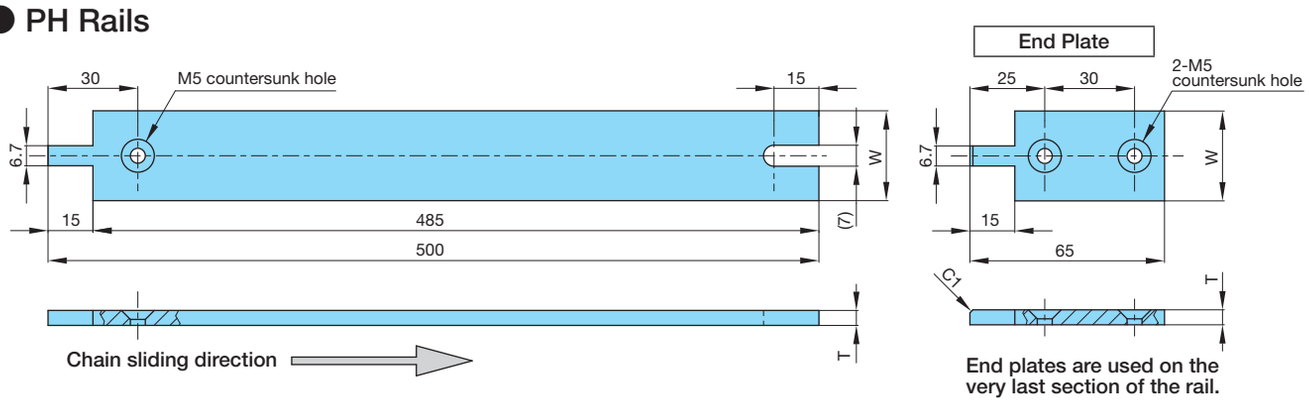
Tsubaki chain no.	Top plate width XW mm
TS635-CTP	63.5
TS762-CTP	76.2

Note: Back-flex radius of TS-CTP top chain is larger than standard TS/TSA chain.

Plastic Guide Rails

Standard Guide Rails

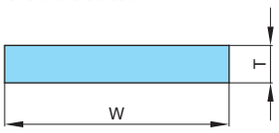
● PH Rails



Rail width *W* mm	Material	Color	Rail thickness *T* mm					
			3		5		6	
			Body	End plate	Body	End plate	Body	End plate
10	UHMW-PE	White			PH510W	PH510EW		
		Green			PH510G	PH510EG		
11		White					PH611W	PH611EW
		Green					PH611G	PH611EG
12		White			PH512W	PH512EW		
		Green			PH512G	PH512EG		
15		White			PH515W	PH515EW	PH615W	PH615EW
		Green			PH515G	PH515EG	PH615G	PH615EG
16		White					PH616W	PH616EW
		Green					PH616G	PH616EG
20		White	PH320W	PH320EW	PH520W	PH520EW	PH620W	PH620EW
		Green	PH320G	PH320EG	PH520G	PH520EG	PH620G	PH620EG
25		White			PH525W	PH525EW	PH625W	PH625EW
		Green			PH525G	PH525EG	PH625G	PH625EG
30		White			PH530W	PH530EW	PH630W	PH630EW
		Green			PH530G	PH530EG	PH630G	PH630EG
35		White	PH335W	PH335EW	PH535W	PH535EW	PH635W	PH635EW
		Green	PH335G	PH335EG	PH535G	PH535EG	PH635G	PH635EG
40		White	PH340W	PH340EW	PH540W	PH540EW	PH640W	PH640EW
		Green	PH340G	PH340EG	PH540G	PH540EG	PH640G	PH640EG
50		White			PH550W	PH550EW	PH650W	PH650EW
		Green			PH550G	PH550EG	PH650G	PH650EG
55		White			PH555W	PH555EW		
		Green			PH555G	PH555EG		
75		White			PH575W	PH575EW		
		Green			PH575G	PH575EG		

Note: 1. Sizes other than those shown above can be fabricated upon request.
2. Can be manufactured from PMW, a material that has better wear resistance and lower friction than UHMW-PE.

● Flat Rails

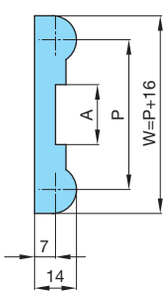


Rail width W mm	Material	Color	Rail thickness T mm			
			3	4*	5	6
15	UHMW-PE	White	FR315W	FR415W	FR515W	FR615W
		Green	FR315G	FR415G	FR515G	FR615G
20		White	FR320W		FR520W	FR620W
		Green	FR320G		FR520G	FR620G
25		White	FR325W	FR425W	FR525W	FR625W
		Green	FR325G	FR425G	FR525G	FR625G
30		White	FR330W	FR430W	FR530W	FR630W
		Green	FR330G	FR430G	FR530G	FR630G
35		White	FR335W	FR435W	FR535W	FR635W
		Green	FR335G	FR435G	FR535G	FR635G
Coil length			50 m	40 m	30 m	25 m

Rail width W mm	Material	Color	Rail thickness T mm			
			3	4*	5	6
40	UHMW-PE	White	FR340W	FR440W	FR540W	FR640W
		Green	FR340G	FR440G	FR540G	FR640G
45		White	FR345W		FR545W	FR645W
		Green	FR345G		FR545G	FR645G
50		White	FR350W	FR450W	FR550W	FR650W
		Green	FR350G	FR450G	FR550G	FR650G
55		White	FR355W		FR555W	
		Green	FR355G		FR555G	
60		White	FR360W		FR560W	FR660W
		Green	FR360G		FR560G	FR660G
Coil length			50 m	40 m	30 m	25 m

Note: 1. *Made-to-order items.
2. Sizes other than those shown above can be fabricated upon request.

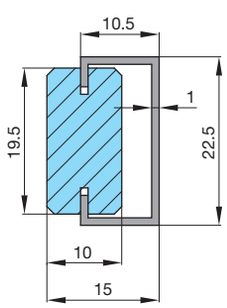
● B Rails



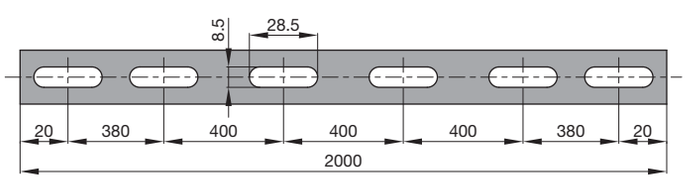
Tsubaki rail no.	P mm	W mm	A mm	Length m	Material	Color
140B40G	40	56	20	2	UHMW-PE	Green
140B50G	50	66	20			
140B65G	65	81	23			

Note: Made-to-order items

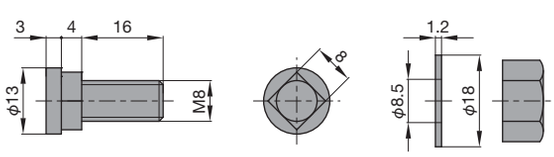
● H Rails



Hole slot positions in channel



Special bolt (with washer and nut)



