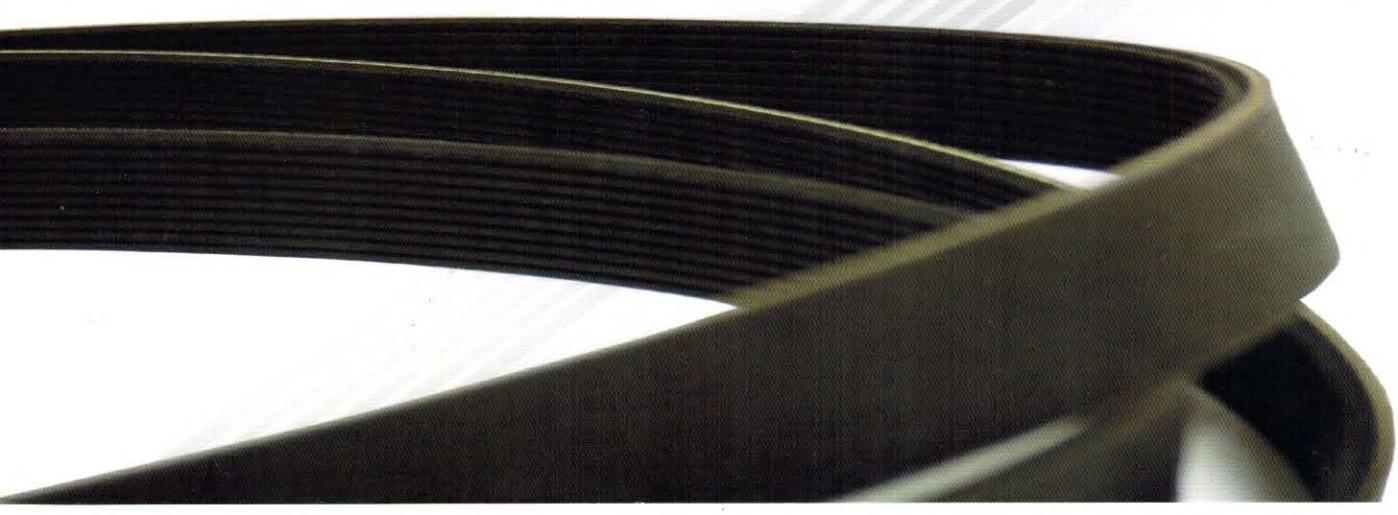
BANDO

BANDO Industrial Power Transmission Belts



Bando Power Transmission Belts

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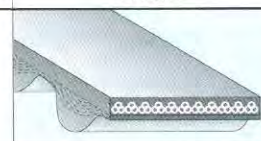
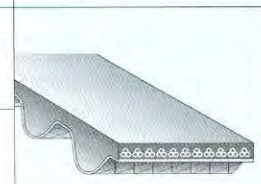
KPS II (King Power Synchronous Belt)	11	
Ceptor-X	13	
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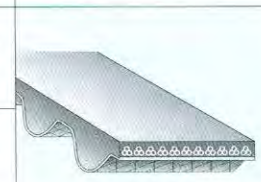
HP-STS (High-Performance Super-Torque Synchronous Belt) HP-HTS (High-Performance High-Torque Synchronous Belt)	19	
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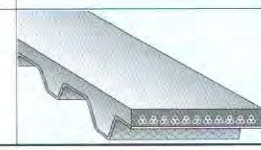
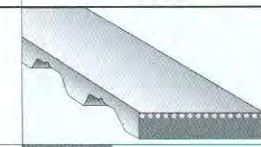
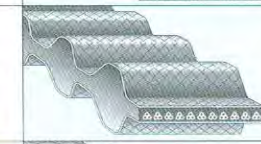
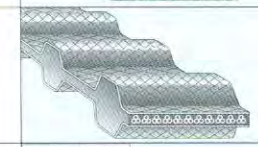
Synchronous Belt	31	
Bancollan Synchronous Belt	31	
Double-Sided STS	27	
Double-Sided Synchronous Belt	41	
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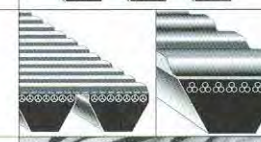
Banflescrum Banflex	65	
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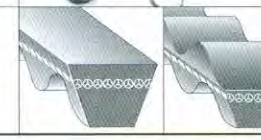
Bancollan V-Belt (VC-DC)	68	
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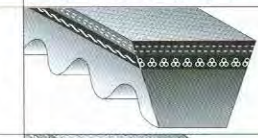
Power Ace Cog	54	
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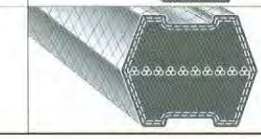
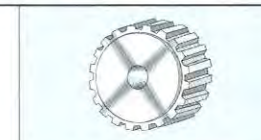
Double-sided V-belt	-	

Pulleys for General-Purpose Power Transmission Belts

STS pulley Synchronous Pulleys (shaft-hole-machined type) (rod-shaped pulley) HTS pulley (shaft-hole-machined type)	-	
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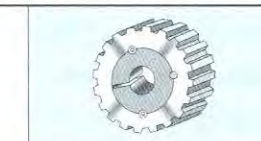
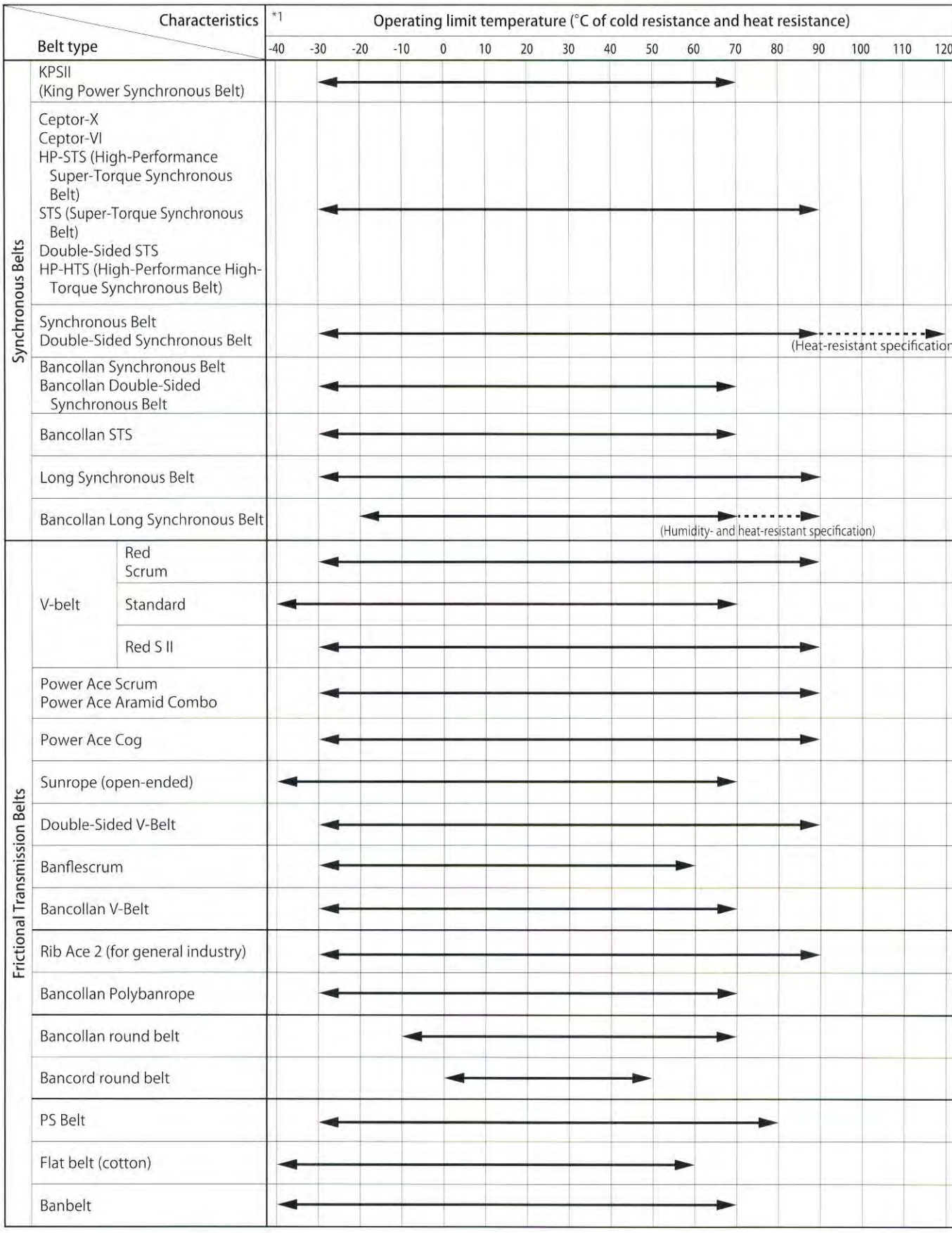
TL-STS pulley TL synchronous pulley With BAN-LOCK	-	
TL Power Ace pulley (bushing type) Power Ace pulley (shaft-hole-machined type)	-	

Required Quality Communication Form for Power Transmission Belt (Information Necessary for Belt Design)

When you need calculation for power transmission belt design, please check the following listed items and contact us.

<table>
<tr><td>Machinery name</td><td></td><td>Section where the belt is to be used</td><td></td></tr>
<tr><td rowspan="2">Driving machine characteristics</td><td colspan="3">1. Standard motor [AC motor (normal torque / squirrel-cage type / synchronous transmission) / DC motor (shunt-wound)]
Engine with two or more cylinders</td></tr>
<tr><td colspan="3">2. Special motor [AC motor (high torque / single-phase / series-wound) / DC motor (series-wound / shunt-wound)]
Single-cylinder engine / line shaft / clutch</td></tr>
<tr><td>Driven power
(If unclear, enter driving power)</td><td colspan="3">Normal _____ [kW, W, kgf•m, kgf•cm / PS, N•m, N•cm]
Max. _____</td></tr>
<tr><td>Driving pulley dia.</td><td colspan="3">Outside dia. _____ ± _____ mm
Pitch dia.
No. of teeth of pulley _____</td></tr>
<tr><td>Driving pulley revolution</td><td colspan="3">_____ rpm</td></tr>
<tr><td>Driven pulley dia.</td><td colspan="3">Outside dia. _____ ± _____ mm
Pitch dia.
No. of teeth of pulley _____</td></tr>
<tr><td>Driven pulley revolution</td><td colspan="3">_____ rpm ± _____ rpm</td></tr>
<tr><td>Allowable pulley width</td><td colspan="3">_____ mm</td></tr>
<tr><td>Center distance</td><td colspan="3">_____ mm ± _____ mm</td></tr>
<tr><td>Operating time</td><td>1. Intermittent use (3 to 5 hours/day)
2. Normal use (8 to 10 hours/day)
3. Continuous use (16 to 24 hours/day)</td><td>Use of idler pulley</td><td>Use / Not use
(inside / outside)
(slack side / tight side)</td></tr>
<tr><td>Requirement characteristics</td><td colspan="3">Vertical shaft power transmission / Fixed pulley diameter / Static electricity prevention / Electrical insulation / Water resistance
Humidity resistance / Oil resistance (mist form / liquid form) / Dust particle resistance / Low noise
Low speed / For positioning / With reciprocating motions / For food conveyance / For conveyance
For high load / Multi-axis power transmission / With idler pulley / Fixed center distance
Long span (power transmission / conveyance) / Special profile (back face processing etc.)
Others</td></tr>
<tr><td rowspan="2">Sudden stop and sudden acceleration</td><td colspan="3">1. Sudden stop Braking on the (driving / driven side)
Sum total of GD^2 _____ $kgf•m^2$ (opposite side to the brake)
Deceleration from revolution n_1 _____ to n_2 _____
Time to change from n_1 to n_2 _____ s
Frequency of sudden stop _____ times/day</td></tr>
<tr><td colspan="3">1. Sudden acceleration
Sum total of GD^2 _____ $kgf•m^2$
Acceleration from revolution n_1 _____ to n_2 _____
Time to change from n_1 to n_2 _____ s
Frequency of sudden acceleration _____ times/day</td></tr>
<tr><td>Other requirements</td><td colspan="3"></td></tr>
</table>

Characteristics Selection Table (Reference)



	Belt type \ Characteristics		*2 Oil resistance	Acid resistance	Alkali resistance	Weather resistance	Water and humidity resistance	Flame resistance	Noise	Vibration
Synchronous Belts	KPSII (King Power Synchronous Belt)		■			■				■
	Ceptor-X Ceptor-VI HP-STS (High-Performance Super-Torque Synchronous Belt) STS (Super-Torque Synchronous Belt) Double-Sided STS HP-HTS (High-Performance High-Torque Synchronous Belt)									■
	Synchronous Belt Double-Sided Synchronous Belt		*3	*4			*4		*5	■
	Bancollan Synchronous Belt Bancollan Double-Sided Synchronous Belt		■			■				■
	Bancollan STS		■			■				■
	Long Synchronous Belt									■
	Bancollan Long Synchronous Belt		■			■				■
Frictional Transmission Belts	V-belt	Red Scrum								
		Standard								
		Red S II								
	Power Ace Scrum Power Ace Aramid Combo									
	Power Ace Cog									
	Sunrope (open-ended)									
	Double-Sided V-Belt									
	Banflescrum					■				■
	Bancollan V-Belt					■				
	Rib Ace 2 (for general industry)									■
	Bancollan Polybanrope					■				■
	Bancollan round belt					■			■	
	Bancord round belt					■			■	
	PS Belt								■	■
	Flat belt (cotton)									
	Banbelt									■

Color-coded indication

■ Very high
□ High
□ Slightly problematic
□ Better not to use

*1 The operating limit temperature indicates ambient temperature.
*2 For material quality, oil resistance evaluation takes belt slip into consideration.
*3 Very high with oil-resistant specification products.
*4 Low-noise specification products should not be used.
*5 High with low-noise specification products.

Flat Belt Drive System: Hyper Flat Drive System

Eco Drive System with Top Energy-Saving Level!

The HFD (Hyper Flat Drive) is a high-efficiency power transmission system that meets the needs of the entire Earth environment, such as energy-saving and reduced CO_2 emissions.

Product Concept

We have developed a high-efficiency belt power transmission system (HFD) using an anti-meander device and a newly designed flat belt that aim at energy-saving and reduced CO_2 emissions and that were developed as items that can smoothly transmit power with a flat belt at high efficiency.

Product Features

- Transmission efficiency improvement and operation at an optimum tension allow you to expect a significant energy-saving effect and reduced CO_2 emissions.
- The longer service life and tensioning by the tensioner eliminate the need for maintenance.
- The thin belt and the resulting lower effect of distortion due to bending enable smaller pulleys and miniaturization.

Principles and structure of flat belt drive system (HFD)

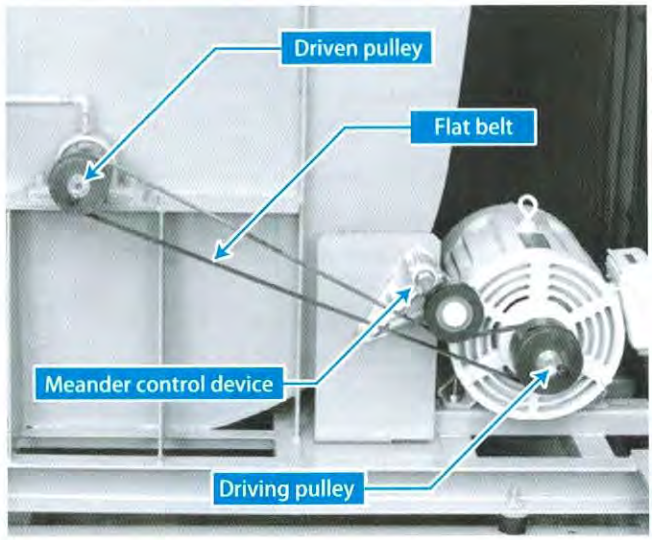
Device Structure

*The applicable capacities are guidelines.
*When you consider the use outside the range of the applicable capacity, please consult us.

This is a high-power-transmission and high-efficiency flat belt specification using the rubber and cord design techniques that were accumulated over many years in the automobile field.
By installing a pulley that controls the meander of the flat belt, the belt and the pulleys can autonomously control themselves, and by stably maintaining tensioning using the spring, a long service life and the elimination of the need for maintenance have become possible. The system can be easily installed by securing the sections A and B on the bracket as designed. By so doing, the system is designed to provide an appropriate tension.

Flat belt Structure

Mounting Example



Adoption Track Record

Air-conditioning machines, blowers, compressors, robotics field, etc.

Range of Manufacturable Sizes

Flat belt

● List of belt standard lengths (Unit: mm)

1000	1060	1120	1180	1250	1320
1400	1500	1600	1700	1800	1900
2000	2120	2240	2360	2500	2650
2800	3000	4000	4250	4400	4500
4750	5000	5200			

- The standard belt widths are 10 mm, 15 mm, 20 mm, 25 mm, 30 mm, 35 mm, 40 mm, and 45 mm, totaling eight types.
- The standard belt thickness is 2.6 mm (belt standard lengths: 1000 to 3000 mm) and 3.0 mm (belt standard lengths: 4000 to 5200 mm), totaling two types.

Meander control pulley

The standard pulley widths are 30 mm, 40 mm, and 75 mm, totaling three types.

Flat pulley

Driving and driven pulleys for the HFD system require flat pulleys.

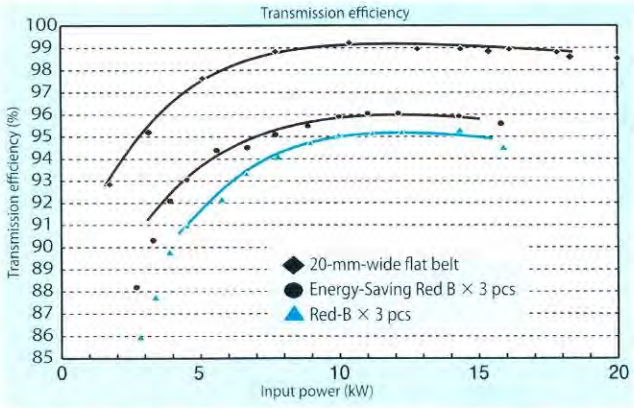
*Flat pulleys are available from us; please consult us.

Flat belt system design

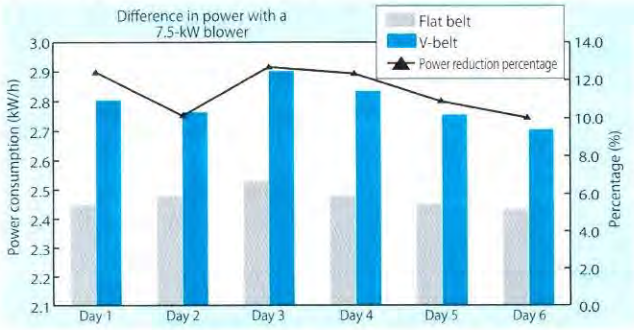
The current setting range is aimed at 2.2 to 45 kW (75 kW). For a capacity of 45 kW or more or outside the range of the applicable capacity, please consult us.
We will consult with you on energy-saving, pulley miniaturization, and size reduction in accordance with the operating conditions and layout drawings.

Verification Result for Flat Belt Drive System

■ Power transmission efficiency verification result



■ Power consumption verification result



■ Energy-saving and CO_2 emissions reduction effects

The Type-A three V-belts Red of the 7.5-kW blower were replaced with a single 10-mm flat belt!
(Calculated with an operating rate of 10 hr/day and 300 days of operation annually)

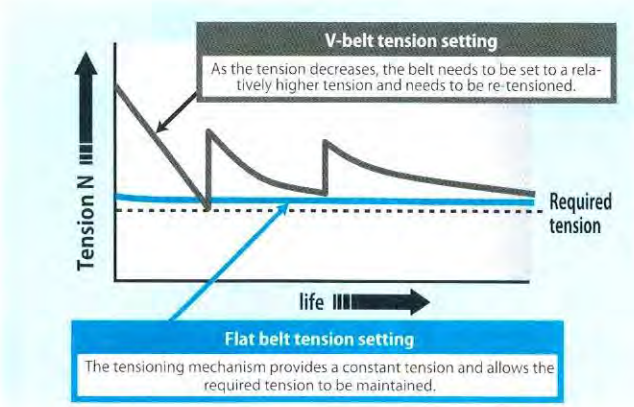
<Energy-saving effect> With approx. 0.3 kW/h and an electricity cost of 12 yen/kWh, the effect in value = 12 yen × 0.3 kW/h × 10 h/day × 300 days/year ≈ 10,800-yen/year reduction in cost.

<Amount of CO_2 emissions reduced> CO_2 conversion factor = 0.378 kg CO_2/kWh
Amount reduced: 0.378 × 0.3 kW/h × 10 h/day × 300 days/year ≈ 340-kg/year reduction in CO_2 emissions

Note: The CO_2 conversion factor used the average value for general electric utilities by the "Calculation method of greenhouse gas emissions from utilities (draft proposal)" by the Global Environmental Bureau of the Ministry of Environment in July 2003.

■ Elimination of the need for maintenance

(Compared to V-belts: about 2.5-fold service life)
The longer service life and tensioning by the tensioner have eliminated the need for maintenance.

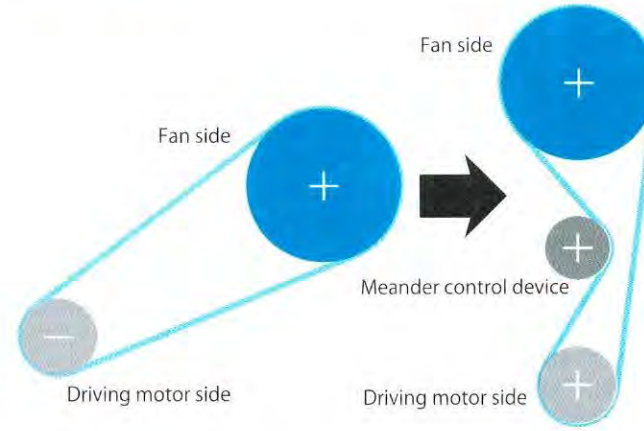


As the flat belt is thin, it is less affected by bending distortion when it is wrapped around a pulley. Therefore, even if it is affected by reverse bend, its service life is as long as approximately 2.5 times that of V-belts. The tensioning mechanism eliminates the reduction in tension that used to occur with V-belts and allows a tension close to the required tension to be maintained at all times; making the belt maintenance-free and achieving a longer service life.