H Rails			
Tsubaki rail no.	Material	Color	Length m
140HRW	UHMW-PE	White	2
140HRG		Green	

Special channels			
Tsubaki channel no.	Material	No. of mounting holes	Length m
140HCSS0	304 stainless steel	0	2
140HCSS6		6	

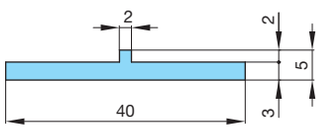
Special bolts		
Tsubaki bolt no.	Material	Remarks
140HBNP1S	Unichrome plated	With washer and nut
140HBSS1S	304 stainless steel	

Plastic Guide Rails (Extruded Guide Rails)

Standard Extruded Guide Rails

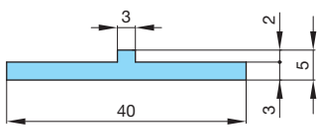
● T Rails

T Rails



Tsubaki rail no.	Material	Color	Length m
140TW	UHMW-PE	White	26
140TG		Green	

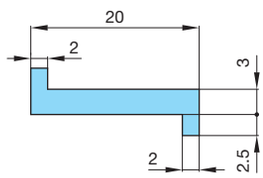
T-403 Rails



Tsubaki rail no.	Material	Color	Length m
140T403W	UHMW-PE	White	26
140T403G		Green	

● Z Rails

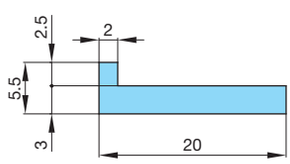
Z Rails



Tsubaki rail no.	Material	Color	Length m
140ZW	UHMW-PE	White	26
140ZG		Green	

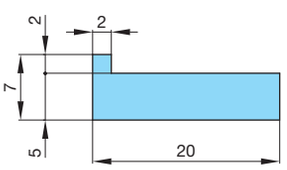
● L Rails

L Rails



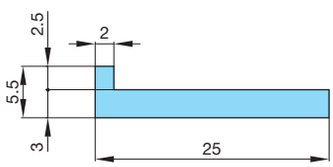
Tsubaki rail no.	Material	Color	Length m
140LW	UHMW-PE	White	26
140LG		Green	

L-5 Rails



Tsubaki rail no.	Material	Color	Length m
140L5W	UHMW-PE	White	20
140L5G		Green	

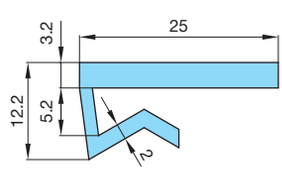
L-25 Rails



Tsubaki rail no.	Material	Color	Length m
140L25W	UHMW-PE	White	20
140L25G		Green	

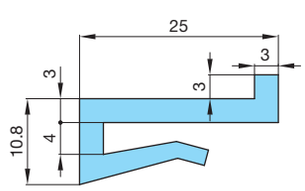
● Snap-on Rails

Snap-on Rail



Tsubaki rail no.	Material	Color	Length m
140SPRW	UHMW-PE	White	30

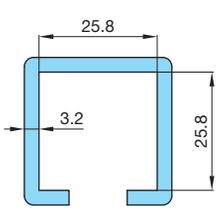
Snap-on L Rail



Tsubaki rail no.	Material	Color	Length m
140SPRLW	UHMW-PE	White	3

● SJQ-5 Rail

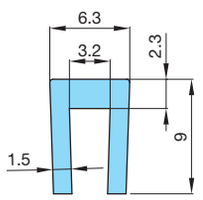
SJQ-5



Tsubaki rail no.	Material	Color	Length m
140SJQ5W	UHMW-PE	White	3

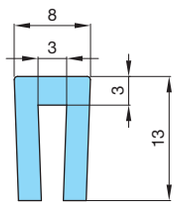
● V Rails

V-3



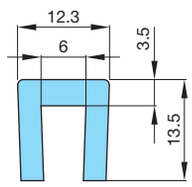
Tsubaki rail no.	Material	Color	Length m
140V3W	UHMW-PE	White	100

V-3L



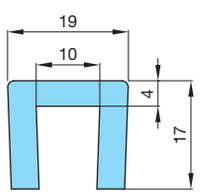
Tsubaki rail no.	Material	Color	Length m
140V3LW	UHMW-PE	White	100

V-6S



Tsubaki rail no.	Material	Color	Length m
140V6SW	UHMW-PE	White	30

V-10

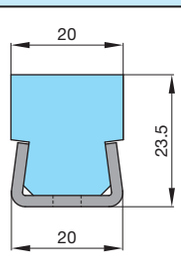


Tsubaki rail no.	Material	Color	Length m
140V10W50M	UHMW-PE	White	50
140V10W3M			3*

Note: *3-meter lengths are available on custom order.

● U Rails

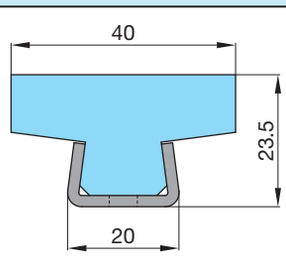
U-20



Tsubaki rail no.	Material	Color	Channel material	Length m
140U20W15M	UHMW-PE	White	SUS304	1.5
140U20W20M				2.0
140U20W24M				2.4

Note: Anti-static (black) and oil-impregnated (green) types are also available.

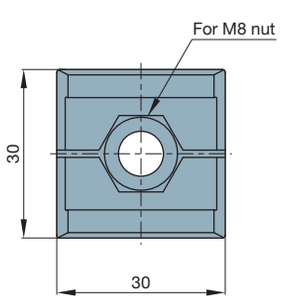
U-40

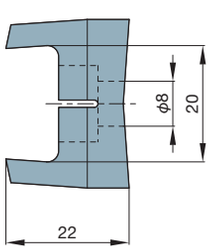


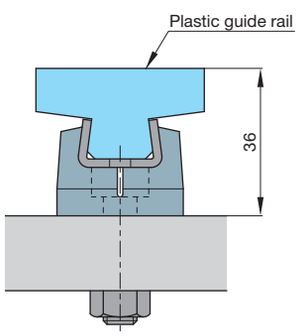
Tsubaki rail no.	Material	Color	Channel material	Length m
140U40W15M	UHMW-PE	White	SUS304	1.5
140U40W20M				2.0
140U40W24M				2.4

Note: Anti-static (black) and oil-impregnated (green) types are also available.

● Clamp for U Rail







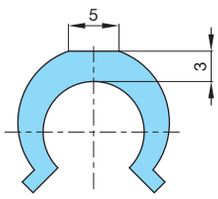
Tsubaki clamp no.	Material	Color
140UK	POM	Black

Note: 1. To install, tighten the M8 nut (bolt) to a torque of 9.8 to 14.7 N·m (1.0 to 1.5 kgf·m).
2. Plastic guide rails and stainless steel channel may slip and change position due to creepage. They should be secured using knock pins (dowel pins) or the like in the vicinity of drive sprockets.

Plastic Guide Rails (Extruded Guide Rails)

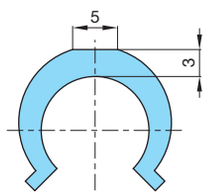
● R Rails

R-10



Tsubaki rail no.	Material	Color	Length m	Round bar mm
140R10W	UHMW-PE	White	3	10

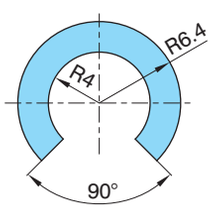
R-12



Tsubaki rail no.	Material	Color	Length m	Round bar mm
140R12W	UHMW-PE	White	3	12

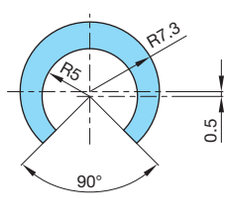
● C Rails

C-8



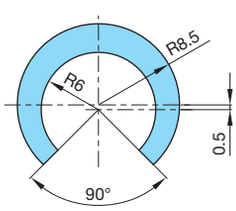
Tsubaki rail no.	Material	Color	Length m	Round bar mm
140C8W	UHMW-PE	White	3	8

C-10



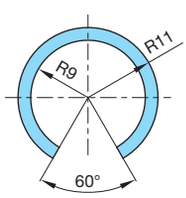
Tsubaki rail no.	Material	Color	Length m	Round bar mm
140C10W	UHMW-PE	White	3	10

C-12



Tsubaki rail no.	Material	Color	Length m	Round bar mm
140C12W	UHMW-PE	White	3	12

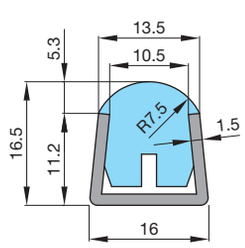
C-18



Tsubaki rail no.	Material	Color	Length m	Round bar mm
140C18W	UHMW-PE	White	3	18

● D Rails

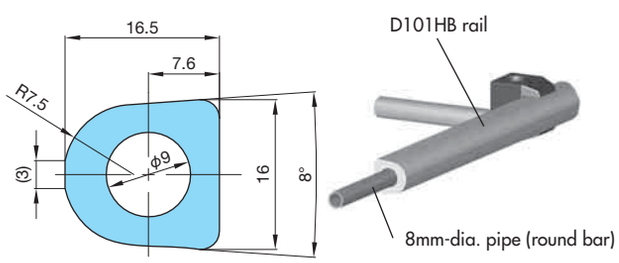
D Rail



With SUS304 stainless steel channel

Tsubaki rail no.	Material	Color	Length m
140DW	UHMW-PE	White	2
140DB	Special UHMW-PE	Black	

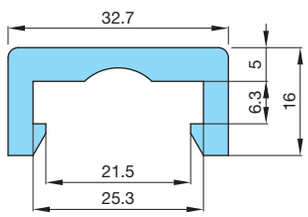
D101HB Rail



Tsubaki rail no.	Material	Color	Length m
140D101HBW	UHMW-PE	White	2

● FA Rails

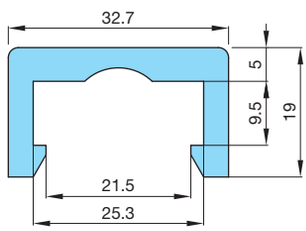
FA Rail



For 6×25mm flat bar

Tsubaki rail no.	Material	Color	Length m
140FAW	UHMW-PE	White	3

FA-2 Rail

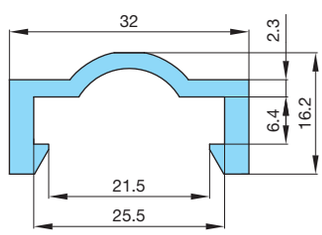


For 9×25mm flat bar

Tsubaki rail no.	Material	Color	Length m
140FA2W	UHMW-PE	White	3

● A Rail

A Rail

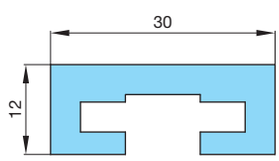


For 6×25mm flat bar

Tsubaki rail no.	Material	Color	Length m
140AW	UHMW-PE	White	3

● K Rail

K Rail

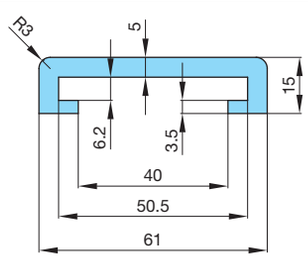


For 3×22mm flat bar

Tsubaki rail no.	Material	Color	Length m
140K3MW	UHMW-PE	White	3
140K3MB	Special UHMW-PE	Black	

● C650 Rail

C650



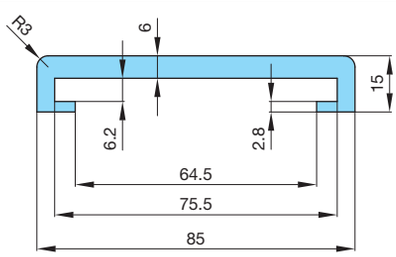
For 6×50mm flat bar

Tsubaki rail no.	Material	Color	Length m
140C650W	UHMW-PE	White	2*

Note: *3-meter and 4-meter lengths are available on custom order.

● C675 Rail

C675



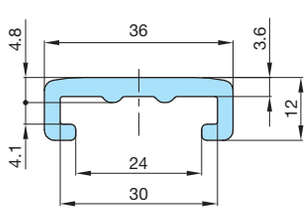
For 6×75mm flat bar

Tsubaki rail no.	Material	Color	Length m
140C675W	UHMW-PE	White	2*

Note: *4-meter lengths are available on custom order.

● GR4301 Rail

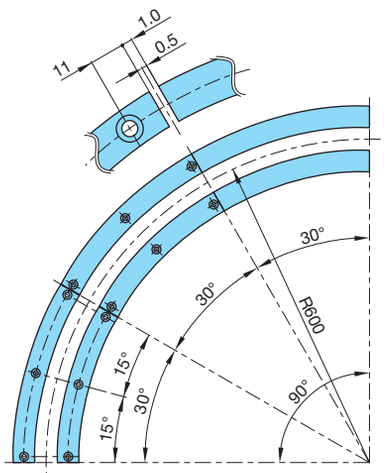
GR4301



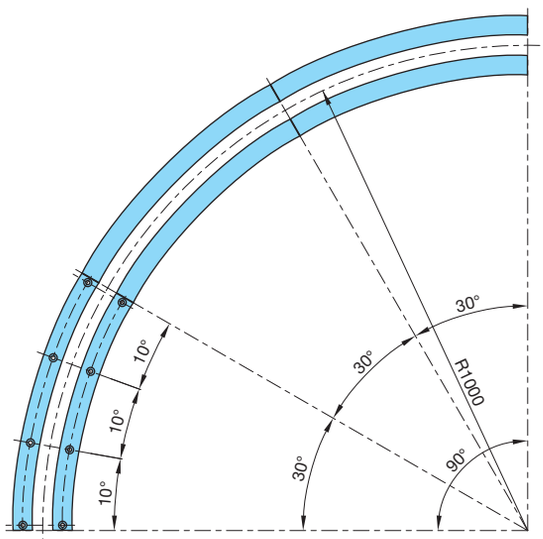
For 4×30mm flat bar

Tsubaki rail no.	Material	Color	Length m
310C430	UHMW-PE	White	3

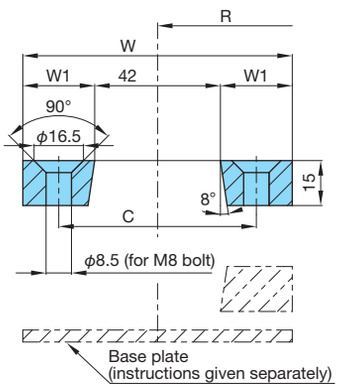
Curved Wearstrip (Split Type) for TTUP Chain