■ Compact design possible

(Compared to V-belts: about 40% reduction)
The thinness and the little effect of distortion by bend eliminate the effect on durability even when reverse bend is applied, allowing compact designs.

		Previous system	Flat belt drive system
Belt specification		V-belt Red	Flat belt
(Example of an experiment at 11 kW)		Type B × 3 pcs (50.1 mm)	20 mm-wide
Pulley dia.	Pulley dia. on driving motor side	ϕ133 mm/1750 rpm	ϕ115 mm/1750 rpm
	Pulley dia. on fan side	ϕ710 mm	ϕ612 mm
Center distance		1220 mm	500 mm
Pitch length		3810 mm (150 inches)	2542 mm



Precautions for Use

- Applicable model: For driving blowers and compressors (For applications, please consult us.)
- Applicable capacity: 2.2 to 45 kW (75 kW) (For outside this range, please consult us.)
- Operating temperature range: -10°C to 60°C
- For HFD installation layout, we will provide a recommend design based on design layout drawings and operating conditions.
- Other environmental conditions that should be avoided
  - ① Operation in a condensing condition
  - ② Use in a dusty environment
  - ③ Use with 6P motors other than inverters
  - ④ Use with insufficient frame strength
  - ⑤ Use in an environment that may be directly exposed to rainwater
  - *In particular, never let rainwater or the like into the sliding section of the fulcrum of the tensioner.
  - ⑥ For use in an environment in which water or oil may adhere and in environments described in ② and ⑤, provide protection by covers or the like.
  - ⑦ For HFD installation, we will provide guidance separately, including settings such as misalignment.

Next-Generation Tension Gauge [Natural Vibration Measuring Instrument]

TENSION MASTER

Tension Master
(Natural vibration measuring instrument)
Capable of measuring natural vibration

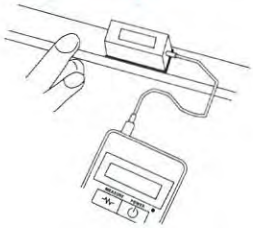
Smartphone
Download the dedicated app

Tension gauge
Capable of measurement on the highest level in the industry

Features

① As vibrations can be measured directly with the acceleration sensor, measurement can be performed even under a noisy environment.
(A sonic-type tension gauge senses noise simultaneously with the microphone, making it likely to result in a measurement error.)
② Accurate measurement is possible even with a layout or belt type that emits low-frequency sound, which is difficult to measure with the sonic type.
③ Measurement accuracy on the highest level in the industry.
④ The calculation function software can be used with a smartphone (tablets can also be used).
⑤ It can also be used as a measuring instrument for natural frequency of equipment, machinery, or buildings.

How to Measure Frequency



Flip with a finger etc. to vibrate it.

Measurement accuracy

- Measurement range of natural frequency: 10 to 1000 Hz
- Measurement accuracy of natural frequency: ±1%
- Sampling frequency: 3.2 kHz
- Operating ambient temperature: -10°C to 60°C

How to Use

Download the app into your smartphone.

*The app is available on Google Play and App Store. Calculation on the website is also possible.

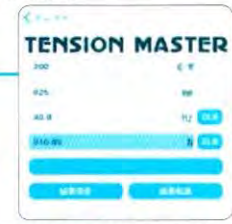
Pattern 1 Tension calculation by selecting a belt

① Input operating conditions.
② Measure the frequency with the Tension Master.→ Input the frequency and calculate the tension.

② Input a target tension (recommended tension) and calculate the target frequency.

Pattern 2 Tension calculation from the unit weight

① Input a unit weight and span length of the belt.
② Measure the frequency with the Tension Master.→ Input the frequency and calculate the tension.



② Input a target tension (recommended tension / design calculation) and calculate the target frequency.

Synchronous Power Transmission (Synchronous Belts)

King Power Synchronous Belt (KPS II)

1. Product Introduction

KPS II was developed based on the new material and new technology developed for KPS, featuring reduction in belt tension changes and improvement of power transmission capacity, and enables energy-saving, space-saving, and high accuracy.

Features

■ High transmission capacity — It has a high transmission capacity of 1.5 to 5 times that of rubber STS, with a smaller belt width than STS, enabling space-saving and resource-saving of power transmission devices.

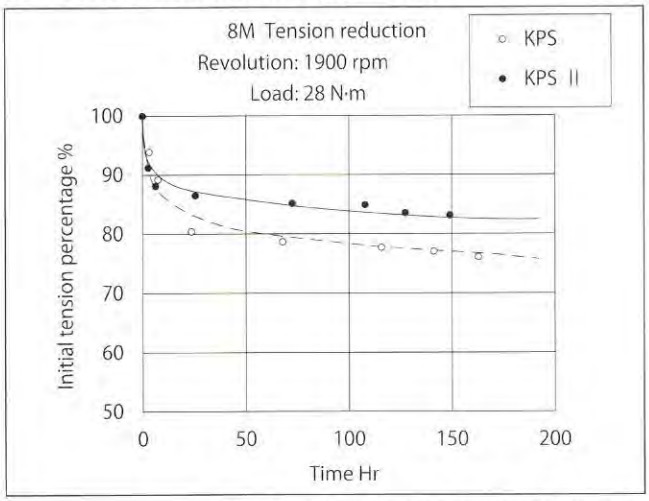
■ General-purpose — The compatibility with rubber STS and the previous KPS allows utilization of STS standard pulleys in stock.

■ Clean activity — The abrasion-resistant polyurethane has little rubber piece fracture, enabling a clean power transmission device to be designed.

■ Low noise — The noise is lower than chain power transmission by 3 dB to 5 dB.

■ Ozone resistance — It employs polyurethane, which has higher ozone resistance than that of chloroprene rubber.

<Belt tension reduction comparison>



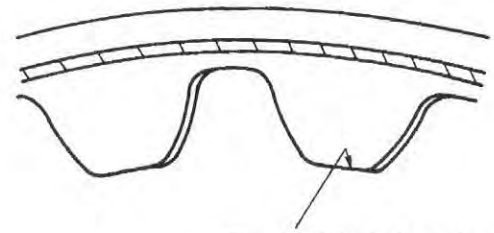
*The above data is based on our bench test results.

Mesh Theory of KPS II

Bando KPS II performs the following unique meshing.

The tip of the belt tooth and the bottom of the pulley are in contact.

KPS II meshes with the tip of the belt tooth in close contact with the bottom of the pulley. As a result, the force applied on the belt is dispersed and becomes uniform. In addition, the cords mesh in a mostly perfect circle condition, which eliminates cord bending (polygonal phenomenon) and significantly reduces cord fatigue, resulting in an extended belt service life.
The pulley has an arc-shaped bottom and side face, allowing smooth close contact with the belt.

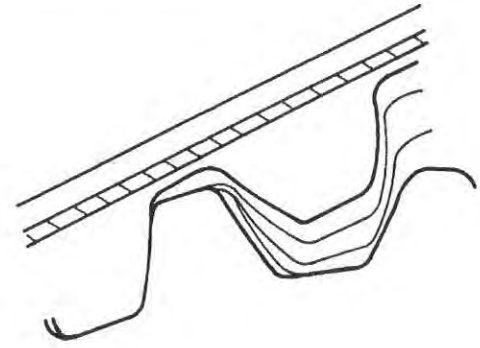


The tip of the belt tooth and the pulley are in contact.

KPS II meshing condition

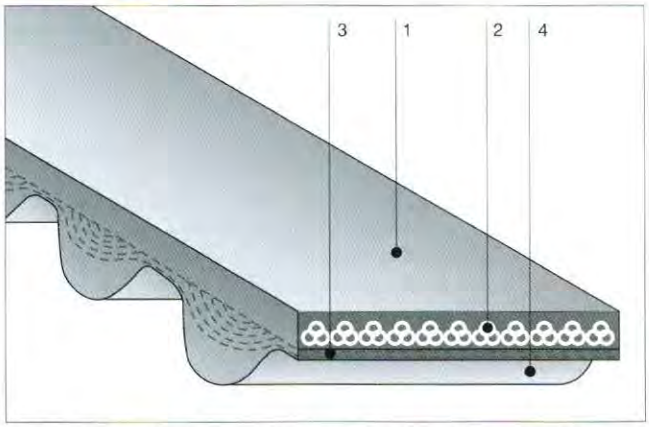
The tooth profile smooths meshing.

For synchronous belts, the tooth section needs to be enlarged as one method of increasing transmission capability. However, with the previous synchronous belts, enlarging the tooth profile causes interference between the teeth and the pulley, resulting in a reduced service life.
KPS II has an arc-shaped tooth profile; hence, enlarging the belt tooth section does not cause interference with the pulley, achieving smooth meshing.



Condition at the start of meshing of KPS II

Structure



1. Back face rubber 2. Cord 3. Special fiber 4. Tooth rubber

Belt dimensions and indication method

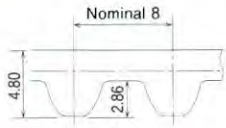
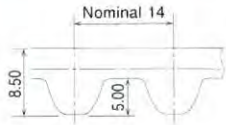
Belt type	Dimension (mm)	Belt indication method
8M		600 KPS II 8M 1000 Belt width (60mm) Belt type (Type 8M) Belt pitch length (1000mm)
14M		800 KPS II 14M 1400 Belt width (80mm) Belt type (Type 14M) Belt pitch length (1400mm)

Table of standard effective lengths

KPS II 8M					
Belt designation	Nominal pitch length (mm)	No. of teeth	Belt designation	Nominal pitch length (mm)	No. of teeth
KPS II 8M 640	640	80	KPS II 8M 1120	1120	140
KPS II 8M 680	680	85	KPS II 8M 1152	1152	144
KPS II 8M 720	720	90	KPS II 8M 1200	1200	150
KPS II 8M 760	760	95	KPS II 8M 1280	1280	160
KPS II 8M 800	800	100	KPS II 8M 1360	1360	170
KPS II 8M 848	848	106	KPS II 8M 1440	1440	180
KPS II 8M 896	896	112	KPS II 8M 1520	1520	190
KPS II 8M 944	944	118	KPS II 8M 1600	1600	200
KPS II 8M 1000	1000	125	KPS II 8M 1696	1696	212
KPS II 8M 1024	1024	128	KPS II 8M 1792	1792	224
KPS II 8M 1032	1032	129	KPS II 8M 1960	1960	245
KPS II 8M 1056	1056	132			

KPS II 14M					
Belt designation	Nominal pitch length (mm)	No. of teeth	Belt designation	Nominal pitch length (mm)	No. of teeth
KPS II 14M 994	994	71	KPS II 14M 1568	1568	112
KPS II 14M 1120	1120	80	KPS II 14M 1652	1652	118
KPS II 14M 1190	1190	85	KPS II 14M 1708	1708	122
KPS II 14M 1260	1260	90	KPS II 14M 1890	1890	135
KPS II 14M 1400	1400	100	KPS II 14M 1960	1960	140
KPS II 14M 1470	1470	105	KPS II 14M 2380	2380	170

Belt standard widths

(Nominal width: belt width (mm) × 10)

Nominal width	150	250	400	600	800	1000	1200
Belt width (mm)	15	25	40	60	80	100	120
8M	○	○	○	○			
14M		○	○	○	○	○	○

Note 1) For other belt widths than standard belt widths, please contact us.
Note 2) For pulleys, please use our standard STS pulleys (→ P. 131).

Belt dimensional tolerance

Effective length

(Unit: mm)

KPS II 8M		KPS II 14M	
Effective length	Tolerance	Effective length	Tolerance
754 or less	±0.42	1182 or less	±0.63
Over 754 to 994 or less	±0.63	Over 1182 to 1462 or less	±0.67
Over 994 to 1274 or less	±0.67	Over 1462 to 1702 or less	±0.78
Over 1274 to 1694 or less	±0.78	Over 1702 to 1972 or less	±0.98
Over 1694 to 1964 or less	±0.98	1972 or more	±1.45

Note) The effective length tolerance is the tolerance of center distance in length measurement.

Belt width

(Unit: mm)

Belt nominal width	Effective length classification		
	840 or less	841~1680	1680 or more
400 or less	+0.8 -0.8	+0.8 -1.2	+0.8 -1.2
Over 400 to 500 or less	+0.8 -1.2	+1.2 -1.2	+1.2 -1.6
Over 500 to 750 or less	+1.2 -1.6	+1.6 -1.6	+1.6 -2.0
Over 750 to 1000 or less	+1.6 -1.6	+1.6 -2.0	+2.0 -2.0
Over 1000	+2.4 -2.4	+2.8 -2.8	+3.2 -3.2

1. Product Introduction

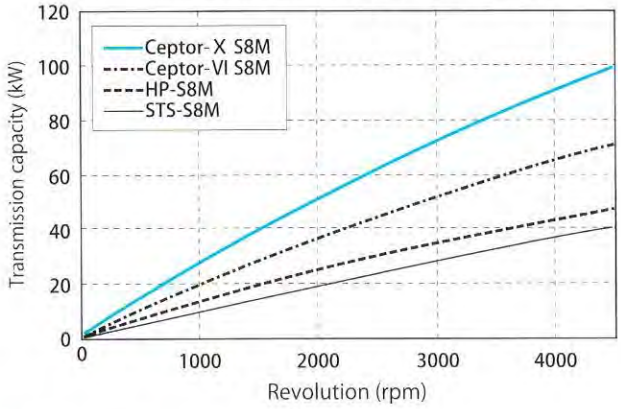
As a result of recent demands for "space-saving, weight reduction, and noise reduction" of industrial machinery, we have developed "Ceptor-X/heavy duty STS belt" utilizing our long-accumulated technological force.

Features

■ High-torque power transmission

Ceptor-X provides higher torque and higher power transmission than normal trapezoidal teeth due to the mesh theory of the unique curvilinear teeth and has achieved high torque and high power transmission by using high-rigidity and high-elasticity components. Although it varies depending on the field, it has a 2.7-fold or more transmission capacity compared to normal STS.

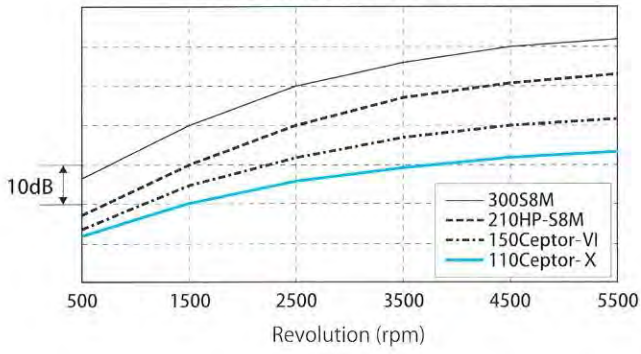
Belt width: 60 mm / Pulley: 26 teeth



■ Low noise

As the belt width can be narrower than the previous specification, the noise can be reduced.

Noise comparison evaluation



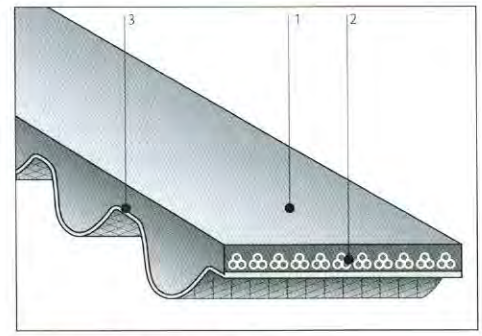
■ Miniaturized

The high transmission capacity allows a narrower width and a smaller pulley diameter than the previous specifications, allowing compact designs.

■ Pulleys used

Ceptor-X can be used with the standard STS pulleys and TL STS pulleys.

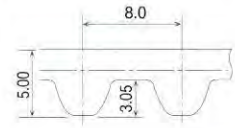
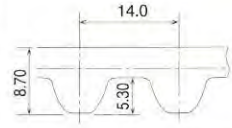
Structure



1. Rubber 2. Cord 3. Facing fabric

- **Rubber**: Adoption of a synthetic rubber with little tooth deformation, high hardness, and high elasticity
- **Cord**: Adoption of ultra-high-elasticity cord with excellent tension maintenance
- **Facing fabric**: Adoption of facing fabric with excellent tooth chipping resistance and abrasion resistance

Tooth profile dimensions and indication method

Belt type	Dimension (mm)	Belt indication method
Ceptor-X S8M		600 Ceptor-X S8M 1000 Belt nominal width (60.0mm) / Belt type (Ceptor-X S8M) / Belt nominal length (1000mm)
Ceptor-X S14M		800 Ceptor-X S14M 1400 Belt nominal width (80.0mm) / Belt type (Ceptor-X S14M) / Belt nominal length (1400mm)

Ceptor™-X standard effective lengths

Ceptor™- X Type S8M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-X S8M 480	480.00	60
Ceptor-X S8M 496	496.00	62
Ceptor-X S8M 512	512.00	64
Ceptor-X S8M 520	520.00	65
Ceptor-X S8M 528	528.00	66
Ceptor-X S8M 560	560.00	70
Ceptor-X S8M 584	584.00	73
Ceptor-X S8M 600	600.00	75
Ceptor-X S8M 632	632.00	79
Ceptor-X S8M 640	640.00	80
Ceptor-X S8M 656	656.00	82
Ceptor-X S8M 672	672.00	84
Ceptor-X S8M 680	680.00	85
Ceptor-X S8M 712	712.00	89
Ceptor-X S8M 720	720.00	90
Ceptor-X S8M 728	728.00	91
Ceptor-X S8M 760	760.00	95
Ceptor-X S8M 800	800.00	100
Ceptor-X S8M 824	824.00	103
Ceptor-X S8M 840	840.00	105
Ceptor-X S8M 848	848.00	106
Ceptor-X S8M 880	880.00	110
Ceptor-X S8M 888	888.00	111
Ceptor-X S8M 896	896.00	112
Ceptor-X S8M 920	920.00	115
Ceptor-X S8M 944	944.00	118
Ceptor-X S8M 960	960.00	120
Ceptor-X S8M 976	976.00	122
Ceptor-X S8M 984	984.00	123
Ceptor-X S8M 1000	1000.00	125
Ceptor-X S8M 1032	1032.00	129
Ceptor-X S8M 1040	1040.00	130
Ceptor-X S8M 1056	1056.00	132
Ceptor-X S8M 1080	1080.00	135
Ceptor-X S8M 1096	1096.00	137
Ceptor-X S8M 1120	1120.00	140
Ceptor-X S8M 1136	1136.00	142
Ceptor-X S8M 1152	1152.00	144
Ceptor-X S8M 1160	1160.00	145
Ceptor-X S8M 1184	1184.00	148
Ceptor-X S8M 1192	1192.00	149
Ceptor-X S8M 1200	1200.00	150
Ceptor-X S8M 1216	1216.00	152
Ceptor-X S8M 1224	1224.00	153
Ceptor-X S8M 1240	1240.00	155
Ceptor-X S8M 1248	1248.00	156
Ceptor-X S8M 1272	1272.00	159
Ceptor-X S8M 1280	1280.00	160
Ceptor-X S8M 1296	1296.00	162
Ceptor-X S8M 1312	1312.00	164
Ceptor-X S8M 1344	1344.00	168
Ceptor-X S8M 1352	1352.00	169
Ceptor-X S8M 1360	1360.00	170
Ceptor-X S8M 1384	1384.00	173
Ceptor-X S8M 1392	1392.00	174

Ceptor™- X Type S8M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-X S8M 1400	1400.00	175
Ceptor-X S8M 1424	1424.00	178
Ceptor-X S8M 1440	1440.00	180
Ceptor-X S8M 1480	1480.00	185
Ceptor-X S8M 1520	1520.00	190
Ceptor-X S8M 1552	1552.00	194
Ceptor-X S8M 1600	1600.00	200
Ceptor-X S8M 1648	1648.00	206
Ceptor-X S8M 1680	1680.00	210
Ceptor-X S8M 1728	1728.00	216
Ceptor-X S8M 1760	1760.00	220
Ceptor-X S8M 1776	1776.00	222
Ceptor-X S8M 1800	1800.00	225
Ceptor-X S8M 1808	1808.00	226
Ceptor-X S8M 1856	1856.00	232
Ceptor-X S8M 1880	1880.00	235
Ceptor-X S8M 1912	1912.00	239
Ceptor-X S8M 1952	1952.00	244
Ceptor-X S8M 2000	2000.00	250
Ceptor-X S8M 2040	2040.00	255
Ceptor-X S8M 2120	2120.00	265
Ceptor-X S8M 2160	2160.00	270
Ceptor-X S8M 2240	2240.00	280
Ceptor-X S8M 2304	2304.00	288
Ceptor-X S8M 2400	2400.00	300
Ceptor-X S8M 2496	2496.00	312
Ceptor-X S8M 2560	2560.00	320
Ceptor-X S8M 2600	2600.00	325
Ceptor-X S8M 2800	2800.00	350
Ceptor-X S8M 2880	2880.00	360
Ceptor-X S8M 2944	2944.00	368
Ceptor-X S8M 3200	3200.00	400
Ceptor-X S8M 3600	3600.00	450
Ceptor-X S8M 3720	3720.00	465
Ceptor-X S8M 3904	3904.00	488
Ceptor-X S8M 4400	4400.00	550

Ceptor™- X Type S14M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-X S14M 1008	1008.00	72
Ceptor-X S14M 1120	1120.00	80
Ceptor-X S14M 1190	1190.00	85
Ceptor-X S14M 1246	1246.00	89
Ceptor-X S14M 1358	1358.00	97
Ceptor-X S14M 1400	1400.00	100
Ceptor-X S14M 1540	1540.00	110
Ceptor-X S14M 1610	1610.00	115
Ceptor-X S14M 1652	1652.00	118
Ceptor-X S14M 1778	1778.00	127
Ceptor-X S14M 1806	1806.00	129
Ceptor-X S14M 1890	1890.00	135
Ceptor-X S14M 1904	1904.00	136
Ceptor-X S14M 1960	1960.00	140
Ceptor-X S14M 2002	2002.00	143
Ceptor-X S14M 2100	2100.00	150
Ceptor-X S14M 2240	2240.00	160
Ceptor-X S14M 2310	2310.00	165
Ceptor-X S14M 2380	2380.00	170
Ceptor-X S14M 2450	2450.00	175
Ceptor-X S14M 2506	2506.00	179
Ceptor-X S14M 2590	2590.00	185
Ceptor-X S14M 2660	2660.00	190
Ceptor-X S14M 2800	2800.00	200
Ceptor-X S14M 3150	3150.00	225
Ceptor-X S14M 3248	3248.00	232
Ceptor-X S14M 3500	3500.00	250
Ceptor-X S14M 3556	3556.00	254
Ceptor-X S14M 3850	3850.00	275
Ceptor-X S14M 4004	4004.00	286
Ceptor-X S14M 4060	4060.00	290
Ceptor-X S14M 4326	4326.00	309
Ceptor-X S14M 4508	4508.00	322
Ceptor-X S14M 5012	5012.00	358

Ceptor™-X standard belt widths

Nominal width	150	250	400	600	800	1000	1200
Width (mm)	15	25	40	60	80	100	120
Ceptor-X S8M	●	●	●	●	●		
Ceptor-X S14M			●	●	●	●	●

Note: For other belt widths than the above, please contact us.
The nominal width is indicated by a factor of ten of the belt width (mm).

1. Product Introduction

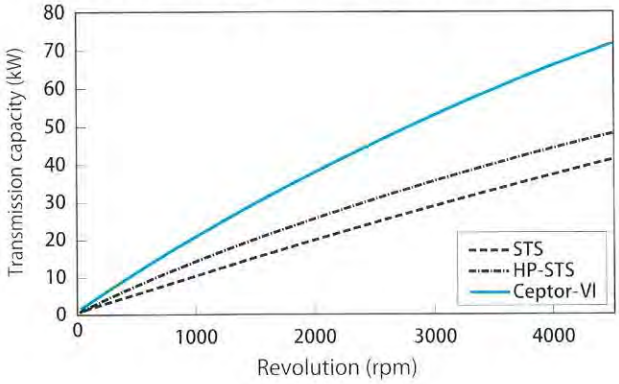
As a result of recent demands for "space-saving, weight reduction, and noise reduction" of industrial machinery, we have developed "Ceptor-VI/heavy duty STS belt" utilizing our long-accumulated technological force.

Features

■ High-torque power transmission

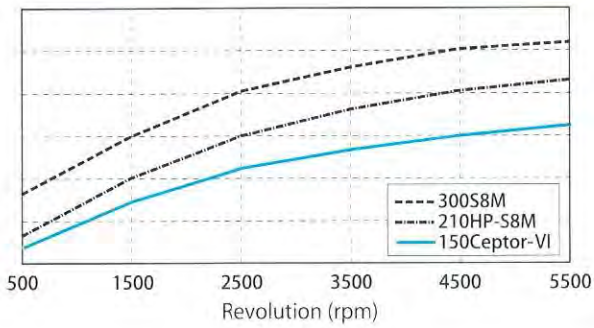
Ceptor-VI provides higher torque and higher power transmission than normal trapezoidal teeth due to the mesh theory of the unique curvilinear teeth and has achieved high torque and high power transmission by using high-rigidity and high-elasticity components. Although it varies depending on the field, it has a 2-fold or more transmission capacity compared to normal STS.

Belt width: 60 mm / Pulley: 26 teeth (S8M)



■ Low noise

As the belt width can be narrower than the standard and HP-STS specifications, the noise can be reduced.



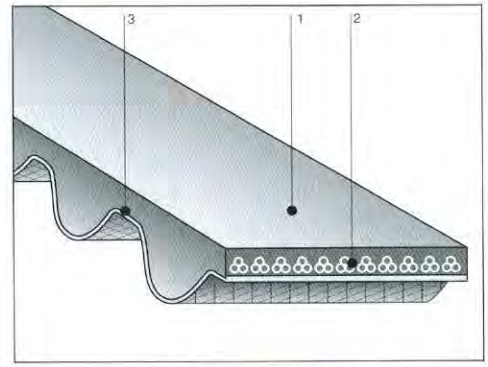
■ Miniaturized

The high transmission capacity allows a narrower width and a smaller pulley diameter than the standard products and the HP-STS specification, allowing compact designs.

■ Pulleys used

Ceptor-VI can be used with the standard STS pulleys and TL STS pulleys.
*Manufacturable with the STS standard belt sizes.

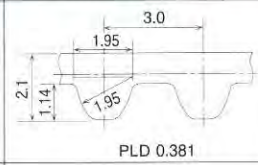
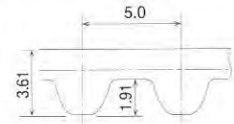
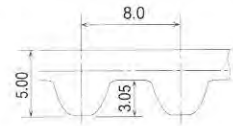
Structure



1. Rubber 2. Cord 3. Facing fabric

- **Rubber**: Adoption of a synthetic rubber with little tooth deformation, high hardness, and high elasticity
- **Cord**: Adoption of a high-elasticity cord with excellent tension maintenance and excellent strength
- **Facing fabric**: Adoption of facing fabric with excellent abrasion resistance and members with excellent tooth chipping resistance and abrasion resistance

Tooth profile dimensions and indication method

Belt type	Dimension (mm)	Belt indication method
Ceptor-VI S3M	 PLD 0.381	100 Ceptor-VI S3M 200 Belt nominal width (10.0mm) · Belt type (Ceptor-VI S3M) · Belt nominal length (200mm)
Ceptor-VI S5M		150 Ceptor-VI S5M 630 Belt nominal width (15.0mm) · Belt type (Ceptor-VI S5M) · Belt nominal length (630mm)
Ceptor-VI S8M		600 Ceptor-VI S8M 1000 Belt nominal width (60.0mm) · Belt type (Ceptor-VI S8M) · Belt nominal length (1000mm)

Ceptor™-VI standard effective lengths

Ceptor™-VI Type S3M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-VI S3M 93	93.00	31
Ceptor-VI S3M 96	96.00	32
Ceptor-VI S3M 99	99.00	33
Ceptor-VI S3M 108	108.00	36
Ceptor-VI S3M 120	120.00	40
Ceptor-VI S3M 123	123.00	41
Ceptor-VI S3M 129	129.00	43
Ceptor-VI S3M 132	132.00	44
Ceptor-VI S3M 138	138.00	46
Ceptor-VI S3M 141	141.00	47
Ceptor-VI S3M 144	144.00	48
Ceptor-VI S3M 147	147.00	49
Ceptor-VI S3M 150	150.00	50
Ceptor-VI S3M 156	156.00	52
Ceptor-VI S3M 159	159.00	53
Ceptor-VI S3M 162	162.00	54
Ceptor-VI S3M 168	168.00	56
Ceptor-VI S3M 171	171.00	57
Ceptor-VI S3M 174	174.00	58
Ceptor-VI S3M 177	177.00	59
Ceptor-VI S3M 180	180.00	60
Ceptor-VI S3M 183	183.00	61
Ceptor-VI S3M 186	186.00	62
Ceptor-VI S3M 189	189.00	63
Ceptor-VI S3M 192	192.00	64
Ceptor-VI S3M 195	195.00	65
Ceptor-VI S3M 198	198.00	66
Ceptor-VI S3M 201	201.00	67
Ceptor-VI S3M 204	204.00	68
Ceptor-VI S3M 207	207.00	69
Ceptor-VI S3M 210	210.00	70
Ceptor-VI S3M 213	213.00	71
Ceptor-VI S3M 219	219.00	73
Ceptor-VI S3M 222	222.00	74
Ceptor-VI S3M 225	225.00	75
Ceptor-VI S3M 228	228.00	76
Ceptor-VI S3M 234	234.00	78
Ceptor-VI S3M 237	237.00	79
Ceptor-VI S3M 240	240.00	80
Ceptor-VI S3M 243	243.00	81
Ceptor-VI S3M 246	246.00	82
Ceptor-VI S3M 249	249.00	83
Ceptor-VI S3M 252	252.00	84
Ceptor-VI S3M 255	255.00	85
Ceptor-VI S3M 258	258.00	86
Ceptor-VI S3M 261	261.00	87
Ceptor-VI S3M 264	264.00	88
Ceptor-VI S3M 267	267.00	89
Ceptor-VI S3M 270	270.00	90
Ceptor-VI S3M 273	273.00	91
Ceptor-VI S3M 276	276.00	92
Ceptor-VI S3M 279	279.00	93
Ceptor-VI S3M 282	282.00	94
Ceptor-VI S3M 285	285.00	95
Ceptor-VI S3M 288	288.00	96
Ceptor-VI S3M 291	291.00	97
Ceptor-VI S3M 294	294.00	98
Ceptor-VI S3M 297	297.00	99
Ceptor-VI S3M 300	300.00	100
Ceptor-VI S3M 303	303.00	101
Ceptor-VI S3M 306	306.00	102
Ceptor-VI S3M 309	309.00	103
Ceptor-VI S3M 312	312.00	104
Ceptor-VI S3M 315	315.00	105
Ceptor-VI S3M 318	318.00	106

Ceptor™-VI Type S3M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-VI S3M 324	324.00	108
Ceptor-VI S3M 327	327.00	109
Ceptor-VI S3M 330	330.00	110
Ceptor-VI S3M 333	333.00	111
Ceptor-VI S3M 336	336.00	112
Ceptor-VI S3M 339	339.00	113
Ceptor-VI S3M 342	342.00	114
Ceptor-VI S3M 348	348.00	116
Ceptor-VI S3M 351	351.00	117
Ceptor-VI S3M 354	354.00	118
Ceptor-VI S3M 360	360.00	120
Ceptor-VI S3M 363	363.00	121
Ceptor-VI S3M 366	366.00	122
Ceptor-VI S3M 369	369.00	123
Ceptor-VI S3M 372	372.00	124
Ceptor-VI S3M 375	375.00	125
Ceptor-VI S3M 378	378.00	126
Ceptor-VI S3M 384	384.00	128
Ceptor-VI S3M 387	387.00	129
Ceptor-VI S3M 390	390.00	130
Ceptor-VI S3M 396	396.00	132
Ceptor-VI S3M 399	399.00	133
Ceptor-VI S3M 402	402.00	134
Ceptor-VI S3M 405	405.00	135
Ceptor-VI S3M 408	408.00	136
Ceptor-VI S3M 414	414.00	138
Ceptor-VI S3M 417	417.00	139
Ceptor-VI S3M 420	420.00	140
Ceptor-VI S3M 423	423.00	141
Ceptor-VI S3M 426	426.00	142
Ceptor-VI S3M 432	432.00	144
Ceptor-VI S3M 438	438.00	146
Ceptor-VI S3M 444	444.00	148
Ceptor-VI S3M 447	447.00	149
Ceptor-VI S3M 453	453.00	151
Ceptor-VI S3M 456	456.00	152
Ceptor-VI S3M 459	459.00	153
Ceptor-VI S3M 468	468.00	156
Ceptor-VI S3M 471	471.00	157
Ceptor-VI S3M 474	474.00	158
Ceptor-VI S3M 480	480.00	160
Ceptor-VI S3M 483	483.00	161
Ceptor-VI S3M 486	486.00	162
Ceptor-VI S3M 489	489.00	163
Ceptor-VI S3M 492	492.00	164
Ceptor-VI S3M 498	498.00	166
Ceptor-VI S3M 501	501.00	167
Ceptor-VI S3M 507	507.00	169
Ceptor-VI S3M 510	510.00	170
Ceptor-VI S3M 513	513.00	171
Ceptor-VI S3M 516	516.00	172
Ceptor-VI S3M 519	519.00	173
Ceptor-VI S3M 522	522.00	174
Ceptor-VI S3M 525	525.00	175
Ceptor-VI S3M 528	528.00	176
Ceptor-VI S3M 534	534.00	178
Ceptor-VI S3M 537	537.00	179
Ceptor-VI S3M 540	540.00	180
Ceptor-VI S3M 543	543.00	181
Ceptor-VI S3M 549	549.00	183
Ceptor-VI S3M 552	552.00	184
Ceptor-VI S3M 555	555.00	185
Ceptor-VI S3M 564	564.00	188
Ceptor-VI S3M 573	573.00	191
Ceptor-VI S3M 579	579.00	193

Ceptor™-VI Type S3M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-VI S3M 588	588.00	196
Ceptor-VI S3M 597	597.00	199
Ceptor-VI S3M 600	600.00	200
Ceptor-VI S3M 603	603.00	201
Ceptor-VI S3M 609	609.00	203
Ceptor-VI S3M 612	612.00	204
Ceptor-VI S3M 621	621.00	207
Ceptor-VI S3M 633	633.00	211
Ceptor-VI S3M 636	636.00	212
Ceptor-VI S3M 648	648.00	216
Ceptor-VI S3M 657	657.00	219
Ceptor-VI S3M 660	660.00	220
Ceptor-VI S3M 666	666.00	222
Ceptor-VI S3M 678	678.00	226
Ceptor-VI S3M 681	681.00	227
Ceptor-VI S3M 687	687.00	229
Ceptor-VI S3M 690	690.00	230
Ceptor-VI S3M 696	696.00	232
Ceptor-VI S3M 699	699.00	233
Ceptor-VI S3M 720	720.00	240
Ceptor-VI S3M 726	726.00	242
Ceptor-VI S3M 735	735.00	245
Ceptor-VI S3M 741	741.00	247
Ceptor-VI S3M 750	750.00	250
Ceptor-VI S3M 768	768.00	256
Ceptor-VI S3M 771	771.00	257
Ceptor-VI S3M 789	789.00	263
Ceptor-VI S3M 804	804.00	268
Ceptor-VI S3M 810	810.00	270
Ceptor-VI S3M 819	819.00	273
Ceptor-VI S3M 825	825.00	275
Ceptor-VI S3M 831	831.00	277
Ceptor-VI S3M 837	837.00	279
Ceptor-VI S3M 852	852.00	284
Ceptor-VI S3M 858	858.00	286
Ceptor-VI S3M 882	882.00	294
Ceptor-VI S3M 885	885.00	295
Ceptor-VI S3M 888	888.00	296
Ceptor-VI S3M 900	900.00	300
Ceptor-VI S3M 909	909.00	303
Ceptor-VI S3M 918	918.00	306
Ceptor-VI S3M 927	927.00	309
Ceptor-VI S3M 936	936.00	312
Ceptor-VI S3M 954	954.00	318
Ceptor-VI S3M 990	990.00	330
Ceptor-VI S3M 999	999.00	333
Ceptor-VI S3M 1014	1014.00	338
Ceptor-VI S3M 1050	1050.00	350
Ceptor-VI S3M 1119	1119.00	373
Ceptor-VI S3M 1134	1134.00	378
Ceptor-VI S3M 1146	1146.00	382
Ceptor-VI S3M 1176	1176.00	392
Ceptor-VI S3M 1188	1188.00	396
Ceptor-VI S3M 1260	1260.00	420
Ceptor-VI S3M 1299	1299.00	433
Ceptor-VI S3M 1338	1338.00	446
Ceptor-VI S3M 1374	1374.00	458
Ceptor-VI S3M 1419	1419.00	473
Ceptor-VI S3M 1530	1530.00	510
Ceptor-VI S3M 1569	1569.00	523
Ceptor-VI S3M 1596	1596.00	532
Ceptor-VI S3M 1650	1650.00	550
Ceptor-VI S3M 1734	1734.00	578

Ceptor™-VI Type S5M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-VI S5M 225	225.00	45
Ceptor-VI S5M 230	230.00	46
Ceptor-VI S5M 255	255.00	51
Ceptor-VI S5M 260	260.00	52
Ceptor-VI S5M 275	275.00	55
Ceptor-VI S5M 285	285.00	57
Ceptor-VI S5M 295	295.00	59
Ceptor-VI S5M 300	300.00	60
Ceptor-VI S5M 305	305.00	61
Ceptor-VI S5M 320	320.00	64
Ceptor-VI S5M 325	325.00	65
Ceptor-VI S5M 340	340.00	68
Ceptor-VI S5M 350	350.00	70
Ceptor-VI S5M 360	360.00	72
Ceptor-VI S5M 370	370.00	74
Ceptor-VI S5M 375	375.00	75
Ceptor-VI S5M 380	380.00	76
Ceptor-VI S5M 390	390.00	78
Ceptor-VI S5M 400	400.00	80
Ceptor-VI S5M 410	410.00	82
Ceptor-VI S5M 415	415.00	83
Ceptor-VI S5M 420	420.00	84
Ceptor-VI S5M 425	425.00	85
Ceptor-VI S5M 435	435.00	87
Ceptor-VI S5M 440	440.00	88
Ceptor-VI S5M 445	445.00	89
Ceptor-VI S5M 450	450.00	90
Ceptor-VI S5M 475	475.00	95
Ceptor-VI S5M 490	490.00	98
Ceptor-VI S5M 500	500.00	100
Ceptor-VI S5M 520	520.00	104
Ceptor-VI S5M 525	525.00	105
Ceptor-VI S5M 530	530.00	106
Ceptor-VI S5M 545	545.00	109
Ceptor-VI S5M 550	550.00	110
Ceptor-VI S5M 560	560.00	112
Ceptor-VI S5M 565	565.00	113
Ceptor-VI S5M 570	570.00	114
Ceptor-VI S5M 575	575.00	115
Ceptor-VI S5M 590	590.00	118
Ceptor-VI S5M 595	595.00	119
Ceptor-VI S5M 600	600.00	120
Ceptor-VI S5M 625	625.00	125
Ceptor-VI S5M 635	635.00	127
Ceptor-VI S5M 640	640.00	128
Ceptor-VI S5M 645	645.00	129
Ceptor-VI S5M 650	650.00	130
Ceptor-VI S5M 665	665.00	133
Ceptor-VI S5M 670	670.00	134
Ceptor-VI S5M 675	675.00	135
Ceptor-VI S5M 690	690.00	138
Ceptor-VI S5M 695	695.00	139
Ceptor-VI S5M 700	700.00	140
Ceptor-VI S5M 710	710.00	142
Ceptor-VI S5M 720	720.00	144
Ceptor-VI S5M 725	725.00	145
Ceptor-VI S5M 730	730.00	146
Ceptor-VI S5M 740	740.00	148
Ceptor-VI S5M 750	750.00	150
Ceptor-VI S5M 765	765.00	153
Ceptor-VI S5M 770	770.00	154
Ceptor-VI S5M 775	775.00	155
Ceptor-VI S5M 780	780.00	156
Ceptor-VI S5M 800	800.00	160
Ceptor-VI S5M 810	810.00	162
Ceptor-VI S5M 830	830.00	166
Ceptor-VI S5M 845	845.00	169
Ceptor-VI S5M 850	850.00	170
Ceptor-VI S5M 860	860.00	172
Ceptor-VI S5M 870	870.00	174

Ceptor™-VI Type S5M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-VI S5M 890	890.00	178
Ceptor-VI S5M 900	900.00	180
Ceptor-VI S5M 920	920.00	184
Ceptor-VI S5M 930	930.00	186
Ceptor-VI S5M 940	940.00	188
Ceptor-VI S5M 950	950.00	190
Ceptor-VI S5M 965	965.00	193
Ceptor-VI S5M 975	975.00	195
Ceptor-VI S5M 1000	1000.00	200
Ceptor-VI S5M 1025	1025.00	205
Ceptor-VI S5M 1050	1050.00	210
Ceptor-VI S5M 1055	1055.00	211
Ceptor-VI S5M 1085	1085.00	217
Ceptor-VI S5M 1090	1090.00	218
Ceptor-VI S5M 1100	1100.00	220
Ceptor-VI S5M 1105	1105.00	221
Ceptor-VI S5M 1115	1115.00	223
Ceptor-VI S5M 1120	1120.00	224
Ceptor-VI S5M 1125	1125.00	225
Ceptor-VI S5M 1135	1135.00	227
Ceptor-VI S5M 1145	1145.00	229
Ceptor-VI S5M 1160	1160.00	232
Ceptor-VI S5M 1165	1165.00	233
Ceptor-VI S5M 1195	1195.00	239
Ceptor-VI S5M 1225	1225.00	245
Ceptor-VI S5M 1250	1250.00	250
Ceptor-VI S5M 1260	1260.00	252
Ceptor-VI S5M 1270	1270.00	254
Ceptor-VI S5M 1295	1295.00	259
Ceptor-VI S5M 1330	1330.00	266
Ceptor-VI S5M 1350	1350.00	270
Ceptor-VI S5M 1420	1420.00	284
Ceptor-VI S5M 1475	1475.00	295
Ceptor-VI S5M 1500	1500.00	300
Ceptor-VI S5M 1505	1505.00	301
Ceptor-VI S5M 1530	1530.00	306
Ceptor-VI S5M 1595	1595.00	319
Ceptor-VI S5M 1605	1605.00	321
Ceptor-VI S5M 1680	1680.00	336
Ceptor-VI S5M 1715	1715.00	343
Ceptor-VI S5M 1800	1800.00	360
Ceptor-VI S5M 2000	2000.00	400