For R600



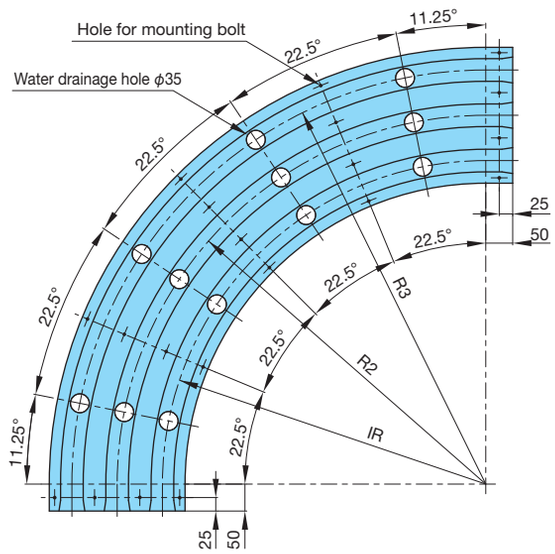
For R1000

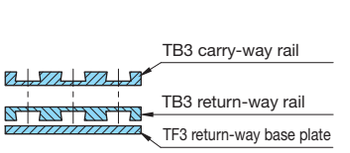


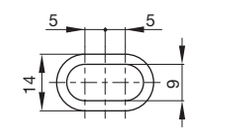
Chain type	Tsubaki rail no.	Center radius mm	Side	Material	Color	Arc angle	Dimensions mm			Number of holes
							Total width W	Rail width W_1	Hole position C	
TTUP826 TTUP826P	14032R600IW	600	Inside	UHMW-PE	White	30°	90	24	66*	3
	14032R600OW		Outside							
	14032R600IG	600	Inside		Green					
	14032R600OG		Outside							
	14032R1000IW	1000	Inside	UHMW-PE	White					4
	14032R1000OW		Outside							
	14032R1000IG	1000	Inside		Green					
	14032R1000OG		Outside							
TTUP1143 TTUP1143P	14044R600IW	600	Inside	UHMW-PE	White	30°	122	40	82*	3
	14044R600OW		Outside							
	14044R600IG	600	Inside		Green					
	14044R600OG		Outside							
	14044R1000IW	1000	Inside	UHMW-PE	White					4
	14044R1000OW		Outside							
	14044R1000IG	1000	Inside		Green					
	14044R1000OG		Outside							
TTUP1905	14074R600IW	600	Inside	UHMW-PE	White	30°	192	75	117*	3
	14074R600OW		Outside							
	14074R600IG	600	Inside		Green					
	14074R600OG		Outside							
	14074R1000IW	1000	Inside	UHMW-PE	White					4
	14074R1000OW		Outside							
	14074R1000IG	1000	Inside		Green					
	14074R1000OG		Outside							

Note: 1. Mounting holes are drilled to indicated dimensions.
2. Can be manufactured from PMW, a material that has better wear resistance and lower friction than UHMW-PE.

Curved Wearstrip (Solid Type) for TTUP Chain

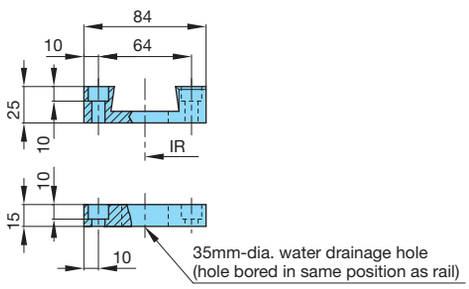




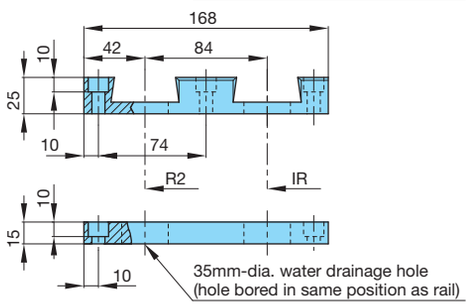


Detail showing hole for mounting bolt
(for M8 cap bolts)

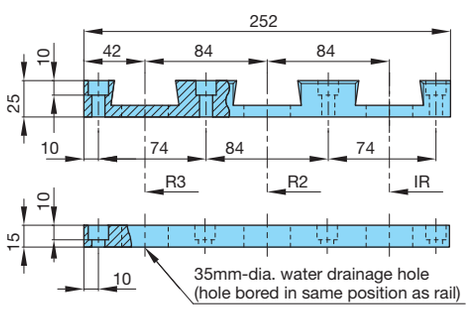
1 strand



2 strands



3 strands



Chain type	No. of strands	IR mm	R2 mm	R3 mm	Carry-way/ return-way rail	Return-way base plate	Set
TTUP826 TTUP826P	1	600	–	–	TB3-16-3	TF3-16-3	TB3-16-3·SET
	2	600	684	–	TB3-26-3	TF3-26-3	TB3-26-3·SET
	3	600	684	768	TB3-36-3	TF3-36-3	TB3-36-3·SET
	1	800	–	–	TB3-18-3	TF3-18-3	TB3-18-3·SET
	2	800	884	–	TB3-28-3	TF3-28-3	TB3-28-3·SET
	3	800	884	968	TB3-38-3	TF3-38-3	TB3-38-3·SET
	1	1000	–	–	TB3-10-3	TF3-10-3	TB3-10-3·SET
	2	1000	1084	–	TB3-20-3	TF3-20-3	TB3-20-3·SET
	3	1000	1084	1168	TB3-30-3	TF3-30-3	TB3-30-3·SET

Note: 1. Custom specifications other than those above, including number of rows, dimensions, color, and top plate width of 114.3mm, are available upon request.
2. Please consult Tsubaki for special specifications such as for super-high-speed operation.
3. Can be manufactured from PMW, a material that has better wear resistance and lower friction than UHMW-PE.

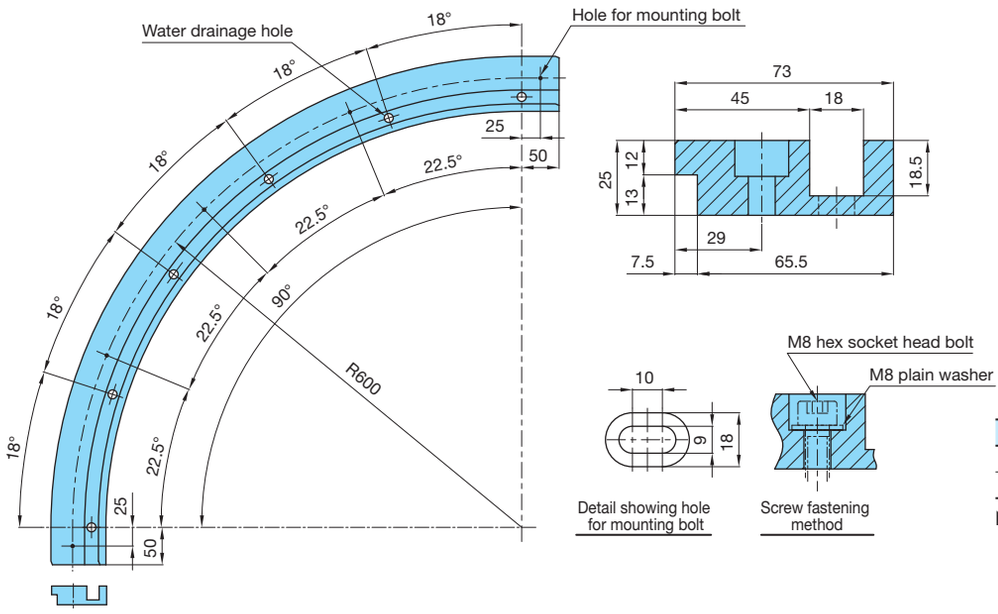
● Wearstrip Numbering

TB 3 – 1 6 – 3 · SET

- Three rails per set—carry way, return way, and base plate (not necessary when ordering carry way and return way individually)
- Material : 10-301 (green)
- Sideflex radius : R600
- Number of strands : For one strand (example)
- Top plate width : For 32 (826) (example)
- Carry way and return way (specify TF for return way base plate)

Curved Wearstrips for 3085C325 Chain

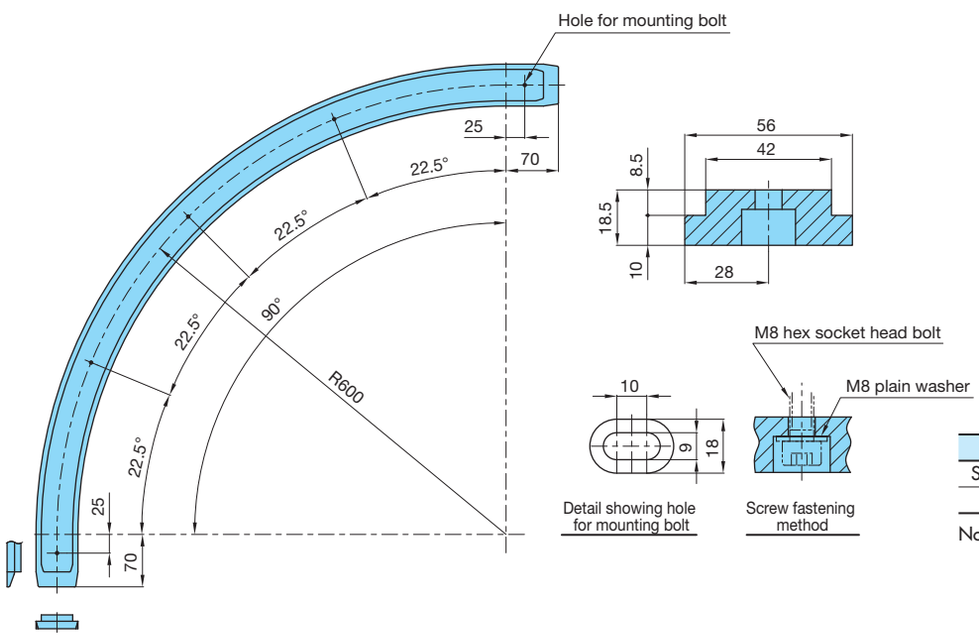
Curved Wearstrip for 3085C325 Chain – Carry Way



Material	Color
Special UHMW-PE	White
MC nylon	Gray

Note: Guide rails made of MC nylon (special polyamide) should be used only under dry conditions (no lubrication).

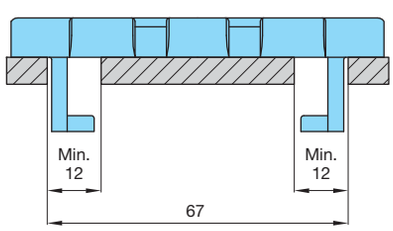
Curved Wearstrip for 3085C325 Chain – Return Way



Material	Color
Special UHMW-PE	White
MC nylon	Gray

Note: Guide rails made of MC nylon (special polyamide) should be used only under dry conditions (no lubrication).

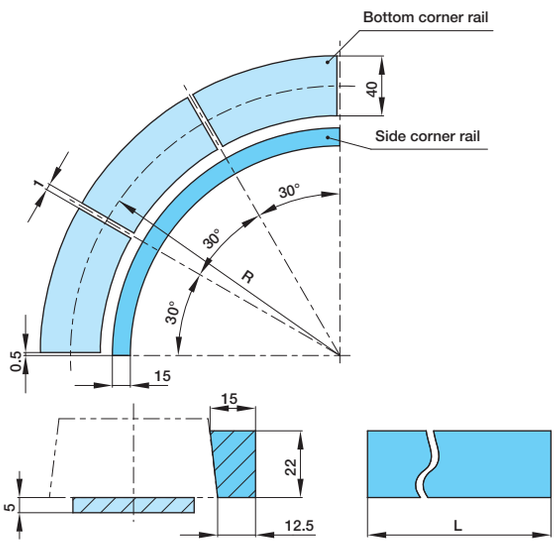
3085C325 Straight Rail Shape



Corner Rails for 50UNS Chain

● Corner Rails for 50UNS Chain

Two types of corner rails are available—a bottom corner rail to support the bottom of the chain while running, and a side corner rail that acts as a guide track to support the side of the chain.



• Bottom Corner Rails

Tsubaki rail no.	Center radius mm	Material	Color	Angle
1405UNKR60030W	600	UHMW-PE	White	30°
1405UNKR60030G			Green	
1405UNKR100030W	1000	UHMW-PE	White	
1405UNKR100030G			Green	
1405UNKR150030G	1500	UHMW-PE	Green	

• Side Corner Rails

Tsubaki rail no.	Material	Color	L mm	Angle	Remarks
1405UNSR60090W	UHMW-PE	White	900	90°	For R600
1405UNSR60090G		Green			
1405UNSR100090W	UHMW-PE	White	1530		For R1000
1405UNSR100090G		Green			
1405UNSR150090W	UHMW-PE	White	2315		For R1500
1405UNSR150090G		Green			

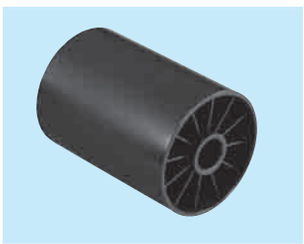
Note: Mounting holes will be drilled upon customer request.