Ceptor™-VI Type S8M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-VI S8M 480	480.00	60
Ceptor-VI S8M 496	496.00	62
Ceptor-VI S8M 512	512.00	64
Ceptor-VI S8M 520	520.00	65
Ceptor-VI S8M 528	528.00	66
Ceptor-VI S8M 560	560.00	70
Ceptor-VI S8M 584	584.00	73
Ceptor-VI S8M 600	600.00	75
Ceptor-VI S8M 632	632.00	79
Ceptor-VI S8M 640	640.00	80
Ceptor-VI S8M 656	656.00	82
Ceptor-VI S8M 672	672.00	84
Ceptor-VI S8M 680	680.00	85
Ceptor-VI S8M 712	712.00	89
Ceptor-VI S8M 720	720.00	90
Ceptor-VI S8M 728	728.00	91
Ceptor-VI S8M 760	760.00	95
Ceptor-VI S8M 800	800.00	100
Ceptor-VI S8M 824	824.00	103
Ceptor-VI S8M 840	840.00	105

Ceptor™-VI Type S8M

Belt nominal length	Pitch length (mm)	No. of teeth
Ceptor-VI S8M 848	848.00	118
Ceptor-VI S8M 880	880.00	120
Ceptor-VI S8M 888	888.00	122
Ceptor-VI S8M 896	896.00	123
Ceptor-VI S8M 920	920.00	125
Ceptor-VI S8M 944	944.00	129
Ceptor-VI S8M 960	960.00	130
Ceptor-VI S8M 976	976.00	132
Ceptor-VI S8M 984	984.00	137
Ceptor-VI S8M 1000	1000.00	140
Ceptor-VI S8M 1032	1032.00	142
Ceptor-VI S8M 1040	1040.00	144
Ceptor-VI S8M 1056	1056.00	145
Ceptor-VI S8M 1096	1096.00	148
Ceptor-VI S8M 1120	1120.00	149
Ceptor-VI S8M 1136	1136.00	150
Ceptor-VI S8M 1152	1152.00	152
Ceptor-VI S8M 1160	1160.00	153
Ceptor-VI S8M 1184	1184.00	155
Ceptor-VI S8M 1192	1192.00	156
Ceptor-VI S8M 1200	1200.00	159
Ceptor-VI S8M 1216	1216.00	160
Ceptor-VI S8M 1224	1224.00	162
Ceptor-VI S8M 1240	1240.00	164
Ceptor-VI S8M 1248	1248.00	168
Ceptor-VI S8M 1272	1272.00	169
Ceptor-VI S8M 1280	1280.00	170
Ceptor-VI S8M 1296	1296.00	173
Ceptor-VI S8M 1312	1312.00	174
Ceptor-VI S8M 1344	1344.00	175
Ceptor-VI S8M 1352	1352.00	178
Ceptor-VI S8M 1360	1360.00	180
Ceptor-VI S8M 1384	1384.00	185
Ceptor-VI S8M 1392	1392.00	190
Ceptor-VI S8M 1400	1400.00	194
Ceptor-VI S8M 1424	1424.00	200
Ceptor-VI S8M 1440	1440.00	206
Ceptor-VI S8M 1480	1480.00	210
Ceptor-VI S8M 1520	1520.00	216
Ceptor-VI S8M 1552	1552.00	220
Ceptor-VI S8M 1600	1600.00	222
Ceptor-VI S8M 1648	1648.00	225
Ceptor-VI S8M 1680	1680.00	226
Ceptor-VI S8M 1728	1728.00	232
Ceptor-VI S8M 1760	1760.00	235
Ceptor-VI S8M 1776	1776.00	239
Ceptor-VI S8M 1800	1800.00	244
Ceptor-VI S8M 1808	1808.00	250
Ceptor-VI S8M 1856	1856.00	255
Ceptor-VI S8M 1880	1880.00	265
Ceptor-VI S8M 1912	1912.00	270
Ceptor-VI S8M 1952	1952.00	280
Ceptor-VI S8M 2000	2000.00	288
Ceptor-VI S8M 2040	2040.00	300
Ceptor-VI S8M 2120	2120.00	312
Ceptor-VI S8M 2160	2160.00	320
Ceptor-VI S8M 2240	2240.00	325
Ceptor-VI S8M 2304	2304.00	350
Ceptor-VI S8M 2400	2400.00	360
Ceptor-VI S8M 2496	2496.00	368
Ceptor-VI S8M 2560	2560.00	400
Ceptor-VI S8M 2600	2600.00	450
Ceptor-VI S8M 2800	2800.00	465
Ceptor-VI S8M 2880	2880.00	488
Ceptor-VI S8M 2944	2944.00	550
Ceptor-VI S8M 3200	3200.00	106
Ceptor-VI S8M 3600	3600.00	110
Ceptor-VI S8M 3720	3720.00	111
Ceptor-VI S8M 3904	3904.00	112
Ceptor-VI S8M 4400	4400.00	115

Ceptor™-VI standard belt widths

Nominal width	60	100	150	200	250	400	600	800
Width (mm)	6	10	15	20	25	40	60	80
Ceptor-VI S3M	●	●	●					
Ceptor-VI S5M		●	●	●	●			
Ceptor-VI S8M			●	●	●	●	●	●

Note: For other belt widths than the above, please contact us.
The nominal width is indicated by a factor of ten of the belt width (mm).

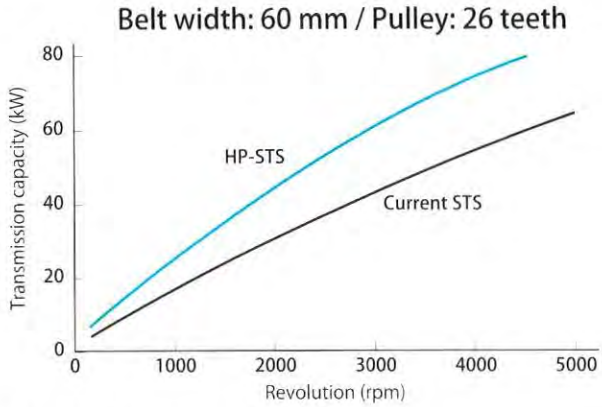
1. HP-STS/HP-HTS Product Introduction

As a result of recent demands for "space-saving" of industrial machinery, we have developed "HP-STS/HP-HTS/heavy duty type belts" utilizing our long-accumulated technology and experience.

Features

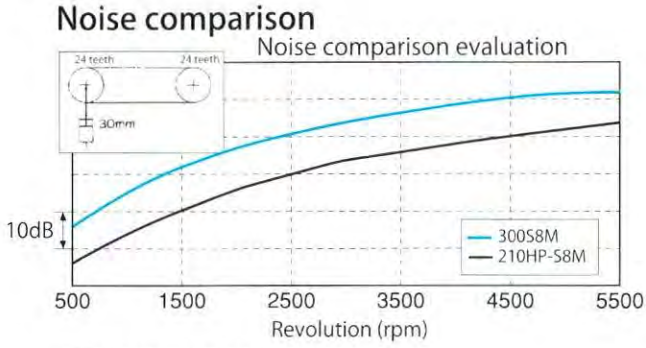
■ High-torque power transmission

The HP-STS/HP-HTS belts provide higher torque and higher power transmission than normal trapezoidal teeth due to the mesh theory of the unique teeth profiles and have achieved high torque and high power transmission by using high-rigidity components. Although it varies depending on the field, it has a 1.4 to 1.8-fold transmission capacity compared to normal STS/HTS.



■ Low noise

As the belt width can be narrower than the standard specification, the noise can be reduced.



*The data shows STS data.

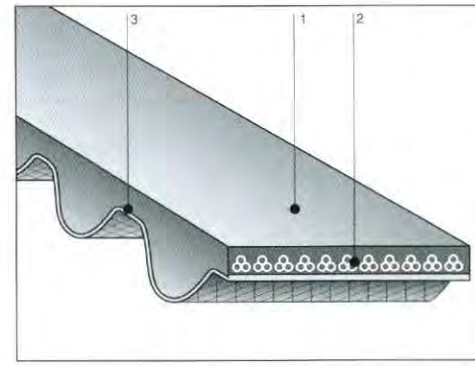
■ Miniaturized

The high transmission capacity allows a narrower width and a smaller pulley diameter than the standard specifications, allowing compact designs.

■ Pulleys used

HP-STS can be used with the standard STS pulleys and TL STS pulleys.
*Manufacturable with the STS standard belt sizes.
HP-HTS can be used with the standard HTS pulleys.

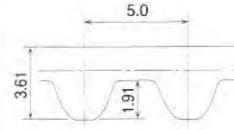
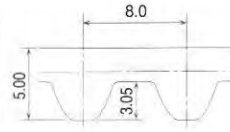
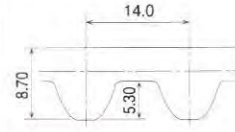
Structure

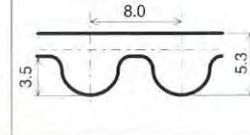


1. Back face rubber 2. Cord 3. Facing fabric

- **Back face rubber**: Adoption of a synthetic rubber with little tooth deformation and high hardness
- **Cord**: Glass cord taking the dimensional stability and flexibility into consideration
- **Facing fabric**: Low noise is achieved by providing irregularities on the facing fabric surface and with the low frictional factor Type S14M has two layers of facing fabric, further lowering the noise and enhancing the durability. HP-S5M has a clean facing fabric specification.

Tooth profile dimensions and indication method

Belt type	HP-STS	
	Dimension (mm)	Belt indication method
HP-S5M		150 HP-S5M 800 Belt nominal width (15.0mm) / Belt type (HP-S5M) / Belt nominal length (800mm)
HP-S8M		600 HP-S8M 1000 Belt nominal width (60.0mm) / Belt type (HP-S8M) / Belt nominal length (1000mm)
HP-S14M		800 HP-S14M 1400 Belt nominal width (80.0mm) / Belt type (HP-S14M) / Belt nominal length (1400mm)

Belt type	HP-HTS	
	Dimension (mm)	Belt indication method
8M		1000 8M 50 Belt pitch length (1000mm) / Belt type (8M) / Belt width (50.0mm)

HP-STS standard effective lengths

Type HP-S5M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S5M 225	225.00	45
HP-S5M 230	230.00	46
HP-S5M 255	255.00	51
HP-S5M 260	260.00	52
HP-S5M 275	275.00	55
HP-S5M 285	285.00	57
HP-S5M 295	295.00	59
HP-S5M 300	300.00	60
HP-S5M 305	305.00	61
HP-S5M 320	320.00	64
HP-S5M 325	325.00	65
HP-S5M 340	340.00	68
HP-S5M 350	350.00	70
HP-S5M 360	360.00	72
HP-S5M 370	370.00	74
HP-S5M 375	375.00	75
HP-S5M 380	380.00	76
HP-S5M 390	390.00	78
HP-S5M 400	400.00	80
HP-S5M 410	410.00	82
HP-S5M 415	415.00	83
HP-S5M 420	420.00	84
HP-S5M 425	425.00	85
HP-S5M 435	435.00	87
HP-S5M 440	440.00	88
HP-S5M 445	445.00	89
HP-S5M 450	450.00	90
HP-S5M 475	475.00	95
HP-S5M 490	490.00	98
HP-S5M 500	500.00	100
HP-S5M 520	520.00	104
HP-S5M 525	525.00	105
HP-S5M 530	530.00	106
HP-S5M 545	545.00	109
HP-S5M 550	550.00	110
HP-S5M 560	560.00	112
HP-S5M 565	565.00	113
HP-S5M 570	570.00	114
HP-S5M 575	575.00	115
HP-S5M 590	590.00	118
HP-S5M 595	595.00	119
HP-S5M 600	600.00	120
HP-S5M 625	625.00	125
HP-S5M 635	635.00	127
HP-S5M 640	640.00	128
HP-S5M 645	645.00	129
HP-S5M 650	650.00	130
HP-S5M 665	665.00	133
HP-S5M 670	670.00	134
HP-S5M 675	675.00	135
HP-S5M 690	690.00	138
HP-S5M 695	695.00	139
HP-S5M 700	700.00	140
HP-S5M 710	710.00	142
HP-S5M 720	720.00	144
HP-S5M 725	725.00	145
HP-S5M 730	730.00	146
HP-S5M 740	740.00	148
HP-S5M 750	750.00	150
HP-S5M 765	765.00	153
HP-S5M 770	770.00	154
HP-S5M 775	775.00	155
HP-S5M 780	780.00	156
HP-S5M 800	800.00	160
HP-S5M 810	810.00	162

Type HP-S5M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S5M 830	830.00	166
HP-S5M 845	845.00	169
HP-S5M 850	850.00	170
HP-S5M 860	860.00	172
HP-S5M 870	870.00	174
HP-S5M 890	890.00	178
HP-S5M 900	900.00	180
HP-S5M 920	920.00	184
HP-S5M 930	930.00	186
HP-S5M 940	940.00	188
HP-S5M 950	950.00	190
HP-S5M 965	965.00	193
HP-S5M 975	975.00	195
HP-S5M 1000	1000.00	200
HP-S5M 1025	1025.00	205
HP-S5M 1050	1050.00	210
HP-S5M 1055	1055.00	211
HP-S5M 1085	1085.00	217
HP-S5M 1090	1090.00	218
HP-S5M 1100	1100.00	220
HP-S5M 1105	1105.00	221
HP-S5M 1115	1115.00	223
HP-S5M 1120	1120.00	224
HP-S5M 1125	1125.00	225
HP-S5M 1135	1135.00	227
HP-S5M 1145	1145.00	229
HP-S5M 1160	1160.00	232
HP-S5M 1165	1165.00	233
HP-S5M 1195	1195.00	239
HP-S5M 1225	1225.00	245
HP-S5M 1250	1250.00	250
HP-S5M 1260	1260.00	252
HP-S5M 1270	1270.00	254
HP-S5M 1295	1295.00	259
HP-S5M 1330	1330.00	266
HP-S5M 1350	1350.00	270
HP-S5M 1420	1420.00	284
HP-S5M 1475	1475.00	295
HP-S5M 1500	1500.00	300
HP-S5M 1505	1505.00	301
HP-S5M 1530	1530.00	306
HP-S5M 1595	1595.00	319
HP-S5M 1605	1605.00	321
HP-S5M 1680	1680.00	336
HP-S5M 1715	1715.00	343
HP-S5M 1800	1800.00	360
HP-S5M 2000	2000.00	400

Type HP-S8M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S8M 352	352.00	44
HP-S8M 384	384.00	48
HP-S8M 408	408.00	51
HP-S8M 424	424.00	53
HP-S8M 440	440.00	55
HP-S8M 456	456.00	57
HP-S8M 480	480.00	60
HP-S8M 496	496.00	62
HP-S8M 512	512.00	64
HP-S8M 520	520.00	65
HP-S8M 528	528.00	66
HP-S8M 560	560.00	70
HP-S8M 584	584.00	73
HP-S8M 600	600.00	75
HP-S8M 632	632.00	79
HP-S8M 640	640.00	80
HP-S8M 656	656.00	82
HP-S8M 672	672.00	84
HP-S8M 680	680.00	85
HP-S8M 712	712.00	89
HP-S8M 720	720.00	90
HP-S8M 728	728.00	91
HP-S8M 760	760.00	95
HP-S8M 800	800.00	100
HP-S8M 824	824.00	103
HP-S8M 840	840.00	105
HP-S8M 848	848.00	106
HP-S8M 880	880.00	110
HP-S8M 888	888.00	111
HP-S8M 896	896.00	112
HP-S8M 920	920.00	115
HP-S8M 944	944.00	118
HP-S8M 960	960.00	120
HP-S8M 976	976.00	122
HP-S8M 984	984.00	123
HP-S8M 1000	1000.00	125
HP-S8M 1032	1032.00	129
HP-S8M 1040	1040.00	130
HP-S8M 1056	1056.00	132
HP-S8M 1080	1080.00	135
HP-S8M 1096	1096.00	137
HP-S8M 1120	1120.00	140
HP-S8M 1136	1136.00	142
HP-S8M 1152	1152.00	144
HP-S8M 1160	1160.00	145
HP-S8M 1184	1184.00	148
HP-S8M 1192	1192.00	149
HP-S8M 1200	1200.00	150
HP-S8M 1216	1216.00	152
HP-S8M 1224	1224.00	153
HP-S8M 1240	1240.00	155
HP-S8M 1248	1248.00	156
HP-S8M 1272	1272.00	159
HP-S8M 1280	1280.00	160
HP-S8M 1296	1296.00	162
HP-S8M 1312	1312.00	164
HP-S8M 1344	1344.00	168
HP-S8M 1352	1352.00	169
HP-S8M 1360	1360.00	170
HP-S8M 1384	1384.00	173
HP-S8M 1392	1392.00	174
HP-S8M 1400	1400.00	175
HP-S8M 1424	1424.00	178
HP-S8M 1440	1440.00	180
HP-S8M 1480	1480.00	185
HP-S8M 1520	1520.00	190
HP-S8M 1552	1552.00	194

HP-HTS standard effective lengths

Type HP-S8M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S8M 1600	1600.00	200
HP-S8M 1648	1648.00	206
HP-S8M 1680	1680.00	210
HP-S8M 1728	1728.00	216
HP-S8M 1760	1760.00	220
HP-S8M 1776	1776.00	222
HP-S8M 1800	1800.00	225
HP-S8M 1808	1808.00	226
HP-S8M 1856	1856.00	232
HP-S8M 1880	1880.00	235
HP-S8M 1912	1912.00	239
HP-S8M 1952	1952.00	244
HP-S8M 2000	2000.00	250
HP-S8M 2040	2040.00	255
HP-S8M 2120	2120.00	265
HP-S8M 2160	2160.00	270
HP-S8M 2240	2240.00	280
HP-S8M 2304	2304.00	288
HP-S8M 2400	2400.00	300
HP-S8M 2496	2496.00	312
HP-S8M 2560	2560.00	320
HP-S8M 2600	2600.00	325
HP-S8M 2800	2800.00	350
HP-S8M 2880	2880.00	360
HP-S8M 2944	2944.00	368
HP-S8M 3200	3200.00	400
HP-S8M 3600	3600.00	450
HP-S8M 3720	3720.00	465
HP-S8M 3904	3904.00	488
HP-S8M 4400	4400.00	550

Type HP-S14M

Belt nominal length	Pitch length (mm)	No. of teeth
HP-S14M 1008	1008.00	72
HP-S14M 1120	1120.00	80
HP-S14M 1190	1190.00	85
HP-S14M 1246	1246.00	89
HP-S14M 1358	1358.00	97
HP-S14M 1400	1400.00	100
HP-S14M 1540	1540.00	110
HP-S14M 1610	1610.00	115
HP-S14M 1652	1652.00	118
HP-S14M 1778	1778.00	127
HP-S14M 1806	1806.00	129
HP-S14M 1890	1890.00	135
HP-S14M 1904	1904.00	136
HP-S14M 1960	1960.00	140
HP-S14M 2002	2002.00	143
HP-S14M 2100	2100.00	150
HP-S14M 2240	2240.00	160
HP-S14M 2310	2310.00	165
HP-S14M 2380	2380.00	170
HP-S14M 2450	2450.00	175
HP-S14M 2506	2506.00	179
HP-S14M 2590	2590.00	185
HP-S14M 2660	2660.00	190
HP-S14M 2800	2800.00	200
HP-S14M 3150	3150.00	225
HP-S14M 3248	3248.00	232
HP-S14M 3500	3500.00	250
HP-S14M 3556	3556.00	254
HP-S14M 3850	3850.00	275
HP-S14M 4004	4004.00	286
HP-S14M 4060	4060.00	290
HP-S14M 4326	4326.00	309
HP-S14M 4508	4508.00	322
HP-S14M 5012	5012.00	358

Type HP-8M

Belt nominal length	Pitch length (mm)	No. of teeth
384 HP-8M	384.00	48
424 HP-8M	424.00	53
480 HP-8M	480.00	60
560 HP-8M	560.00	70
600 HP-8M	600.00	75
624 HP-8M	624.00	78
640 HP-8M	640.00	80
656 HP-8M	656.00	82
680 HP-8M	680.00	85
720 HP-8M	720.00	90
760 HP-8M	760.00	95
800 HP-8M	800.00	100
840 HP-8M	840.00	105
856 HP-8M	856.00	107
880 HP-8M	880.00	110
896 HP-8M	896.00	112
920 HP-8M	920.00	115
960 HP-8M	960.00	120
1000 HP-8M	1000.00	125
1040 HP-8M	1040.00	130
1056 HP-8M	1056.00	132
1064 HP-8M	1064.00	133
1080 HP-8M	1080.00	135
1120 HP-8M	1120.00	140
1152 HP-8M	1152.00	144
1160 HP-8M	1160.00	145
1184 HP-8M	1184.00	148
1192 HP-8M	1192.00	149
1200 HP-8M	1200.00	150
1224 HP-8M	1224.00	153
1248 HP-8M	1248.00	156
1264 HP-8M	1264.00	158
1280 HP-8M	1280.00	160
1304 HP-8M	1304.00	163
1360 HP-8M	1360.00	170
1392 HP-8M	1392.00	174
1400 HP-8M	1400.00	175
1424 HP-8M	1424.00	178
1440 HP-8M	1440.00	180
1480 HP-8M	1480.00	185
1512 HP-8M	1512.00	189
1520 HP-8M	1520.00	190
1584 HP-8M	1584.00	198
1600 HP-8M	1600.00	200
1680 HP-8M	1680.00	210
1728 HP-8M	1728.00	216
1760 HP-8M	1760.00	220
1800 HP-8M	1800.00	225
1904 HP-8M	1904.00	238
2000 HP-8M	2000.00	250
2056 HP-8M	2056.00	257
2080 HP-8M	2080.00	260
2104 HP-8M	2104.00	263
2160 HP-8M	2160.00	270
2240 HP-8M	2240.00	280
2248 HP-8M	2248.00	281
2272 HP-8M	2272.00	284
2400 HP-8M	2400.00	300
2504 HP-8M	2504.00	313
2600 HP-8M	2600.00	325
2800 HP-8M	2800.00	350
3048 HP-8M	3048.00	381
3200 HP-8M	3200.00	400
3280 HP-8M	3280.00	410
3360 HP-8M	3360.00	420
3600 HP-8M	3600.00	450
4400 HP-8M	4400.00	550

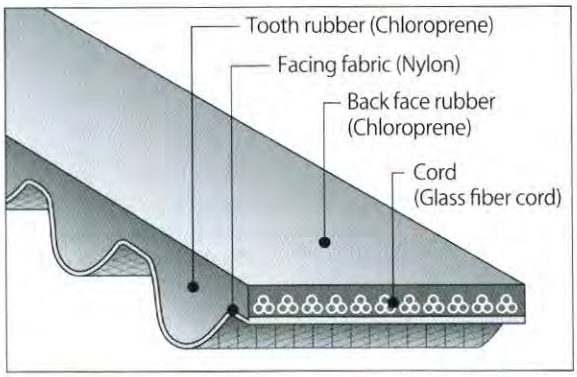
Belt standard widths

Nominal width (S tooth profile)	100	150	200	250	300	400	500	600	800	850	1000	1200
Nominal width (HTS tooth profile)	10	15	20	25	30	40	50	60	80	85	100	120
Width (mm)	10	15	20	25	30	40	50	60	80	85	100	120
HP-S5M	●	●	●	●								
HP-S8M		●		●		●		●				
HP-S14M						●		●	●		●	●
HP-8M			●	●	●	●	●	●		●		

Note: For other belt widths than the above, please contact us.
* For the S tooth profile, the nominal width is ten times the belt width. For the HTS tooth profile, the nominal width is the belt width.