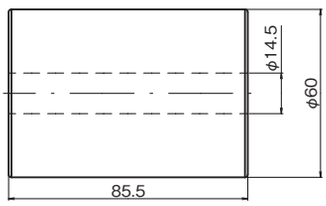
Peripheral Parts

Return Rollers & Guide Flanges

Note: Use return rollers on the return way of the conveyor to support the top surface of the chain.

• Return Roller

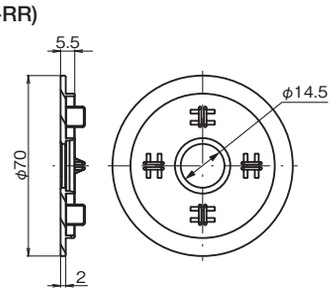




Material: Polyamide

Tsubaki return roller no.	Color
TP-C12890T-RR	Black

• Guide Flange (for TP-C12890T-RR)

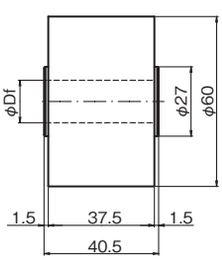


Material: Polyamide

Tsubaki guide flange no.	Color
TP-C12891T-GF	Black

Note: Will mount only on TP-C12980T-RR return roller (shown above).

• Split-Hub Return Roller (no flange)

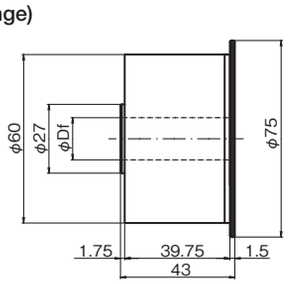


Material: High-density polyethylene
Color: Black

Tsubaki return roller no.	Shaft diameter Df
TP-C122113NT-RR	15.5
TP-C12535NT-RR	20.5

Note: TP-C12535NT-RR is for use with wide chains.

• Split-Hub Return Roller (with flange)

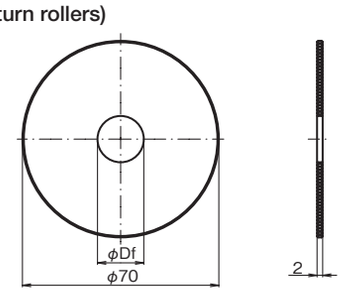


Material: High-density polyethylene
Color: Black

Tsubaki return roller no.	Shaft diameter Df
TP-C122116NT-RR	15.5
TP-C12536NT-RR	20.5

Note: TP-C12536NT-RR is for use with wide chains.

• Guide Flange (for split-hub return rollers)

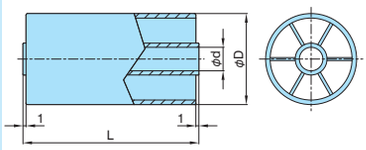


Material: Polypropylene
Color: Green

Tsubaki guide flange no.	Shaft diameter Df
TP-C12842T-GF	15.5
TP-C12534T-GF	20.5

Note: For use with split-hub return rollers.

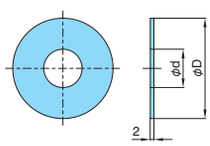
• Return Roller



Tsubaki return roller no.	Dimensions			Applicable guide flange
	D	d	L	
RR-41532	40	15.5	82	DP-415
RR-41544	40	15.5	114	DP-415
RR-61544	60	15.5	114	DP-615
RR-42032	40	20.5	82	DP-420
RR-42044	40	20.5	114	DP-420
RR-62032	60	20.5	82	DP-620
RR-62044	60	20.5	114	DP-620

Note: Use d=15.5 return rollers for plastic chain.
Material: Polyamide

• Guide Flange



Tsubaki return roller no.	Dimensions	
	D	d
DP-415	55	16
DP-615	80	16
DP-420	55	21
DP-620	80	21

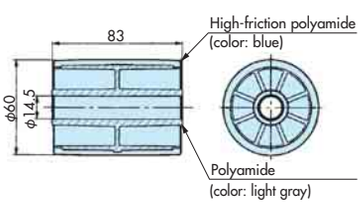
Material: Polyamide

High-Rotational-Performance Return Rollers & Guide Flanges

These return rollers use an engineering plastic having low resistance to the shaft on the inner circumference and a soft material having a high resistance to the chain on the outer circumference, thus ensuring exceptionally smooth rotation. These rollers are effective in situations in which damage to the top surface of the chain slats must be avoided, or to deaden noise on the return way of the chain.
In addition, we have expanded the line-up to include types that minimize the generation of wear dust by reducing contact with the slat top surfaces and through the use of internal bearings in the shaft hole.

TP-IR60, TP-IR18, TP-RR50: For dry conditions
TP-C121963, 121966RNT-RR, TP-C121967, 121970RNFT-RR: For wet and dry conditions

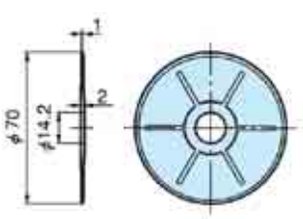
• TP-IR60 Return Roller



Tsubaki return roller no.	Operating temperature range
TP-IR60	-20°C to 80°C

Note: 1. Should not be used under wet conditions.
2. For use at chain speeds of less than 50 meters/minute.
3. Use return rollers on the return way of the conveyor to support the top surface of the chain.

• TP-GF70 Guide Flange

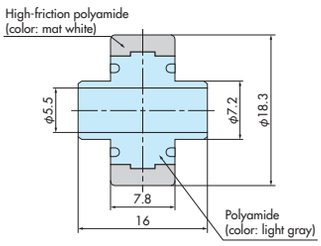


Tsubaki guide flange no.	Material (color)	Operating temperature range
TP-GF70	Antistatic polyacetal (light gray)	-20°C to 80°C

Note: For use with TP-IR60 return roller (shown above).

Peripheral Parts

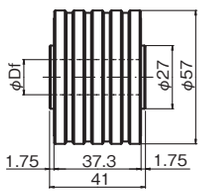
• TP-IR18 Return Roller



Tsubaki return roller no.	Operating temperature range
TP-IR18	-20°C to 80°C

Note: 1. Should not be used under wet conditions.
2. For use with BTC4-500-M.
3. Use return rollers on the return way of the conveyor to support the top surface of the chain.

• Split-Hub Return Roller (no guide flange)

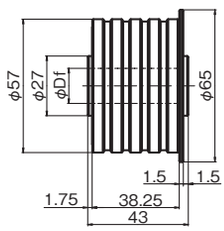


Material: Shaft/sides: High-density polyethylene (green)
Outer circumference: Thermoplastic rubber (gray)

Tsubaki return roller no.	Shaft diameter Df	Operating temperature range
TP-C121963RNT-RR	15.5	-20°C to 60°C
TP-C121966RNT-RR	20.5	

Note: 1. For use at chain speeds of less than 50 meters/minute.
2. TP-C121966RNT-RR is for use with wide chains.
3. Use return rollers on the return way of the conveyor to support the top surface of the chain.

• Split-Hub Return Roller (with guide flange)

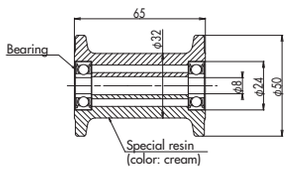


Material: Shaft/sides: High-density polyethylene (green)
Outer circumference: Thermoplastic rubber (gray)

Tsubaki return roller no.	Shaft diameter Df	Operating temperature range
TP-C121967RNFT-RR	15.5	-20°C to 60°C
TP-C121970RNFT-RR	20.5	

Note: 1. For use at chain speeds of less than 50 meters/minute.
2. TP-C121970RNFT-RR is for use with wide chains.
3. Use return rollers on the return way of the conveyor to support the top surface of the chain.

• TP-RR50 Return Roller (with internal bearings in shaft hole)



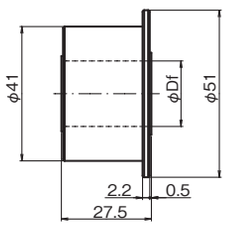
Tsubaki return roller no.	Operating temperature range
TP-RR50	0°C to 40°C

Note: 1. Should not be used under wet conditions.
2. For use at chain speeds of less than 50 meters/minute.
3. Use return rollers on the return way of the conveyor to support the top surface of the chain.

Return Rollers for Stainless Steel Top Chain

Note: Use return rollers on the return way of the conveyor to support the top surface of the chain.

• Return Roller (for stainless steel top chain)

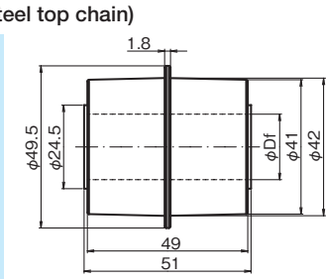


Material: High-density polyethylene
Color: Black

Tsubaki return roller no.	Shaft diameter Df
TP-C12822NT-RR	20.5

Note: 1. For use with stainless steel top chains.
2. Operating temperature range: -20°C to 60°C (except in hot water environments)

• Return Roller (for stainless steel top chain)

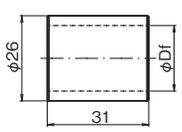


Material: High-density polyethylene
Color: Black

Tsubaki return roller no.	Shaft diameter Df
TP-C12862NT-DR	20.5

Note: 1. For use with stainless steel top chains.
2. Operating temperature range: -20°C to 60°C (except in hot water environments)

• Spacer (for 82.6-mm plate width)



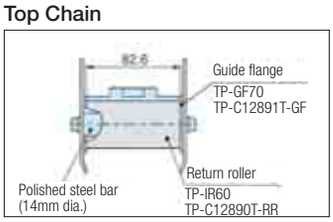
Material: Polyamide
Color: Black

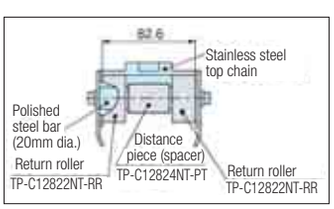
Tsubaki spacer no.	Shaft diameter Df
TP-C12824NT-DT	20.5

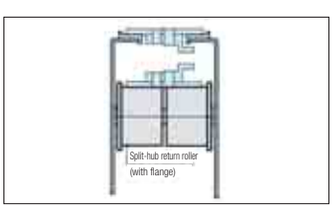
Note: 1. For plate widths other than 82.6mm, cut PVC pipe or similar material to the required width and assemble with the return roller shown above.
2. Operating temperature range: -20°C to 80°C (except in hot water environments)

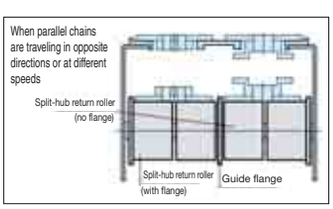
Return Roller Mounting Examples

Top Chain



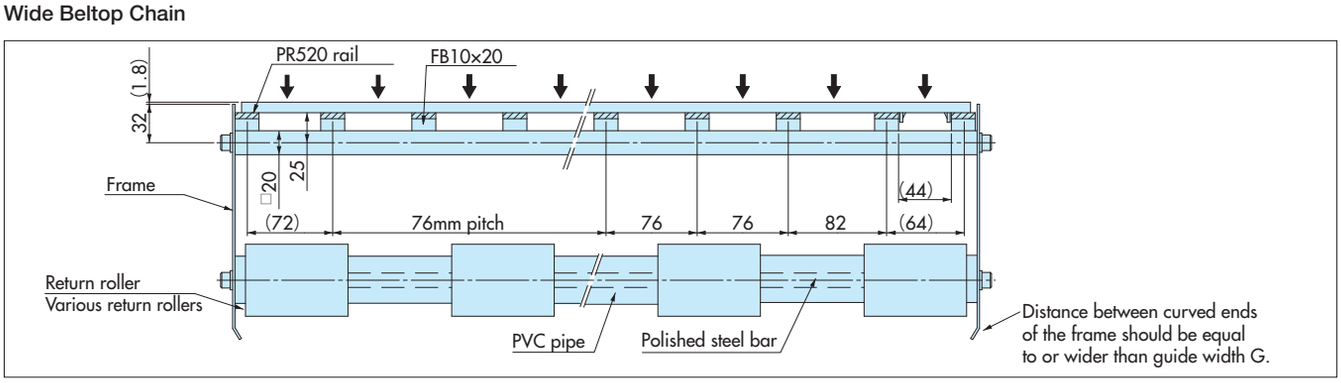






- When the plate width is greater than 83mm, use PVC pipe or similar material instead of the spacer shown above to adjust the distance between return rollers.
- Return rollers for stainless steel top chain will not rotate when combined with plastic chain, and may cause uneven wear of top plate surfaces.

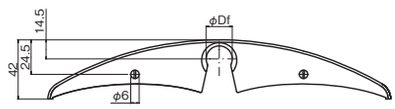
Wide Beltop Chain

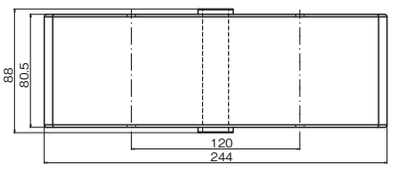


Sliding Shoes & Spacers for Plastic Top Chain

Sliding Shoes, Spacers, Washer Guide Rails

• Sliding Shoe (SD)



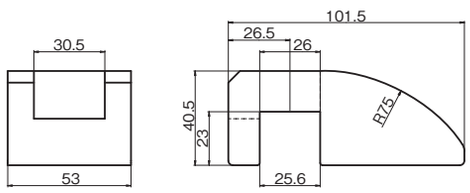


Application: For use with 82.6mm wide top chain
Material: Polyamide
Color: Black

Tsubaki sliding shoe no.	Bore diameter Df
TP-C14833BT-SD	20.5

Note: 1. For use with accumulation chains and roller tables.
2. Mount on 20mm-dia. round machined bar.
3. For use at chain speeds of less than 50 meters/minute.