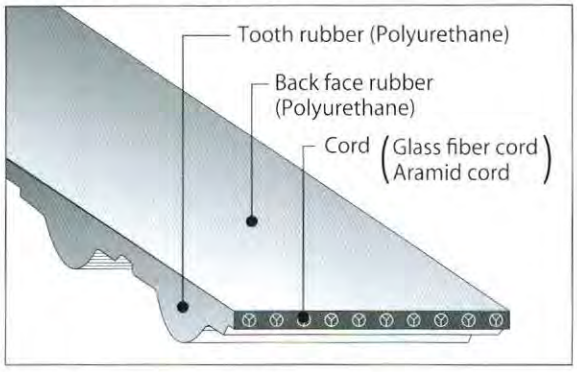
Structure

(1) Rubber STS



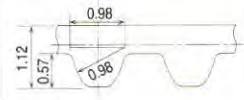
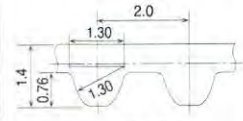
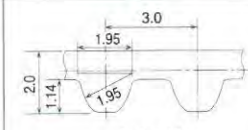
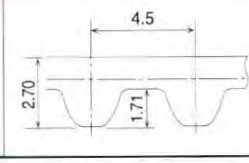
- **Back face rubber**: The chloroprene rubber, which has excellent weather resistance and abrasion resistance, protects the cords.
- **Cord**: Strong glass fiber cords are spirally s-twisted and z-twisted alternately, which allows little elongation and prevents side tracking of the belt.
- **Tooth rubber**: The chloroprene rubber combined with the back face rubber protects the cords and provides high flex fatigue strength and excellent heat resistance, oil resistance, and weather resistance.
- **Facing fabric**: The nylon woven cloth excellent in abrasion resistance protects the tooth section and smooths the meshing with the pulleys.

(2) Bancollan STS (polyurethane)

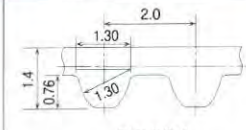
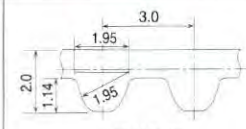


- **Back face rubber / Tooth rubber**:
  They use polyurethane and are excellent in shearing force, abrasion resistance, oil resistance, and weather resistance. (In the winter, white powder adheres to the belt surface and becomes liquid at normal temperature, but this has no problems in use. However, please avoid using the back face for paper conveyance.)
- **Cord**: Glass fiber cord
  Strong glass fiber cords are spirally s-twisted and z-twisted alternately, which allows little elongation and prevents side tracking of the belt.
  : Aramid cord
  High tensile strength and excellent flex fatigue. However, the dimensions vary depending on the ambient humidity; please check the performance, such as shaft load and tooth skip torque, before using the belt.

Tooth profile dimensions and indication method
(rubber STS)

Belt type	Dimension (mm)	Belt indication method
S1.5M		60 S1.5M 204 Belt nominal width (6mm) · Belt type (S1.5M) · Belt nominal length (204mm)
S2M	 PLD 0.254	60 S2M 200 Belt nominal width (6mm) · Belt type (S2M) · Belt nominal length (200mm)
S3M	 PLD 0.381	100 S3M 200 Belt nominal width (10mm) · Belt type (S3M) · Belt nominal length (200mm)
S4.5M		150 S4.5M 630 Belt nominal width (15.0mm) · Belt type (S4.5M) · Belt nominal length (630mm)

Tooth profile dimensions and indication method
(Bancollan STS)

Belt type	Dimension (mm)	Belt indication method
S2M	 PLD 0.254	60 S2M 200 U G Belt nominal width (6mm) · Belt type (S2M) · Belt nominal length (200mm) · Polyurethane · Glass fiber
S3M	 PLD 0.381	100 S3M 200 U K Belt nominal width (10mm) · Belt type (S3M) · Belt nominal length (200mm) · Polyurethane · Aramid

STS standard effective lengths

R: Rubber
U: Polyurethane

Type S1.5M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S1.5M 84	84.00	56	●	—
S1.5M 92	91.50	61	●	—
S1.5M 93	93.00	62	●	—
S1.5M 95	94.50	63	●	—
S1.5M 98	97.50	65	●	—
S1.5M 99	99.00	66	●	—
S1.5M 101	100.50	67	●	—
S1.5M 102	102.00	68	●	—
S1.5M 114	114.00	76	●	—
S1.5M 119	118.50	79	●	—
S1.5M 123	123.00	82	●	—
S1.5M 134	133.50	89	●	—
S1.5M 135	135.00	90	●	—
S1.5M 137	136.50	91	●	—
S1.5M 141	141.00	94	●	—
S1.5M 150	150.00	100	●	—
S1.5M 158	157.50	105	●	—
S1.5M 161	160.50	107	●	—
S1.5M 164	163.50	109	●	—
S1.5M 165	165.00	110	●	—
S1.5M 168	168.00	112	●	—
S1.5M 174	174.00	116	●	—
S1.5M 180	180.00	120	●	—
S1.5M 186	186.00	124	●	—
S1.5M 195	195.00	130	●	—
S1.5M 198	198.00	132	●	—
S1.5M 204	204.00	136	●	—
S1.5M 206	205.50	137	●	—
S1.5M 210	210.00	140	●	—
S1.5M 222	222.00	148	●	—
S1.5M 224	223.50	149	●	—
S1.5M 225	225.00	150	●	—
S1.5M 227	226.50	151	●	—
S1.5M 236	235.50	157	●	—
S1.5M 240	240.00	160	●	—
S1.5M 248	247.50	165	●	—
S1.5M 249	249.00	166	●	—
S1.5M 252	252.00	168	●	—
S1.5M 255	255.00	170	●	—
S1.5M 261	261.00	174	●	—
S1.5M 263	262.50	175	●	—
S1.5M 273	273.00	182	●	—
S1.5M 281	280.50	187	●	—
S1.5M 288	288.00	192	●	—
S1.5M 290	289.50	193	●	—
S1.5M 293	292.50	195	●	—
S1.5M 302	301.50	201	●	—
S1.5M 303	303.00	202	●	—
S1.5M 305	304.50	203	●	—
S1.5M 315	315.00	210	●	—
S1.5M 335	334.50	223	●	—
S1.5M 347	346.50	231	●	—
S1.5M 365	364.50	243	●	—
S1.5M 366	366.00	244	●	—
S1.5M 378	378.00	252	●	—
S1.5M 390	390.00	260	●	—
S1.5M 441	441.00	294	●	—
S1.5M 444	444.00	296	●	—
S1.5M 480	480.00	320	●	—
S1.5M 501	501.00	334	●	—
S1.5M 516	516.00	344	●	—
S1.5M 555	555.00	370	●	—
S1.5M 560	559.50	373	●	—
S1.5M 567	567.00	378	●	—
S1.5M 720	720.00	480	●	—
S1.5M 792	792.00	528	●	—
S1.5M 1116	1116.00	744	●	—

Type S2M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S2M 74	74.00	37	●	—
S2M 76	76.00	38	●	○
S2M 78	78.00	39	●	○
S2M 80	80.00	40	●	○
S2M 84	84.00	42	●	—
S2M 86	86.00	43	●	○
S2M 88	88.00	44	●	—
S2M 90	90.00	45	●	○
S2M 92	92.00	46	●	○
S2M 94	94.00	47	●	—
S2M 96	96.00	48	●	—
S2M 98	98.00	49	●	—
S2M 100	100.00	50	●	○
S2M 102	102.00	51	●	○
S2M 104	104.00	52	●	—
S2M 106	106.00	53	●	○
S2M 108	108.00	54	●	—
S2M 110	110.00	55	●	○
S2M 112	112.00	56	●	○
S2M 114	114.00	57	●	○
S2M 116	116.00	58	●	○
S2M 118	118.00	59	●	—
S2M 120	120.00	60	●	○
S2M 122	122.00	61	●	○
S2M 124	124.00	62	●	—
S2M 126	126.00	63	●	○
S2M 128	128.00	64	●	○
S2M 130	130.00	65	●	—
S2M 132	132.00	66	●	—
S2M 134	134.00	67	●	—
S2M 136	136.00	68	●	—
S2M 138	138.00	69	●	○
S2M 140	140.00	70	●	○
S2M 142	142.00	71	●	○
S2M 144	144.00	72	●	○
S2M 146	146.00	73	●	—
S2M 148	148.00	74	●	○
S2M 150	150.00	75	●	—
S2M 152	152.00	76	●	—
S2M 156	156.00	78	●	—
S2M 158	158.00	79	●	○
S2M 160	160.00	80	●	○
S2M 162	162.00	81	●	—
S2M 164	164.00	82	●	○
S2M 166	166.00	83	●	○
S2M 168	168.00	84	●	○
S2M 170	170.00	85	●	○
S2M 172	172.00	86	●	○
S2M 174	174.00	87	●	—
S2M 176	176.00	88	●	○
S2M 178	178.00	89	●	—
S2M 180	180.00	90	●	○
S2M 182	182.00	91	●	—
S2M 184	184.00	92	●	○
S2M 186	186.00	93	●	○
S2M 188	188.00	94	●	—
S2M 190	190.00	95	●	○
S2M 192	192.00	96	●	○
S2M 194	194.00	97	●	—
S2M 196	196.00	98	●	—
S2M 198	198.00	99	●	—
S2M 200	200.00	100	●	○
S2M 202	202.00	101	●	—
S2M 204	204.00	102	●	—
S2M 206	206.00	103	●	○
S2M 208	208.00	104	●	—
S2M 210	210.00	105	●	○

Type S2M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S2M 212	212.00	106	●	—
S2M 214	214.00	107	●	○
S2M 216	216.00	108	●	○
S2M 218	218.00	109	●	○
S2M 220	220.00	110	●	○
S2M 222	222.00	111	●	—
S2M 224	224.00	112	●	○
S2M 226	226.00	113	●	—
S2M 230	230.00	115	●	○
S2M 232	232.00	116	●	—
S2M 234	234.00	117	●	○
S2M 236	236.00	118	●	○
S2M 238	238.00	119	●	○
S2M 240	240.00	120	●	○
S2M 242	242.00	121	●	—
S2M 244	244.00	122	●	—
S2M 248	248.00	124	●	—
S2M 250	250.00	125	●	○
S2M 252	252.00	126	●	—
S2M 254	254.00	127	●	—
S2M 256	256.00	128	●	○
S2M 258	258.00	129	●	○
S2M 260	260.00	130	●	○
S2M 262	262.00	131	●	—
S2M 264	264.00	132	●	○
S2M 266	266.00	133	●	○
S2M 268	268.00	134	●	—
S2M 270	270.00	135	●	—
S2M 272	272.00	136	●	—
S2M 274	274.00	137	●	—
S2M 276	276.00	138	●	—
S2M 278	278.00	139	●	—
S2M 280	280.00	140	●	○
S2M 282	282.00	141	●	—
S2M 284	284.00	142	●	—
S2M 286	286.00	143	●	—
S2M 288	288.00	144	●	—
S2M 290	290.00	145	●	○
S2M 292	292.00	146	●	—
S2M 294	294.00	147	●	—
S2M 296	296.00	148	●	—
S2M 298	298.00	149	●	—
S2M 300	300.00	150	●	○
S2M 302	302.00	151	●	—
S2M 304	304.00	152	●	—
S2M 306	306.00	153	●	—
S2M 308	308.00	154	●	—
S2M 310	310.00	155	●	—
S2M 312	312.00	156	●	—
S2M 314	314.00	157	●	○
S2M 316	316.00	158	●	○
S2M 318	318.00	159	●	—
S2M 320	320.00	160	●	○
S2M 322	322.00	161	●	○
S2M 324	324.00	162	●	—
S2M 326	326.00	163	●	—
S2M 328	328.00	164	●	—
S2M 330	330.00	165	●	—
S2M 332	332.00	166	●	—
S2M 334	334.00	167	●	○
S2M 336	336.00	168	●	—
S2M 338	338.00	169	●	—
S2M 340	340.00	170	●	○
S2M 342	342.00	171	●	—
S2M 344	344.00	172	●	—
S2M 350	350.00	175	●	—
S2M 354	354.00	177	●	○

Type S2M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S2M 360	360.00	180	●	○
S2M 364	364.00	182	●	—
S2M 370	370.00	185	●	○
S2M 372	372.00	186	●	—
S2M 374	374.00	187	●	—
S2M 376	376.00	188	●	—
S2M 380	380.00	190	●	○
S2M 386	386.00	193	●	—
S2M 390	390.00	195	●	—
S2M 396	396.00	198	●	○
S2M 400	400.00	200	●	○
S2M 406	406.00	203	●	—
S2M 408	408.00	204	●	—
S2M 410	410.00	205	●	—
S2M 416	416.00	208	●	—
S2M 420	420.00	210	●	—
S2M 426	426.00	213	●	—
S2M 428	428.00	214	●	—
S2M 434	434.00	217	●	—
S2M 436	436.00	218	●	○
S2M 438	438.00	219	●	—
S2M 440	440.00	220	●	○
S2M 448	448.00	224	●	○
S2M 452	452.00	226	●	—
S2M 454	454.00	227	●	○
S2M 456	456.00	228	●	—
S2M 460	460.00	230	●	○
S2M 464	464.00	232	●	—
S2M 468	468.00	234	●	—
S2M 474	474.00	237	●	○
S2M 480	480.00	240	●	○
S2M 486	486.00	243	●	—
S2M 488	488.00	244	●	○
S2M 490	490.00	245	●	—
S2M 494	494.00	247	●	—
S2M 500	500.00	250	●	○
S2M 504	504.00	252	●	○
S2M 506	506.00	253	●	—
S2M 520	520.00	260	●	○
S2M 524	524.00	262	●	—
S2M 530	530.00	265	●	—
S2M 532	532.00	266	●	—
S2M 540	540.00	270	●	—
S2M 544	544.00	272	●	○
S2M 548	548.00	274	●	○
S2M 550	550.00	275	●	—
S2M 558	558.00	279	●	—
S2M 560	560.00	280	●	—
S2M 572	572.00	286	●	—
S2M 580	580.00	290	●	—
S2M 586	586.00	293	●	—
S2M 594	594.00	297	●	—
S2M 596	596.00	298	●	—
S2M 600	600.00	300	●	○
S2M 604	604.00	302	●	—
S2M 606	606.00	303	●	—
S2M 620	620.00	310	●	○
S2M 630	630.00	315	●	○
S2M 632	632.00	316	●	—
S2M 650	650.00	325	●	—
S2M 652	652.00	326	●	—
S2M 654	654.00	327	●	○
S2M 656	656.00	328	●	—
S2M 660	660.00	330	●	—
S2M 668	668.00	334	●	—
S2M 676	676.00	338	●	—
S2M 692	692.00	346	●	—

Type S2M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S2M 700	700.00	350	●	—
S2M 710	710.00	355	●	○
S2M 726	726.00	363	●	—
S2M 742	742.00	371	●	—
S2M 752	752.00	376	●	—
S2M 754	754.00	377	●	○
S2M 766	766.00	383	●	—
S2M 790	790.00	395	●	○
S2M 796	796.00	398	●	—
S2M 800	800.00	400	●	○
S2M 806	806.00	403	●	○
S2M 810	810.00	405	●	—
S2M 826	826.00	413	●	—
S2M 828	828.00	414	●	—
S2M 848	848.00	424	●	—
S2M 856	856.00	425	●	—
S2M 864	864.00	432	●	—
S2M 898	898.00	449	●	—
S2M 900	900.00	450	●	*○
S2M 940	940.00	470	●	—
S2M 946	946.00	473	●	—
S2M 950	950.00	475	●	—
S2M 984	984.00	492	●	—
S2M 1000	1000.00	500	●	*○
S2M 1020	1020.00	510	●	—
S2M 1024	1024.00	512	●	—
S2M 1032	1032.00	516	●	—
S2M 1036	1036.00	518	●	—
S2M 1042	1042.00	521	●	—
S2M 1064	1064.00	532	●	—
S2M 1066	1066.00	533	●	—
S2M 1074	1074.00	537	●	—
S2M 1086	1086.00	543	●	—
S2M 1094	1094.00	547	●	—
S2M 1100	1100.00	550	●	—
S2M 1110	1110.00	555	●	—
S2M 1136	1136.00	568	●	—
S2M 1154	1154.00	577	●	—
S2M 1166	1166.00	583	●	—
S2M 1196	1196.00	598	●	—
S2M 1200	1200.00	600	●	—
S2M 1224	1224.00	612	●	—
S2M 1228	1228.00	614	●	—
S2M 1250	1250.00	625	●	—
S2M 1274	1274.00	637	●	—
S2M 1284	1284.00	642	●	—
S2M 1290	1290.00	645	●	—

Bancollan STS and S2M of the sizes with the * mark are available in aramid cord type only.

Type S3M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S3M 93	93.00	31	●	—
S3M 96	96.00	32	●	—
S3M 99	99.00	33	●	—
S3M 108	108.00	36	●	—
S3M 120	120.00	40	●	○
S3M 123	123.00	41	●	—
S3M 129	129.00	43	●	—
S3M 132	132.00	44	●	—
S3M 138	138.00	46	●	—
S3M 141	141.00	47	●	—
S3M 144	144.00	48	●	○
S3M 147	147.00	49	●	—
S3M 150	150.00	50	●	○
S3M 156	156.00	52	●	—
S3M 159	159.00	53	●	○
S3M 162	162.00	54	●	○
S3M 168	168.00	56	●	—
S3M 171	171.00	57	●	○
S3M 174	174.00	58	●	○
S3M 177	177.00	59	●	○
S3M 180	180.00	60	●	—
S3M 183	183.00	61	●	—
S3M 186	186.00	62	●	○
S3M 189	189.00	63	●	○
S3M 192	192.00	64	●	○
S3M 195	195.00	65	●	○
S3M 198	198.00	66	●	—
S3M 201	201.00	67	●	○
S3M 204	204.00	68	●	○
S3M 207	207.00	69	●	—
S3M 210	210.00	70	●	○
S3M 213	213.00	71	●	○
S3M 219	219.00	73	●	○
S3M 222	222.00	74	●	○
S3M 225	225.00	75	●	○
S3M 228	228.00	76	●	—
S3M 234	234.00	78	●	○
S3M 237	237.00	79	●	○
S3M 240	240.00	80	●	○
S3M 243	243.00	81	●	—
S3M 246	246.00	82	●	○
S3M 249	249.00	83	●	—
S3M 252	252.00	84	●	○
S3M 255	255.00	85	●	○
S3M 258	258.00	86	●	—
S3M 261	261.00	87	●	—
S3M 264	264.00	88	●	○
S3M 267	267.00	89	●	○
S3M 270	270.00	90	●	○
S3M 273	273.00	91	●	—
S3M 276	276.00	92	●	○
S3M 279	279.00	93	●	—
S3M 282	282.00	94	●	—
S3M 285	285.00	95	●	○
S3M 288	288.00	96	●	—
S3M 291	291.00	97	●	—
S3M 294	294.00	98	●	—
S3M 297	297.00	99	●	—
S3M 300	300.00	100	●	○
S3M 303	303.00	101	●	—
S3M 306	306.00	102	●	—
S3M 309	309.00	103	●	—
S3M 312	312.00	104	●	○
S3M 315	315.00	105	●	—
S3M 318	318.00	106	●	○
S3M 324	324.00	108	●	—
S3M 327	327.00	109	●	○

STS standard effective lengths

R: Rubber
U: Polyurethane

Type S3M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S3M 330	330.00	110	●	—
S3M 333	333.00	111	●	—
S3M 336	336.00	112	●	—
S3M 339	339.00	113	●	○
S3M 342	342.00	114	●	○
S3M 348	348.00	116	●	—
S3M 351	351.00	117	●	—
S3M 354	354.00	118	●	○
S3M 360	360.00	120	●	○
S3M 363	363.00	121	●	—
S3M 366	366.00	122	●	—
S3M 369	369.00	123	●	—
S3M 372	372.00	124	●	—
S3M 375	375.00	125	●	—
S3M 378	378.00	126	●	○
S3M 384	384.00	128	●	○
S3M 387	387.00	129	●	—
S3M 390	390.00	130	●	○
S3M 396	396.00	132	●	○
S3M 399	399.00	133	●	—
S3M 402	402.00	134	●	○
S3M 405	405.00	135	●	○
S3M 408	408.00	136	●	—
S3M 414	414.00	138	●	—
S3M 417	417.00	139	●	○
S3M 420	420.00	140	●	○
S3M 423	423.00	141	●	—
S3M 426	426.00	142	●	—
S3M 432	432.00	144	●	○
S3M 438	438.00	146	●	—
S3M 444	444.00	148	●	—
S3M 447	447.00	149	●	○
S3M 453	453.00	151	●	○
S3M 456	456.00	152	●	—
S3M 459	459.00	153	●	○
S3M 468	468.00	156	●	—
S3M 471	471.00	157	●	—
S3M 474	474.00	158	●	—
S3M 480	480.00	160	●	—
S3M 483	483.00	161	●	—
S3M 486	486.00	162	●	○
S3M 489	489.00	163	●	—
S3M 492	492.00	164	●	—
S3M 498	498.00	166	●	—
S3M 501	501.00	167	●	○
S3M 504	504.00	168	●	○
S3M 507	507.00	169	●	○
S3M 510	510.00	170	●	○
S3M 513	513.00	171	●	○
S3M 516	516.00	172	●	○
S3M 519	519.00	173	●	○
S3M 522	522.00	174	●	—
S3M 525	525.00	175	●	—
S3M 528	528.00	176	●	—
S3M 534	534.00	178	●	—
S3M 537	537.00	179	●	○
S3M 540	540.00	180	●	—
S3M 543	543.00	181	●	—
S3M 549	549.00	183	●	—
S3M 552	552.00	184	●	—
S3M 555	555.00	185	●	○
S3M 564	564.00	188	●	○
S3M 573	573.00	191	●	—
S3M 579	579.00	193	●	—
S3M 588	588.00	196	●	○
S3M 597	597.00	199	●	—
S3M 600	600.00	200	●	○

Type S3M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S3M 603	603.00	201	●	—
S3M 609	609.00	203	●	○
S3M 612	612.00	204	●	—
S3M 621	621.00	207	●	—
S3M 633	633.00	211	●	○
S3M 636	636.00	212	●	—
S3M 648	648.00	216	●	—
S3M 657	657.00	219	●	—
S3M 660	660.00	220	●	○
S3M 666	666.00	222	●	○
S3M 678	678.00	226	●	—
S3M 681	681.00	227	●	○
S3M 687	687.00	229	●	—
S3M 690	690.00	230	●	—
S3M 696	696.00	232	●	—
S3M 699	699.00	233	●	○
S3M 720	720.00	240	●	—
S3M 726	726.00	242	●	—
S3M 735	735.00	245	●	—
S3M 741	741.00	247	●	—
S3M 750	750.00	250	●	○
S3M 765	765.00	255	●	○
S3M 768	768.00	256	●	—
S3M 771	771.00	257	●	—
S3M 774	774.00	258	●	○
S3M 789	789.00	263	●	○
S3M 804	804.00	268	●	○
S3M 810	810.00	270	●	○
S3M 819	819.00	273	●	—
S3M 825	825.00	275	●	—
S3M 831	831.00	277	●	—
S3M 837	837.00	279	●	—
S3M 852	852.00	284	●	—
S3M 858	858.00	286	●	—
S3M 882	882.00	294	●	—
S3M 885	885.00	295	●	○
S3M 888	888.00	296	●	—
S3M 900	900.00	300	●	○
S3M 909	909.00	303	●	—
S3M 918	918.00	306	●	—
S3M 927	927.00	309	●	—
S3M 936	936.00	312	●	○
S3M 951	951.00	317	●	○
S3M 954	954.00	318	●	—
S3M 990	990.00	330	●	—
S3M 999	999.00	333	●	—
S3M 1005	1005.00	335	●	○
S3M 1014	1014.00	338	●	—
S3M 1050	1050.00	350	●	○
S3M 1080	1080.00	360	●	—
S3M 1119	1119.00	373	●	—
S3M 1134	1134.00	378	●	—
S3M 1146	1146.00	382	●	○
S3M 1170	1170.00	390	●	—
S3M 1176	1176.00	392	●	—
S3M 1188	1188.00	396	●	—
S3M 1203	1203.00	401	●	—
S3M 1221	1221.00	407	●	—
S3M 1236	1236.00	412	●	—
S3M 1245	1245.00	415	●	—
S3M 1260	1260.00	420	●	○
S3M 1290	1290.00	430	●	—
S3M 1299	1299.00	433	●	—
S3M 1332	1332.00	444	●	—
S3M 1338	1338.00	446	●	—
S3M 1374	1374.00	458	●	—
S3M 1383	1383.00	461	●	○

Type S3M

Belt nominal length	Pitch length (mm)	No. of teeth	Manufacturable or not R	Manufacturable or not U
S3M 1401	1401.00	467	●	—
S3M 1419	1419.00	473	●	—
S3M 1530	1530.00	510	●	—
S3M 1569	1569.00	523	●	—
S3M 1596	1596.00	532	●	○
S3M 1650	1650.00	550	●	—
S3M 1680	1680.00	560	●	—
S3M 1734	1734.00	578	●	—
S3M 1788	1788.00	596	●	—

Type S4.5M (rubber)

Belt nominal length	Pitch length (mm)	No. of teeth
S4.5M 162	162.00	36
S4.5M 180	180.00	40
S4.5M 198	198.00	44
S4.5M 225	225.00	50
S4.5M 239	238.50	53
S4.5M 252	252.00	56
S4.5M 279	279.00	62
S4.5M 284	283.50	63
S4.5M 315	315.00	70
S4.5M 324	324.00	72
S4.5M 351	351.00	78
S4.5M 383	382.50	85
S4.5M 396	396.00	88
S4.5M 450	450.00	100
S4.5M 491	490.50	109
S4.5M 504	504.00	112
S4.5M 518	517.50	115
S4.5M 558	558.00	124
S4.5M 563	562.50	125
S4.5M 612	612.00	136
S4.5M 630	630.00	140
S4.5M 711	711.00	158
S4.5M 729	729.00	162
S4.5M 801	801.00	178
S4.5M 1031	1030.50	229
S4.5M 2111	2110.50	469

STS belt standard widths

Nominal width	40	60	100	150
Width (mm)	4.0	6.0	10.0	15.0
S1.5M	●	●	●	
S2M	●	●	●	
S3M		●	●	●
S4.5M		●	●	●

Note: For other belt widths than the above, please contact us.
The nominal width is indicated by a factor of ten of the belt width (mm).

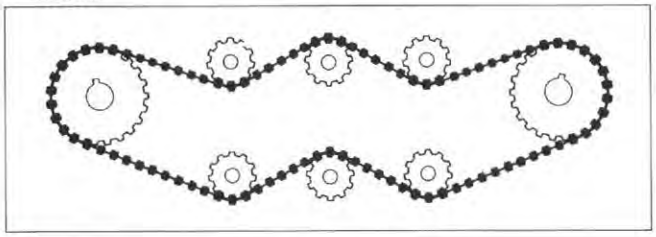
2. Double-Sided STS Product Introduction

Double-Sided STS is a double-sided synchronous belt of high horsepower type. Use this belt when the space for power transmission is limited, a long service life is required, or noise is large with a double-sided synchronous belt or chain.

Features

■ Multi-shaft synchronous power transmission possible

A single belt can synchronously transmit power with many shafts.



■ Easy maintenance

Unlike chains, it has no need to re-tension or lubricate and is easy to maintain.

■ Low noise

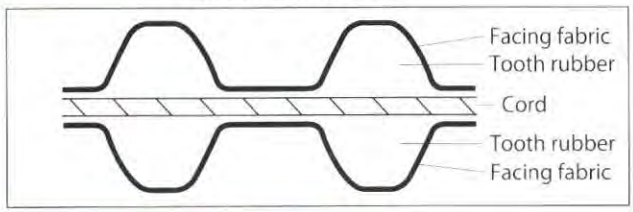
No metal-to-metal contact allows quiet power transmission.

■ Clean

Unlike chains or gears, it has no need for lubrication, eliminating oil dispersion, which provides cleanliness in the sections around the belt.

Structure

Double-Sided STS



Indication Method

Double-Sided STS

250 D S8M 1400

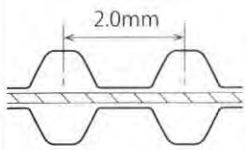
- 250: Belt nominal width (25mm)
- D: Double-Sided STS
- S8M: Belt type (S8M)
- 1400: Belt nominal length (1400mm)

Dimensional Tolerance

For dimensional tolerances of effective length and belt width, refer to **P. 58**.

Double-Sided STS standard effective lengths

Type DS2M



Belt standard widths

Nominal width	Width (mm)
40	4
60	6
100	10

Belt size (Type DS2M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS2M 300	300.00	150
DS2M 302	302.00	151
DS2M 304	304.00	152
DS2M 306	306.00	153
DS2M 308	308.00	154
DS2M 310	310.00	155
DS2M 312	312.00	156
DS2M 314	314.00	157
DS2M 316	316.00	158
DS2M 318	318.00	159
DS2M 320	320.00	160
DS2M 322	322.00	161
DS2M 324	324.00	162
DS2M 326	326.00	163
DS2M 328	328.00	164
DS2M 330	330.00	165
DS2M 332	332.00	166
DS2M 334	334.00	167
DS2M 336	336.00	168
DS2M 338	338.00	169
DS2M 340	340.00	170

Belt size (Type DS2M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS2M 342	342.00	171
DS2M 344	344.00	172
DS2M 350	350.00	175
DS2M 354	354.00	177
DS2M 360	360.00	180
DS2M 364	364.00	182
DS2M 370	370.00	185
DS2M 372	372.00	186
DS2M 374	374.00	187
DS2M 376	376.00	188
DS2M 380	380.00	190
DS2M 386	386.00	193
DS2M 390	390.00	195
DS2M 396	396.00	198
DS2M 400	400.00	200
DS2M 406	406.00	203
DS2M 408	408.00	204
DS2M 410	410.00	205
DS2M 416	416.00	208
DS2M 420	420.00	210
DS2M 426	426.00	213
DS2M 428	428.00	214
DS2M 434	434.00	217
DS2M 436	436.00	218
DS2M 438	438.00	219
DS2M 440	440.00	220
DS2M 448	448.00	224
DS2M 452	452.00	226
DS2M 454	454.00	227
DS2M 456	456.00	228
DS2M 460	460.00	230

Belt size (Type DS2M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS2M 464	464.00	232
DS2M 468	468.00	234
DS2M 474	474.00	237
DS2M 480	480.00	240
DS2M 486	486.00	243
DS2M 490	490.00	245
DS2M 494	494.00	247
DS2M 500	500.00	250
DS2M 506	506.00	253
DS2M 520	520.00	260
DS2M 524	524.00	262
DS2M 530	530.00	265
DS2M 532	532.00	266
DS2M 540	540.00	270
DS2M 550	550.00	275
DS2M 558	558.00	279
DS2M 560	560.00	280
DS2M 572	572.00	286
DS2M 580	580.00	290
DS2M 586	586.00	293
DS2M 594	594.00	297
DS2M 596	596.00	298
DS2M 600	600.00	300
DS2M 604	604.00	302
DS2M 606	606.00	303
DS2M 620	620.00	310
DS2M 630	630.00	315
DS2M 632	632.00	316
DS2M 650	650.00	325
DS2M 652	652.00	326
DS2M 654	654.00	327

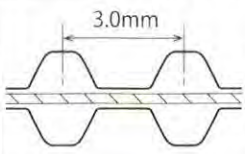
STS / Double-Sided STS (Super-Torque Synchronous Belt)

Product Introduction

Belt size (Type DS2M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS2M 656	656.00	328
DS2M 660	660.00	330
DS2M 668	668.00	334
DS2M 676	676.00	338
DS2M 692	692.00	346
DS2M 700	700.00	350
DS2M 710	710.00	355
DS2M 726	726.00	363
DS2M 742	742.00	371
DS2M 752	752.00	376
DS2M 754	754.00	377
DS2M 766	766.00	383
DS2M 796	796.00	398
DS2M 800	800.00	400
DS2M 810	810.00	405
DS2M 826	826.00	413
DS2M 828	828.00	414
DS2M 848	848.00	424
DS2M 856	856.00	428
DS2M 864	864.00	432
DS2M 898	898.00	449
DS2M 900	900.00	450
DS2M 940	940.00	470
DS2M 946	946.00	473
DS2M 950	950.00	475
DS2M 984	984.00	492
DS2M 1000	1000.00	500
DS2M 1020	1020.00	510
DS2M 1024	1024.00	512
DS2M 1032	1032.00	516
DS2M 1036	1036.00	518
DS2M 1042	1042.00	521
DS2M 1064	1064.00	532
DS2M 1066	1066.00	533
DS2M 1074	1074.00	537
DS2M 1086	1086.00	543
DS2M 1094	1094.00	547
DS2M 1100	1100.00	550
DS2M 1110	1110.00	555
DS2M 1136	1136.00	568
DS2M 1154	1154.00	577

Type DS3M



Belt standard widths

Nominal width	Width (mm)
60	6
100	10
150	15

Belt size (Type DS3M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS3M 300	300.00	100
DS3M 303	303.00	101
DS3M 306	306.00	102
DS3M 309	309.00	103
DS3M 312	312.00	104
DS3M 315	315.00	105
DS3M 318	318.00	106
DS3M 324	324.00	108
DS3M 327	327.00	109
DS3M 330	330.00	110
DS3M 333	333.00	111
DS3M 336	336.00	112
DS3M 339	339.00	113
DS3M 342	342.00	114
DS3M 348	348.00	116

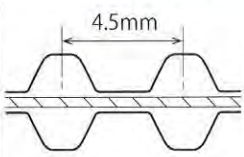
Belt size (Type DS3M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS3M 351	351.00	117
DS3M 354	354.00	118
DS3M 360	360.00	120
DS3M 363	363.00	121
DS3M 366	366.00	122
DS3M 369	369.00	123
DS3M 372	372.00	124
DS3M 375	375.00	125
DS3M 378	378.00	126
DS3M 384	384.00	128
DS3M 387	387.00	129
DS3M 390	390.00	130
DS3M 396	396.00	132
DS3M 399	399.00	133
DS3M 402	402.00	134
DS3M 405	405.00	135
DS3M 408	408.00	136
DS3M 414	414.00	138
DS3M 417	417.00	139
DS3M 420	420.00	140
DS3M 423	423.00	141
DS3M 426	426.00	142
DS3M 432	432.00	144
DS3M 438	438.00	146
DS3M 444	444.00	148
DS3M 447	447.00	149
DS3M 453	453.00	151
DS3M 456	456.00	152
DS3M 459	459.00	153
DS3M 468	468.00	156
DS3M 471	471.00	157
DS3M 474	474.00	158
DS3M 480	480.00	160
DS3M 483	483.00	161
DS3M 486	486.00	162
DS3M 489	489.00	163
DS3M 492	492.00	164
DS3M 498	498.00	166
DS3M 501	501.00	167
DS3M 507	507.00	169
DS3M 510	510.00	170
DS3M 513	513.00	171
DS3M 516	516.00	172
DS3M 519	519.00	173
DS3M 522	522.00	174
DS3M 525	525.00	175
DS3M 528	528.00	176
DS3M 534	534.00	178
DS3M 537	537.00	179
DS3M 540	540.00	180
DS3M 543	543.00	181
DS3M 549	549.00	183
DS3M 552	552.00	184
DS3M 555	555.00	185
DS3M 564	564.00	188
DS3M 573	573.00	191
DS3M 579	579.00	193
DS3M 588	588.00	196
DS3M 597	597.00	199
DS3M 600	600.00	200
DS3M 603	603.00	201
DS3M 609	609.00	203
DS3M 612	612.00	204
DS3M 621	621.00	207
DS3M 633	633.00	211
DS3M 636	636.00	212
DS3M 648	648.00	216
DS3M 657	657.00	219
DS3M 660	660.00	220

Belt size (Type DS3M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS3M 666	666.00	222
DS3M 678	678.00	226
DS3M 681	681.00	227
DS3M 687	687.00	229
DS3M 690	690.00	230
DS3M 696	696.00	232
DS3M 699	699.00	233
DS3M 720	720.00	240
DS3M 726	726.00	242
DS3M 735	735.00	245
DS3M 741	741.00	247
DS3M 750	750.00	250
DS3M 768	768.00	256
DS3M 771	771.00	257
DS3M 789	789.00	263
DS3M 804	804.00	268
DS3M 810	810.00	270
DS3M 819	819.00	273
DS3M 825	825.00	275
DS3M 831	831.00	277
DS3M 837	837.00	279
DS3M 852	852.00	284
DS3M 858	858.00	286
DS3M 882	882.00	294
DS3M 885	885.00	295
DS3M 888	888.00	296
DS3M 900	900.00	300
DS3M 909	909.00	303
DS3M 918	918.00	306
DS3M 927	927.00	309
DS3M 936	936.00	312
DS3M 954	954.00	318
DS3M 990	990.00	330
DS3M 999	999.00	333
DS3M 1014	1014.00	338
DS3M 1050	1050.00	350
DS3M 1080	1080.00	360
DS3M 1119	1119.00	373
DS3M 1134	1134.00	378
DS3M 1146	1146.00	382
DS3M 1170	1170.00	390
DS3M 1176	1176.00	392
DS3M 1188	1188.00	396
DS3M 1203	1203.00	401
DS3M 1221	1221.00	407
DS3M 1236	1236.00	412
DS3M 1245	1245.00	415
DS3M 1290	1290.00	430
DS3M 1299	1299.00	433
DS3M 1332	1332.00	444
DS3M 1338	1338.00	446
DS3M 1374	1374.00	458
DS3M 1401	1401.00	467
DS3M 1419	1419.00	473
DS3M 1530	1530.00	510

Type DS4.5M



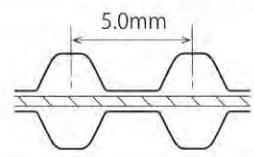
Belt standard widths

Nominal width	Width (mm)
60	6
100	10
150	15

Belt size (Type DS4.5M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS4.5M 450	450.00	100
DS4.5M 491	490.50	109
DS4.5M 504	504.00	112
DS4.5M 518	517.50	115
DS4.5M 558	558.00	124
DS4.5M 563	562.50	125
DS4.5M 612	612.00	136
DS4.5M 630	630.00	140
DS4.5M 711	711.00	158
DS4.5M 729	729.00	162
DS4.5M 801	801.00	178
DS4.5M 1031	1030.50	229

Type DS5M



Belt standard widths

Nominal width	Width (mm)
100	10
150	15
200	20
250	25

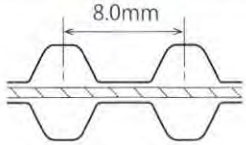
Belt size (Type DS5M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS5M 425	425.00	85
DS5M 435	435.00	87
DS5M 440	440.00	88
DS5M 445	445.00	89
DS5M 450	450.00	90
DS5M 475	475.00	95
DS5M 490	490.00	98
DS5M 500	500.00	100
DS5M 520	520.00	104
DS5M 525	525.00	105
DS5M 530	530.00	106
DS5M 545	545.00	109
DS5M 550	550.00	110
DS5M 560	560.00	112
DS5M 565	565.00	113
DS5M 570	570.00	114
DS5M 575	575.00	115
DS5M 590	590.00	118
DS5M 595	595.00	119
DS5M 600	600.00	120
DS5M 625	625.00	125
DS5M 635	635.00	127
DS5M 640	640.00	128
DS5M 645	645.00	129
DS5M 650	650.00	130
DS5M 665	665.00	133
DS5M 670	670.00	134
DS5M 675	675.00	135
DS5M 690	690.00	138
DS5M 695	695.00	139
DS5M 700	700.00	140
DS5M 710	710.00	142
DS5M 720	720.00	144
DS5M 725	725.00	145
DS5M 730	730.00	146
DS5M 740	740.00	148
DS5M 750	750.00	150
DS5M 765	765.00	153
DS5M 770	770.00	154
DS5M 775	775.00	155
DS5M 780	780.00	156
DS5M 800	800.00	160
DS5M 810	810.00	162
DS5M 830	830.00	166
DS5M 845	845.00	169
DS5M 850	850.00	170
DS5M 860	860.00	172
DS5M 870	870.00	174
DS5M 890	890.00	178
DS5M 900	900.00	180
DS5M 920	920.00	184
DS5M 930	930.00	186
DS5M 940	940.00	188
DS5M 950	950.00	190
DS5M 965	965.00	193

Belt size (Type DS5M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS5M 975	975.00	195
DS5M 1000	1000.00	200
DS5M 1025	1025.00	205
DS5M 1050	1050.00	210
DS5M 1055	1055.00	211
DS5M 1085	1085.00	217
DS5M 1090	1090.00	218
DS5M 1100	1100.00	220
DS5M 1105	1105.00	221
DS5M 1115	1115.00	223
DS5M 1120	1120.00	224
DS5M 1125	1125.00	225
DS5M 1135	1135.00	227
DS5M 1145	1145.00	229
DS5M 1160	1160.00	232
DS5M 1165	1165.00	233
DS5M 1195	1195.00	239
DS5M 1225	1225.00	245
DS5M 1250	1250.00	250
DS5M 1260	1260.00	252
DS5M 1270	1270.00	254
DS5M 1295	1295.00	259
DS5M 1330	1330.00	266
DS5M 1350	1350.00	270
DS5M 1420	1420.00	284
DS5M 1475	1475.00	295
DS5M 1500	1500.00	300
DS5M 1505	1505.00	301
DS5M 1530	1530.00	306
DS5M 1595	1595.00	319
DS5M 1605	1605.00	321
DS5M 1680	1680.00	336
DS5M 1715	1715.00	343
DS5M 1800	1800.00	360
DS5M 2000	2000.00	400