• Sliding Shoe (SD)



Max. Chain Speed (m/min)

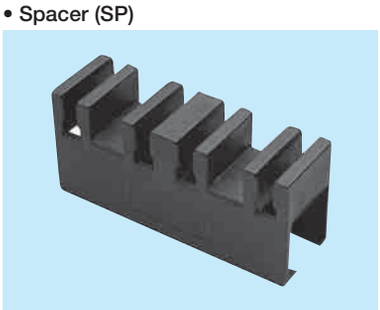
Chain material	Lube	
	None	Yes
Stainless steel	60	100
Polyacetal	40	60

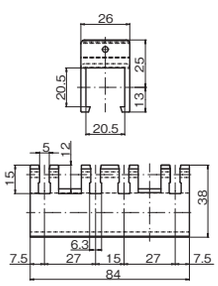
Material: Polyethylene (green)

Tsubaki sliding shoe no.	Operating temperature range
TP-C14343T-SD	-20°C to 60°C

Note: 1. For use with TP-C14320T-SP spacer.
2. For use with 82.6mm wide top chain.

• Spacer (SP)



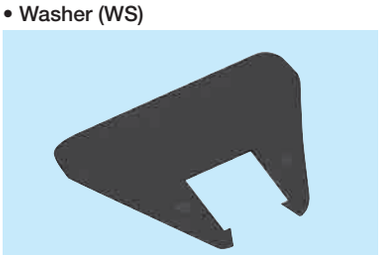


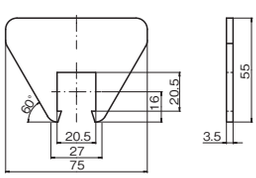
Material: Polyamide (black)

Tsubaki spacer no.	Operating temperature range
TP-C14320T-SP	-20°C to 80°C

Note: 1. For use with TP-C19067VT-PR guide rail.
2. Mount on 20 x 20mm square shaft.

• Washer (WS)



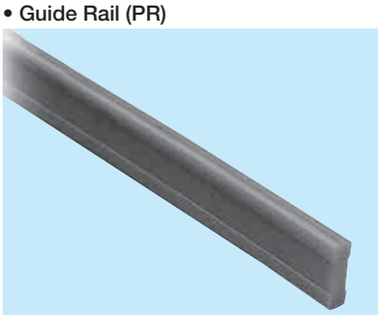


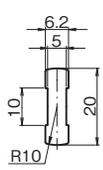
Material: Polyamide (black)

Tsubaki spacer no.	Operating temperature range
TP-C14322T-WS	-20°C to 80°C

Note: 1. For use with multiple strands of top chain to prevent interference between the chains.
2. For use with TP-C14320T-SP spacer.

• Guide Rail (PR)





Material: UHMW-PE (green)

Tsubaki rail no.	Standard length	Operating temperature range
TP-C19067VT-PR	60 m	-20°C to 60°C

Note: Guide rail for use with TP-C14320T-SP spacer.
Order length: Sold by the piece in 1-meter units.

For Your Safety When Using the Chain

Warning

To avoid danger, observe the following rules.

General

- Do not use chain or chain accessories for any purpose other than their originally intended use.
- Never perform additional work on chain (including machining, grinding, annealing, cleaning with acids or alkalis, electroplating, or welding or cutting with a torch which will cause heat effects). These processes may cause the chain to break during operation, leading to a risk of severe injury.
- When replacing a worn or damaged part, do not replace just the worn or damaged part. Replace all parts with new parts. The chain may break during operation, leading to a risk of severe injury.
- When using chain in a lifting device, set up a safety barrier and do not allow anyone to go under the equipment. Also, when jigs or tools are connected to the edges of the chain, be sure to adequately lubricate the connecting parts. Detachment of the chain or unexpected chain breakage may lead to severe injury from flying or falling parts.
- Strictly observe the general guidelines listed in Section 1, Chapter 1, 2nd Edition of the Japanese Occupational Safety and Health Regulations as well as rules and regulations concerning occupational safety and health in your region/country. Always install safety equipment (safety covers, etc.) on chain and sprockets. There is a risk of severe injury from conveyed items or the chain as a result of becoming caught in the chain or from unexpected chain breakage.
- Chain and sprockets must be inspected on a regular basis. Damaged parts, or parts that have reached the end of their service life, should be replaced with new parts. There is a risk not only of the chain not functioning properly, but also of severe injury from chain breakage or abnormal operation. Perform the work as instructed in the manual, catalog or other documentation that was provided with the product.

During Installation

- Before starting work, turn off the power switch and take measures to prevent it from being turned on accidentally. There is a risk of severe injury from becoming caught in the chain.
- Always wear safety goggles when using hammers while working to connect chains. There is a risk of severe injury from flying metal fragments or splinters.
- Secure the chain and parts to prevent them from moving freely. There is a risk of severe injury from chain components moving under their own weight, or from falling and body parts becoming pinched in the chain.

Caution

To prevent accidents, observe the following rules.

- Understand the structure and specifications of the chain that you are handling.
- Before installing chain, inspect it to make sure no damage occurred during delivery.
- Inspect and maintain chain and sprockets at regular intervals.
- Chain strength varies by manufacturer. Only Tsubaki products should be used when chain is selected using Tsubaki catalogs.
- Start and stop the chain gradually, and do not subject it to sudden impact.
- Do not apply initial tension to the chain.
- Consult with a Tsubaki representative before using the chain in cases where it will be in contact with special liquids or used under special environments.
- When disconnecting chains that have engineering plastic pins, do not reuse a pin once removed since it may not engage properly or it may even come loose.
- When using chains with engineering plastic pins under wet conditions, make sure that the temperature does not exceed 60°C.
- The link material for ULF ultra low friction series contains silicone-based lubricant. Therefore, do not use this chain for printing processes, or in cases where silicone will have a harmful effect.
- The TP-IR18/IR60/RR50 (return rollers) and PR520-M (M plastic rail) are dry conveyor parts (lube-free, no water adhesion). The DIA series and KV150 are specifically for dry environments. Do not use these on a conveyor under wet conditions (environments where they will come into contact with water, soapy water or other liquids), since this may cause the chain to malfunction. Bearing corner discs are also designed for use in dry environments.
- Using a plastic top chain in a wet environment will decrease the resin's self-lubricating ability and thus shorten the life of the chain. Since this is especially true with stainless steel pins, we recommend using plastic pins or KV series chain.
- The operating temperature range for accessories, sprockets, and idler wheels made of UHMW-PE (ultra-high molecular weight polyethylene) is -20°C to 60°C. Also, do not use in environments where such components will be exposed to steam.
- Toxic gases may be generated if the Chemical Resistant series (including Super Chemical Resistant) is exposed directly to open flame, or to temperatures above 150°C. Do not expose to excessive heat or to open flame.
- Plastic chain is flammable. Do not use at temperatures above the maximum allowable temperature or use near open flame. Combustion may generate dangerous toxic gases.

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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