Type DS8M



Belt standard widths

Nominal width	Width (mm)
150	15
250	25
400	40
600	60

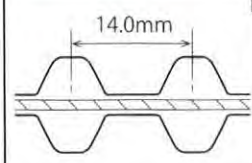
Belt size (Type DS8M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS8M 424	424.00	53
DS8M 440	440.00	55
DS8M 456	456.00	57
DS8M 480	480.00	60
DS8M 496	496.00	62
DS8M 512	512.00	64
DS8M 520	520.00	65
DS8M 528	528.00	66
DS8M 560	560.00	70
DS8M 584	584.00	73
DS8M 600	600.00	75
DS8M 632	632.00	79
DS8M 640	640.00	80
DS8M 656	656.00	82
DS8M 672	672.00	84
DS8M 680	680.00	85
DS8M 712	712.00	89
DS8M 720	720.00	90
DS8M 728	728.00	91
DS8M 760	760.00	95
DS8M 800	800.00	100
DS8M 824	824.00	103
DS8M 840	840.00	105
DS8M 848	848.00	106
DS8M 880	880.00	110
DS8M 888	888.00	111
DS8M 896	896.00	112
DS8M 920	920.00	115
DS8M 944	944.00	118
DS8M 960	960.00	120
DS8M 976	976.00	122
DS8M 984	984.00	123
DS8M 1000	1000.00	125
DS8M 1032	1032.00	129
DS8M 1040	1040.00	130
DS8M 1056	1056.00	132
DS8M 1080	1080.00	135
DS8M 1096	1096.00	137
DS8M 1120	1120.00	140
DS8M 1136	1136.00	142
DS8M 1152	1152.00	144
DS8M 1160	1160.00	145
DS8M 1184	1184.00	148
DS8M 1192	1192.00	149
DS8M 1200	1200.00	150
DS8M 1216	1216.00	152
DS8M 1224	1224.00	153
DS8M 1240	1240.00	155
DS8M 1248	1248.00	156
DS8M 1272	1272.00	159
DS8M 1280	1280.00	160
DS8M 1296	1296.00	162
DS8M 1312	1312.00	164
DS8M 1344	1344.00	168
DS8M 1352	1352.00	169

Belt size (Type DS8M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS8M 1360	1360.00	170
DS8M 1384	1384.00	173
DS8M 1392	1392.00	174
DS8M 1400	1400.00	175
DS8M 1424	1424.00	178
DS8M 1440	1440.00	180
DS8M 1480	1480.00	185
DS8M 1520	1520.00	190
DS8M 1552	1552.00	194
DS8M 1600	1600.00	200
DS8M 1648	1648.00	206
DS8M 1680	1680.00	210
DS8M 1728	1728.00	216
DS8M 1760	1760.00	220
DS8M 1776	1776.00	222
DS8M 1800	1800.00	225
DS8M 1808	1808.00	226
DS8M 1880	1880.00	235
DS8M 1912	1912.00	239
DS8M 1952	1952.00	244
DS8M 2000	2000.00	250
DS8M 2040	2040.00	255
DS8M 2120	2120.00	265
DS8M 2160	2160.00	270
DS8M 2240	2240.00	280
DS8M 2304	2304.00	288
DS8M 2400	2400.00	300
DS8M 2496	2496.00	312
DS8M 2560	2560.00	320
DS8M 2600	2600.00	325
DS8M 2800	2800.00	350
DS8M 2880	2880.00	360
DS8M 2944	2944.00	368
DS8M 3200	3200.00	400
DS8M 3600	3600.00	450
DS8M 3720	3720.00	465
DS8M 3904	3904.00	488
DS8M 4400	4400.00	550

Type DS14M



Belt standard widths

Nominal width	Width (mm)
400	40
600	60
800	80
1000	100
1200	120

Belt size (Type DS14M)

Belt nominal length	Pitch length (mm)	No. of teeth
DS14M 1400	1400.00	100
DS14M 1540	1540.00	110
DS14M 1610	1610.00	115
DS14M 1652	1652.00	118
DS14M 1778	1778.00	127
DS14M 1806	1806.00	129
DS14M 1890	1890.00	135
DS14M 1904	1904.00	136
DS14M 1960	1960.00	140
DS14M 2002	2002.00	143
DS14M 2100	2100.00	150
DS14M 2240	2240.00	160
DS14M 2310	2310.00	165
DS14M 2380	2380.00	170
DS14M 2450	2450.00	175
DS14M 2506	2506.00	179
DS14M 2590	2590.00	185
DS14M 2660	2660.00	190
DS14M 2800	2800.00	200
DS14M 3150	3150.00	225
DS14M 3248	3248.00	232
DS14M 3500	3500.00	250
DS14M 3556	3556.00	254
DS14M 3850	3850.00	275
DS14M 4004	4004.00	286
DS14M 4060	4060.00	290
DS14M 4326	4326.00	309
DS14M 4508	4508.00	322
DS14M 5012	5012.00	358

Synchronous Belt / Double-Sided Synchronous Belt

1. Bancollan Synchronous Belt TN Product Introduction

Features

■ Usable with a small pulley with a pitch diameter of 5.09 mm!

Because of the thin belt and cords (especially the polyester specification), Type TN10 fits well even with a pulley with a pitch diameter of 5.09 mm.

☆TN10.....Pitch diameter 5.09 mm / Outside diameter 4.74 mm

☆TN15.....Pitch diameter 9.55 mm / Outside diameter 8.91 mm

■ High torque with low power consumption!

The belt flex resistance and power loss by slipping are small, and the bearing load due to the initial tension can also be reduced. It can transmit higher torques than rubber rectangular belts or flat belts. Decelerated drive can reduce power consumption compared to DD (direct drive).

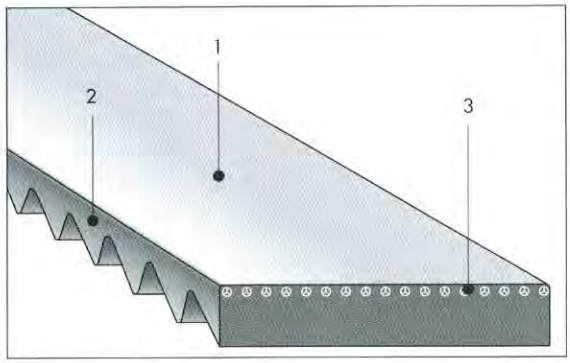
■ Little rotation non-uniformity!

The small belt pitch makes the pitch line close to a perfect circle when the belt is wound around a pulley. Therefore, it provides smooth rotation close to that of flat belts at accurate revolutions.

■ No backlash!

The triangular teeth at an angle of 70° mesh in contact with both wall surfaces of the pulley groove, causing no backlash.

Structure



1. **Tension rubber** (polyurethane)
2. **Tooth rubber** (polyurethane)
3. **Cord** Aramid cord Symbol K
   Polyester cord Symbol T

Note) Type TN10 is available in the polyester cord type only.

●**Cord**: Aramid cord
High tensile strength and excellent flex fatigue. However, the dimensions vary depending on the ambient humidity; please check the performance, such as shaft load and tooth skip torque, before using the belt.

Example of use

■ Audio equipment
- Compact disc (disc-driving / loading sections)
- Car stereo (tuner-driving / loading sections)
- Radio cassette recorder (measure against slipping of a rectangular belt)

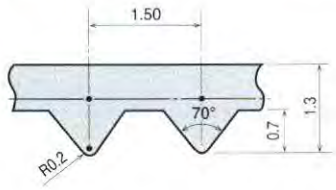
■ OA and automization equipment
- X-Y plotter (for forwarding / driving pens)
- Dot printer (carriage feed / pin tractor driving)
- Vending machine / money changer (for authenticating / feeding / driving bills)
- Bank terminal machine (for feeding / driving bills and cards)

■ Video equipment
- VTR (tape-winding-driving / loading sections)
- Video disc (loading section and reading section)
- Ultra-compact TV (tuner section)

■ Other precision equipment
- Camera (film winding driving)
- Analytical equipment (sample feeding)
- Robots / NC devices (for position detection)
- Medical equipment

(1) Type TN15

• Belt cross section dimensions



- Belt indication method

180 TN15-5.0 K

No. of teeth | Belt type | Belt nominal width | Cord symbol

- Belt standard widths

Belt nominal width	Belt width (mm)
3.0	3.0
5.0	5.0
7.0	7.0
10.0	10.0
13.0	13.0

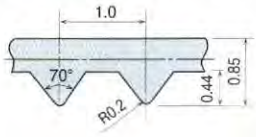
● Standard effective lengths

Belt nominal length	Pitch length (mm)	No. of teeth	Belt nominal length	Pitch length (mm)	No. of teeth	Belt nominal length	Pitch length (mm)	No. of teeth
25TN15	37.5	25	160TN15	240.0	160	320TN15	480.0	320
43TN15	64.5	43	164TN15	246.0	164	330TN15	495.0	330
50TN15	75.0	50	170TN15	255.0	170	334TN15	501.0	334
60TN15	90.0	60	172TN15	258.0	172	340TN15	510.0	340
63TN15	94.5	63	180TN15	270.0	180	350TN15	525.0	350
79TN15	118.5	79	186TN15	279.0	186	360TN15	540.0	360
82TN15	123.0	82	190TN15	285.0	190	370TN15	555.0	370
100TN15	150.0	100	192TN15	288.0	192	380TN15	570.0	380
110TN15	165.0	110	196TN15	294.0	196	390TN15	585.0	390
114TN15	171.0	114	204TN15	306.0	204	400TN15	600.0	400
120TN15	180.0	120	228TN15	342.0	228	421TN15	631.5	421
129TN15	193.5	129	240TN15	360.0	240	441TN15	661.5	441
130TN15	195.0	130	250TN15	375.0	250	460TN15	690.0	460
131TN15	196.5	131	260TN15	390.0	260	480TN15	720.0	480
137TN15	205.5	137	270TN15	405.0	270	481TN15	721.5	481
140TN15	210.0	140	271TN15	406.5	271	828TN15	1242.0	828
148TN15	222.0	148	280TN15	420.0	280			
150TN15	225.0	150	290TN15	435.0	290			
155TN15	232.5	155	300TN15	450.0	300			
157TN15	235.5	157	310TN15	465.0	310			

Note) Please note that the way the belt cross-sectional dimensions are indicated is different from that for the notched synchronous belt (Type N15) that has been manufactured.

(2) Type TN10

• Belt cross section dimensions



- Belt indication method

170 TN10-2.0 T

No. of teeth | Belt type | Nominal width | Cord symbol

- Belt standard widths

Belt nominal width	Belt width (mm)
1.0	1.0
2.0	2.0
3.0	3.0

● Standard effective lengths

Belt nominal length	Pitch length (mm)	No. of teeth	Belt nominal length	Pitch length (mm)	No. of teeth	Belt nominal length	Pitch length (mm)	No. of teeth
50TN10	50.0	50	140TN10	140.0	140	287TN10	287.0	287
60TN10	60.0	60	150TN10	150.0	150	292TN10	292.0	292
66TN10	66.0	66	160TN10	160.0	160	294TN10	294.0	294
70TN10	70.0	70	170TN10	170.0	170	298TN10	298.0	298
80TN10	80.0	80	200TN10	200.0	200	302TN10	302.0	302
81TN10	81.0	81	207TN10	207.0	207	310TN10	310.0	310
98TN10	98.0	98	215TN10	215.0	215	329TN10	329.0	329
100TN10	100.0	100	220TN10	220.0	220	349TN10	349.0	349
107TN10	107.0	107	230TN10	230.0	230	360TN10	360.0	360
110TN10	110.0	110	250TN10	250.0	250	372TN10	372.0	372
120TN10	120.0	120	275TN10	275.0	275	467TN10	467.0	467
130TN10	130.0	130	279TN10	279.0	279			

● Effective length tolerances

(Unit: mm)

Belt type	Nominal length	Center distance tolerance
TN10	50 or more to 200 or less	±0.20
	201 or more to 300 or less	±0.30
	301 or more	±0.40

● Belt width tolerances

(Unit: mm)

Belt type	Nominal width	Tolerance
TN10	1.0	±0.2
	2.0	
	3.0	

Note) The center distance tolerance is the one in length measurement under our measurement conditions.

2. Synchronous Belt (Rubber/Polyurethane) Product Introduction

The synchronous belts are belts for synchronous power transmission that combine the features of gears, chains, and flat belts. They are available in abundant types and sizes and are therefore easy to design for a wide range of applications from light duty to heavy duty. They are available in synthetic rubber type and polyurethane type (Bancollan); select them based on their respective features.

(1) Synchronous Belt (rubber)

Features

■ Accurate power transmission

The belt and pulleys mesh accurately and therefore provide revolutions and the amount of movement as calculated.

■ Economical power transmission

- No metal-to-metal contact eliminates the necessity for lubrication devices.
- As high initial tension is unnecessary, the bearing and motor can be miniaturized.

■ Wide range of operating conditions

In addition to the standard specifications, we manufacture the following special specification synchronous belts.

- Oil-resistant synchronous belt
  (when the belt is used where it is subject to a large amount of oil)
- Heat-resistant synchronous belt
  (when the belt is used at high temperatures from 90°C to 120°C)
- High-electrical-resistance synchronous belt
  (when insulation of 100 MΩ or more is required)

(2) Bancollan Synchronous Belt (polyurethane)

Features

■ Resistant to oil and ozone

Non-occurrence of swelling by oil and of cracking by ozone makes the belt most suitable for the following applications.

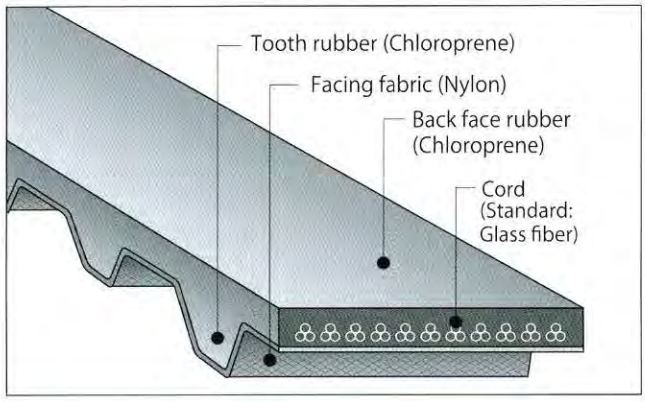
- Applications in which the oil from gears and bearings adhere to the belt, such as metal working machines and printing machines
- Applications that involve ozone generation, such as optical machines, copiers, and developers

■ Clean power transmission and conveyance

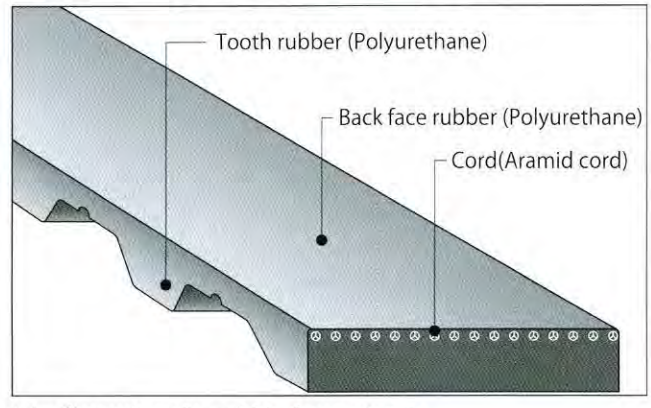
The beautiful color and the non-dispersion of rubber pieces allow sections around the belt to be kept clean. The belt is suitable for OA equipment and food packaging machines.

Structure

(1) Synchronous Belt (rubber)



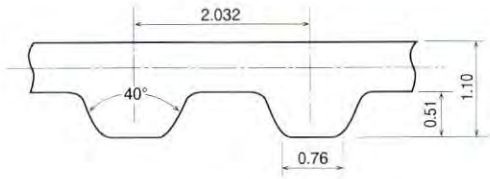
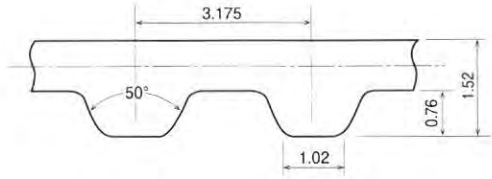
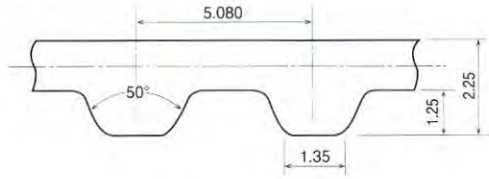
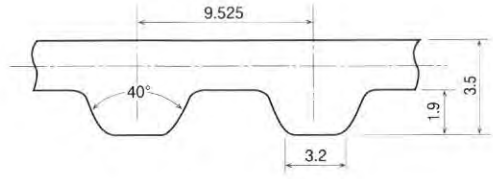
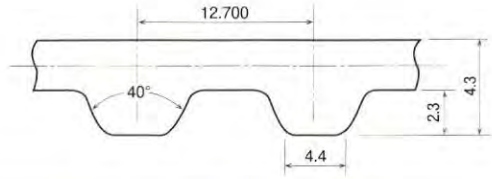
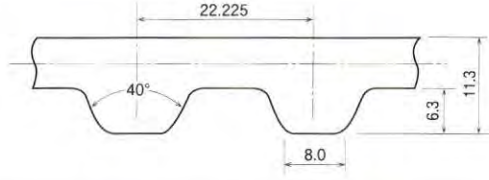
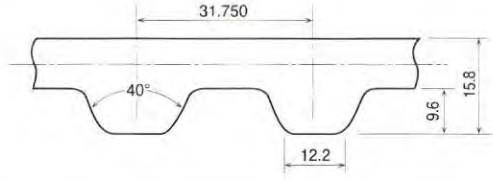
(2) Bancollan Synchronous Belt (polyurethane)



*Glass fiber cords are also available; please contact us.

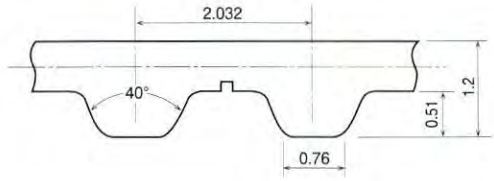
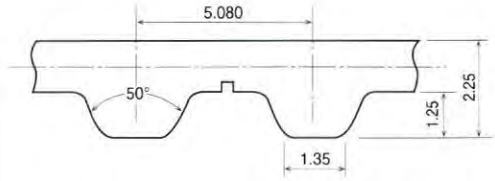
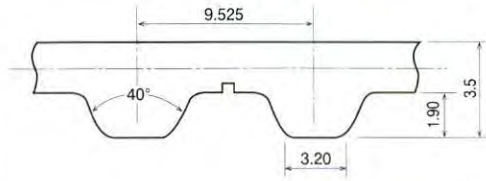
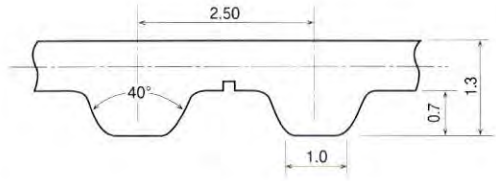
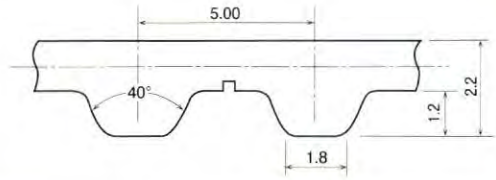
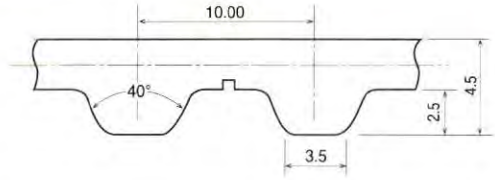
Belt dimensions and indication method

(1) Synchronous Belt (rubber)

Belt type	Dimension (mm)	Belt indication method
Type MXL		**B 250 MXL 6.4** Belt; No. of teeth of belt (250 teeth: 508.0 mm); Belt type (Type MXL); Belt width (6.4mm)
Type XXL		**60 XXL 4.8** No. of teeth of belt (60 teeth: 190.5 mm); Belt type (Type XXL); Belt width (4.8mm)
Type XL		**250 XL 025 G** Belt nominal length (25 inches: 635 mm); Belt type (Type XL); Belt nominal width (0.25 inches: 6.4 mm); Cord symbol
Type L		**300 L 100 G** Belt nominal length (30 inches: 762 mm); Belt type (Type L); Belt nominal width (1.0 inches: 25.4 mm); Cord symbol
Type H		**600 H 200 G** Belt nominal length (60 inches: 1524 mm); Belt type (Type H); Belt nominal width (2.0 inches: 50.8 mm); Cord symbol
Type XH		**700 XH 400 G** Belt nominal length (70 inches: 1778 mm); Belt type (Type XH); Belt nominal width (4.0 inches: 101.6 mm); Cord symbol
Type XXH		**1200 XXH 600 G** Belt nominal length (120 inches: 3048 mm); Belt type (Type XXH); Belt nominal width (6.0 inches: 152.4 mm); Cord symbol

Belt Dimensions and Indication Method

(2) Bancollan Synchronous Belt (polyurethane)

Belt type	Dimension (mm)	Belt indication method
Type MXL		**180** No. of teeth of belt (180 teeth: 365.76 mm) **MXL** Belt type (Type MXL) **6.4** Belt width (6.4mm) **UK** U: Material symbol (polyurethane) K: Cord symbol (aramid)
Type XL		**180** Belt nominal length (18 inches: 457.2 mm) **XL** Belt type (Type XL) **037** Belt nominal width (0.37 inches: 9.5 mm) **UK** U: Material symbol (polyurethane) K: Cord symbol (aramid)
Type L		**240** Belt nominal length (24 inches: 609.6 mm) **L** Belt type (Type L) **075** Belt nominal width (0.75 inches: 19.1 mm) **U** Material symbol (Polyurethane)
Type T2.5		**10** Belt width (10mm) **T2.5** - Belt type (Type T2.5) **245** Belt pitch length (245mm)
Type T5		**10** Belt width (10mm) **T5** - Belt type (Type T5) **750** Belt pitch length (750 mm)
Type T10		**20** Belt width (20mm) **T10** - Belt type (Type T10) **1250** Belt pitch length (1250mm)

Synchronous Belt (Rubber/Polyurethane) standard lengths

R: Rubber
U: Polyurethane

Type MXL

Pitch: 2.032 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
B30MXL	60.96	30	●	○
B35MXL	71.12	35	●	○
B36MXL	73.15	36	●	○
B37MXL	75.18	37	●	○
B40MXL	81.28	40	●	○
B41MXL	83.31	41	-	○
B42MXL	85.34	42	●	○
B43MXL	87.38	43	-	-
B44MXL	89.41	44	●	-
*B45MXL	91.44	45	●	○
B48MXL	97.54	48	●	○
*B50MXL	101.60	50	●	○
B52MXL	105.66	52	●	○
B53MXL	107.70	53	●	○
B54MXL	109.73	54	●	○
*B55MXL	111.76	55	●	○
B56MXL	113.79	56	●	○
B57MXL	115.82	57	●	○
B59MXL	119.89	59	●	○
*B60MXL	121.92	60	●	○
B61MXL	123.95	61	●	-
B62MXL	125.98	62	●	-
B63MXL	128.02	63	●	○
B64MXL	130.05	64	●	-
B65MXL	132.08	65	●	○
B67MXL	136.14	67	●	○
B68MXL	138.18	68	●	○
B69MXL	140.21	69	●	-
*B70MXL	142.24	70	●	○
B71MXL	144.27	71	●	○
B72MXL	146.30	72	●	○
B73MXL	148.34	73	●	○
B74MXL	150.37	74	●	-
*B75MXL	152.40	75	●	○
B76MXL	154.43	76	●	○
B77MXL	156.46	77	●	-
B78MXL	158.50	78	●	-
B79MXL	160.53	79	●	○
*B80MXL	162.56	80	●	○
B81MXL	164.59	81	●	○
B82MXL	166.62	82	●	○
B83MXL	168.66	83	●	○
B84MXL	170.69	84	●	-
B85MXL	172.72	85	●	○
B86MXL	174.75	86	●	-
B87MXL	176.78	87	●	○
B88MXL	178.82	88	●	○
*B90MXL	182.88	90	●	○
B91MXL	184.91	91	●	○
B92MXL	186.94	92	●	-
B93MXL	188.98	93	●	-
B94MXL	191.01	94	●	○
B95MXL	193.04	95	●	○
B96MXL	195.07	96	●	-
B97MXL	197.10	97	●	○
B98MXL	199.14	98	●	○
B99MXL	201.17	99	●	-
B100MXL	203.20	100	●	○
B101MXL	205.23	101	●	-
B102MXL	207.26	102	●	○
B103MXL	209.30	103	●	○
B104MXL	211.33	104	●	○
B105MXL	213.36	105	●	-
B106MXL	215.39	106	●	○
B108MXL	219.46	108	●	-
B109MXL	221.49	109	●	-
*B110MXL	223.52	110	●	○
B112MXL	227.58	112	●	○
B114MXL	231.65	114	●	○
B115MXL	233.68	115	●	○
B118MXL	239.78	118	●	○
B119MXL	241.81	119	●	-
B120MXL	243.84	120	●	○
B121MXL	245.87	121	●	-
B122MXL	247.90	122	●	-
B123MXL	249.94	123	●	○
B124MXL	251.97	124	●	-
*B125MXL	254.00	125	●	○
B126MXL	256.03	126	●	○
B127MXL	258.06	127	●	-

Type MXL

Pitch: 2.032 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
B128MXL	260.10	128	●	○
B129MXL	262.13	129	●	-
B130MXL	264.16	130	●	○
B131MXL	266.19	131	●	-
B132MXL	268.22	132	●	○
B134MXL	272.29	134	●	○
B135MXL	274.32	135	●	-
B136MXL	276.35	136	●	
B137MXL	278.38	137	●	-
B138MXL	280.42	138	●	-
B140MXL	284.48	140	●	○
B142MXL	288.54	142	●	-
B144MXL	292.61	144	●	○
B145MXL	294.64	145	●	-
B146MXL	296.67	146	●	-
B148MXL	300.74	148	●	-
B150MXL	304.80	150	●	○
B151MXL	306.83	151	●	-
*B155MXL	314.96	155	●	○
B157MXL	319.02	157	●	○
B158MXL	321.06	158	●	-
B159MXL	323.09	159	●	-
B160MXL	325.12	160	●	○
B162MXL	329.18	162	●	-
B163MXL	331.22	163	●	-
B164MXL	333.25	164	●	-
B165MXL	335.28	165	●	○
B169MXL	343.41	169	●	-
B170MXL	345.44	170	●	○
*B175MXL	355.60	175	●	○
B177MXL	359.66	177	●	-
B180MXL	365.76	180	●	○
B184MXL	373.89	184	●	○
B188MXL	382.02	188	●	-
B190MXL	386.08	190	●	○
B192MXL	390.14	192	●	-
B194MXL	394.21	194	●	○
B195MXL	396.24	195	●	○
B196MXL	398.27	196	●	-
B200MXL	406.40	200	●	○
B204MXL	414.53	204	●	-
B205MXL	416.56	205	●	○
B210MXL	426.72	210	●	○
B212MXL	430.78	212	●	○
B215MXL	436.88	215	●	○
B220MXL	447.04	220	●	○
B221MXL	449.07	221	●	-
B222MXL	451.10	222	●	-
B224MXL	455.17	224	●	-
*B225MXL	457.20	225	●	○
B226MXL	459.23	226	●	-
B228MXL	463.30	228	●	-
B230MXL	467.36	230	●	○
B232MXL	471.42	232	●	-
B234MXL	475.49	234	●	-
B236MXL	479.55	236	●	○
B239MXL	485.65	239	●	-
B240MXL	487.68	240	●	○
B245MXL	497.84	245	●	-
B248MXL	503.94	248	●	-
B249MXL	505.97	249	●	-
*B250MXL	508.00	250	●	○
B251MXL	510.03	251	●	-
B255MXL	518.16	255	●	○
B256MXL	520.19	256	●	-
B260MXL	528.32	260	●	○
B262MXL	532.38	262	●	-
B265MXL	538.48	265	●	○
B268MXL	544.58	268	●	-
B270MXL	548.64	270	●	○
B271MXL	550.67	271	●	-
B273MXL	554.74	273	●	-
B275MXL	558.80	275	●	-
B280MXL	568.96	280	●	○
B281MXL	570.99	281	●	-
B285MXL	579.12	285	●	-
B288MXL	585.22	288	●	-
B290MXL	589.28	290	●	-
B295MXL	599.44	295	●	○
B297MXL	603.50	297	●	-

Type MXL

Pitch: 2.032 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
B300MXL	609.60	300	●	○
B305MXL	619.76	305	●	○
B308MXL	625.86	308	●	-
B310MXL	629.92	310	●	○
B312MXL	633.98	312	●	-
B315MXL	640.08	315	●	-
B318MXL	646.18	318	●	-
B320MXL	650.24	320	●	-
B321MXL	652.27	321	●	○
B323MXL	656.34	323	●	-
B326MXL	662.43	326	●	-
B328MXL	666.50	328	●	○
B330MXL	670.56	330	●	○
B332MXL	674.62	332	●	-
B334MXL	678.69	334	●	-
B336MXL	682.75	336	●	○
B337MXL	684.78	337	●	-
B340MXL	690.88	340	●	○
B347MXL	705.10	347	●	○
B350MXL	711.20	350	●	○
B354MXL	719.33	354	●	-
B355MXL	721.36	355	●	-
B358MXL	727.46	358	●	-
B359MXL	729.49	359	●	-
B360MXL	731.52	360	●	○
B364MXL	739.65	364	●	-
B365MXL	741.68	365	●	-
B366MXL	743.71	366	●	-
B371MXL	753.87	371	●	-
B372MXL	755.90	372	●	-
B380MXL	772.16	380	●	-
B388MXL	788.42	388	●	-
B397MXL	806.70	397	●	-
B400MXL	812.80	400	●	-
B402MXL	816.86	402	●	-
B405MXL	822.96	405	●	-
B410MXL	833.12	410	●	-
B413MXL	839.22	413	●	-
B419MXL	851.41	419	●	-
B425MXL	863.60	425	●	-
B431MXL	875.79	431	●	-
B434MXL	881.89	434	●	-
B435MXL	883.92	435	●	-
B440MXL	894.08	440	●	-
B448MXL	910.34	448	●	-
B453MXL	920.50	453	●	○
B464MXL	942.90	464	●	-
B468MXL	950.98	468	●	○
B473MXL	961.14	473	●	-
B475MXL	965.20	475	●	-
B480MXL	975.36	480	●	-
B487MXL	989.58	487	●	-
B493MXL	1001.78	493	●	-
B498MXL	1011.94	498	●	-
B500MXL	1016.00	500	●	-
B516MXL	1048.51	516	●	-
B522MXL	1060.70	522	●	-
B524MXL	1064.77	524	●	-
B525MXL	1066.80	525	●	-
B535MXL	1087.12	535	●	-
B550MXL	1117.60	550	●	-
B579MXL	1176.53	579	●	○
B591MXL	1200.91	591	●	-
B612MXL	1243.58	612	●	-
B660MXL	1341.12	660	●	○
B665MXL	1351.28	665	●	-

Note) * indicates RMA standard sizes.

Synchronous Belt (Rubber/Polyurethane) standard lengths

R: Rubber
U: Polyurethane

Type XXL

Pitch: 3.175 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
51XXL	161.93	51	●	-
80XXL	254.00	80	●	-
100XXL	317.50	100	●	-
103XXL	327.03	103	●	-
104XXL	330.20	104	●	-
105XXL	333.38	105	●	-
114XXL	361.95	114	●	-
115XXL	365.13	115	●	-
126XXL	400.50	126	●	-
150XXL	476.25	150	●	-
153XXL	485.78	153	●	-
154XXL	488.95	154	●	-
156XXL	495.30	156	●	-
160XXL	508.00	160	●	-
162XXL	514.35	162	●	-
163XXL	517.53	163	●	-
168XXL	533.40	168	●	-
173XXL	549.28	173	●	-
220XXL	698.50	220	●	-
231XXL	733.43	231	●	-
321XXL	1019.18	321	●	-
379XXL	1203.33	379	●	-

Type XL

Pitch: 5.080 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
50XL	127.00	25	●	-
60XL	152.40	30	●	○
64XL	162.56	32	●	-
68XL	172.72	34	●	-
*70XL	177.80	35	●	○
72XL	182.88	36	●	-
74XL	187.96	37	●	-
76XL	193.04	38	●	-
78XL	198.12	39	●	-
*80XL	203.20	40	●	○
84XL	213.36	42	●	○
88XL	223.52	44	●	-
*90XL	228.60	45	●	○
92XL	233.68	46	●	-
94XL	238.76	47	●	-
96XL	243.84	48	●	○
98XL	248.92	49	●	-
*100XL	254.00	50	●	○
102XL	259.08	51	●	-
104XL	264.16	52	●	-
106XL	269.24	53	●	-
108XL	274.32	54	●	-
*110XL	279.40	55	●	○
112XL	284.48	56	●	-
114XL	289.56	57	●	○
116XL	294.64	58	●	-
118XL	299.72	59	●	-
*120XL	304.80	60	●	○
122XL	309.88	61	●	-
124XL	314.96	62	●	-
126XL	320.04	63	●	-
128XL	325.12	64	●	-
*130XL	330.20	65	●	○
132XL	335.28	66	●	-
134XL	340.36	67	●	-
136XL	345.44	68	●	-
138XL	350.52	69	●	-
*140XL	355.60	70	●	○
142XL	360.68	71	●	-
144XL	365.76	72	●	-
146XL	370.84	73	●	-
148XL	375.92	74	●	-
*150XL	381.00	75	●	○
152XL	386.08	76	●	-
154XL	391.16	77	●	○
156XL	396.24	78	●	○
158XL	401.32	79	●	-
*160XL	406.40	80	●	○
162XL	411.48	81	●	-
164XL	416.56	82	●	-
166XL	421.64	83	●	○
168XL	426.72	84	●	○
*170XL	431.80	85	●	○
172XL	436.88	86	●	-
174XL	441.96	87	●	-
176XL	447.04	88	●	○
178XL	452.12	89	●	-
*180XL	457.20	90	●	○
182XL	462.28	91	●	-
184XL	467.36	92	●	-
188XL	477.52	94	●	-
*190XL	482.60	95	●	○
194XL	492.76	97	●	-
196XL	497.84	98	●	-
198XL	502.92	99	●	○
*200XL	508.00	100	●	○
202XL	513.08	101	●	○
206XL	523.24	103	●	-
208XL	528.32	104	●	-
*210XL	533.40	105	●	○
212XL	538.48	106	●	○
214XL	543.56	107	●	-
216XL	548.64	108	●	-
*220XL	558.80	110	●	○
222XL	563.88	111	●	-
224XL	568.96	112	●	-
228XL	579.12	114	●	-
*230XL	584.20	115	●	○
234XL	594.36	117	●	-
*240XL	609.60	120	●	○

Type XL

Pitch: 5.080 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
244XL	619.75	122	●	-
248XL	629.92	124	●	-
*250XL	635.00	125	●	○
254XL	645.16	127	●	○
*260XL	660.40	130	●	○
262XL	665.48	131	●	-
266XL	675.64	133	●	-
270XL	685.80	135	●	○
276XL	701.04	138	●	-
280XL	711.20	140	●	-
282XL	716.28	141	●	-
290XL	736.60	145	●	○
300XL	762.00	150	●	○
310XL	787.40	155	●	-
314XL	797.56	157	●	-
320XL	812.80	160	●	○
322XL	817.88	161	●	-
330XL	838.20	165	●	○
340XL	863.60	170	●	-
344XL	873.76	172	●	-
348XL	883.92	174	●	-
352XL	894.08	176	●	-
356XL	904.24	178	●	-
360XL	914.40	180	●	-
364XL	924.00	182	●	-
370XL	939.80	185	●	-
372XL	944.88	186	●	-
376XL	955.04	188	●	○
384XL	975.36	192	●	-
386XL	980.44	193	●	-
388XL	985.52	194	●	-
390XL	990.60	195	●	-
396XL	1005.84	198	●	○
400XL	1016.00	200	●	-
408XL	1036.32	204	●	-
414XL	1015.56	207	●	○
424XL	1076.96	212	●	-
430XL	1092.20	215	●	○
450XL	1143.00	225	●	-
456XL	1158.24	228	●	-
460XL	1168.40	230	●	○
470XL	1193.80	235	●	-
478XL	1214.12	239	●	○
480XL	1219.20	240	●	○
490XL	1244.60	245	●	○
496XL	1259.84	248	●	-
510XL	1295.40	255	●	-
512XL	1300.48	256	●	○
564XL	1432.56	282	●	○
592XL	1503.68	296	●	-
608XL	1544.32	304	●	-
630XL	1600.20	315	●	○
638XL	1620.52	319	●	-
670XL	1701.80	335	●	○
686XL	1742.44	343	●	○
730XL	1854.20	365	●	○
828XL	2103.12	414	●	-
860XL	2184.40	430	●	-
888XL	2255.52	444	●	-
900XL	2286.00	450	●	-
908XL	2306.32	454	●	-
914XL	2321.56	457	●	-
926XL	2352.04	463	●	-
1014XL	2575.56	507	●	-
1020XL	2590.80	510	●	-

Synchronous Belt (Rubber/Polyurethane) standard lengths

R: Rubber
U: Polyurethane

Type L

Pitch: 9.525 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
98L	247.65	26	●	-
109L	276.23	29	●	-
*124L	314.33	33	●	○
135L	342.90	36	●	-
*150L	381.00	40	●	○
165L	419.10	44	●	○
169L	428.63	45	●	-
172L	438.15	46	●	-
*187L	476.25	50	●	○
203L	514.35	54	●	-
*210L	533.40	56	●	○
218L	552.45	58	●	-
*225L	571.50	60	●	○
240L	609.60	64	●	○
248L	628.65	66	●	-
*255L	647.70	68	●	○
263L	666.75	70	●	-
*270L	685.80	72	●	○
277L	704.85	74	●	-
*285L	723.90	76	●	○
*300L	762.00	80	●	○
304L	771.53	81	●	-
315L	800.10	84	●	-
320L	809.63	85	●	-
*322L	819.15	86	●	○
334L	847.73	89	●	-
337L	857.25	90	●	-
*345L	876.30	92	●	○
360L	914.40	96	●	○
*367L	933.45	98	●	○
375L	952.50	100	●	-
382L	971.55	102	●	-
*390L	990.60	104	●	○
394L	1000.13	105	●	-
*420L	1066.80	112	●	○
427L	1085.85	114	●	-
436L	1104.90	116	●	-
439L	1114.43	117	●	-
446L	1133.48	119	●	-
*450L	1143.00	120	●	○
465L	1181.10	124	●	-
*480L	1219.20	128	●	○
*510L	1295.40	136	●	○
514L	1304.93	137	●	-
525L	1333.50	140	●	-
*540L	1371.60	144	●	○
548L	1390.65	146	●	-
581L	1476.38	155	●	-
*600L	1524.00	160	●	○
605L	1533.53	161	●	-
619L	1571.63	165	●	-
630L	1600.20	168	●	-
●640L	1619.25	170	●	-
653L	1657.35	174	●	-
660L	1676.40	176	●	-
697L	1771.65	186	●	-
728L	1847.85	194	●	-
731L	1857.38	195	●	-
●767L	1952.63	205	●	-
780L	1981.20	208	●	-
788L	2000.25	210	●	-
806L	2047.88	215	●	-
855L	2171.70	228	●	-
863L	2190.75	230	●	-
881L	2238.38	235	●	-
915L	2324.10	244	●	-
919L	2333.63	245	●	-
938L	2381.25	250	●	-
1294L	3286.13	345	●	-

(Remarks)
1) For Type L with the ● mark, check the length and the number of teeth.
2) * indicates RMA standard sizes.

Type H

Pitch: 12.7 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
185H	469.90	37	●	-
225H	571.50	45	●	-
230H	584.20	46	●	-
*240H	609.60	48	●	-
245H	622.30	49	●	-
*270H	685.80	54	●	-
280H	711.20	56	●	-
*300H	762.00	60	●	-
310H	787.40	62	●	-
315H	800.10	63	●	-
320H	812.80	64	●	-
*330H	838.20	66	●	-
340H	863.60	68	●	-
350H	889.00	70	●	-
*360H	914.40	72	●	-
370H	939.80	74	●	-
375H	952.50	75	●	-
*390H	990.60	78	●	-
400H	1016.00	80	●	-
410H	1041.40	82	●	-
*420H	1066.80	84	●	-
430H	1092.20	86	●	-
*450H	1143.00	90	●	-
465H	1181.10	93	●	-
*480H	1219.20	96	●	-
490H	1244.60	98	●	-
*510H	1295.40	102	●	-
530H	1346.20	106	●	-
540H	1371.60	108	●	-
560H	1422.40	112	●	-
565H	1435.10	113	●	-
*570H	1447.80	114	●	-
580H	1473.20	116	●	-
*600H	1524.00	120	●	-
605H	1536.70	121	●	-
*630H	1600.20	126	●	-
640H	1625.60	128	●	-
650H	1651.00	130	●	-
*660H	1676.40	132	●	-
680H	1727.20	136	●	-
*700H	1778.00	140	●	-
730H	1854.20	146	●	-
*750H	1905.00	150	●	-
760H	1930.40	152	●	-
770H	1955.80	154	●	-
*800H	2032.00	160	●	-
810H	2057.40	162	●	-
820H	2082.80	164	●	-
840H	2133.60	168	●	-
*850H	2159.00	170	●	-
860H	2184.40	172	●	-
880H	2235.20	176	●	-
*900H	2286.00	180	●	-
950H	2413.00	190	●	-
985H	2501.90	197	●	-
*1000H	2540.00	200	●	-
1020H	2590.80	204	●	-
1050H	2667.00	210	●	-
*1100H	2794.00	220	●	-
1130H	2870.20	226	●	-
1140H	2895.60	228	●	-
*1250H	3175.00	250	●	-
1325H	3365.50	265	●	-
1350H	3429.00	270	●	-
*1400H	3556.00	280	●	-
1680H	4267.20	336	●	-
*1700H	4318.00	340	●	-

Type XH

Pitch: 22.225 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
*507XH	1289.05	58	●	-
*560XH	1422.40	64	●	-
*630XH	1600.20	72	●	-
*700XH	1778.00	80	●	-
735XH	1866.90	84	●	-
*770XH	1955.80	88	●	-
*840XH	2133.60	96	●	-
875XH	2222.50	100	●	-
927XH	2355.85	106	●	-
*980XH	2489.20	112	●	-
*1120XH	2844.80	128	●	-
*1260XH	3200.40	144	●	-
*1400XH	3556.00	160	●	-
*1540XH	3911.60	176	●	-
*1750XH	4445.00	200	●	-

Type XXH

Pitch: 31.75 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
*700XXH	1778.00	56	●	-
*800XXH	2032.00	64	●	-
*900XXH	2286.00	72	●	-
*1000XXH	2540.00	80	●	-
*1200XXH	3048.00	96	●	-
*1400XXH	3556.00	112	●	-
*1600XXH	4064.00	128	●	-
*1800XXH	4572.00	144	●	-
1915XXH	4857.75	153	●	-

Note) * indicates RMA standard sizes.

Bancollan Synchronous Belt (polyurethane) standard lengths

R: Rubber
U: Polyurethane

Type T2.5

Pitch: 2.5 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
T2.5-120	120.0	48	-	○
T2.5-145	145.0	58	-	○
T2.5-160	160.0	64	-	○
T2.5-177.5	177.5	71	-	○
T2.5-182.5	182.5	73	-	○
T2.5-200	200.0	80	-	○
T2.5-230	230.0	92	-	○
T2.5-245	245.0	98	-	○
T2.5-265	265.0	106	-	○
T2.5-285	285.0	114	-	○
T2.5-305	305.0	122	-	○
T2.5-317.5	317.5	127	-	○
T2.5-330	330.0	132	-	○
T2.5-380	380.0	152	-	○
T2.5-420	420.0	168	-	○
T2.5-480	480.0	192	-	○
T2.5-492.5	492.5	197	-	○
T2.5-500	500.0	200	-	○
T2.5-600	600.0	240	-	○
T2.5-620	620.0	248	-	○
T2.5-650	650.0	260	-	○
T2.5-780	780.0	312	-	○
T2.5-915	915.0	366	-	○
T2.5-950	950.0	380	-	○

Type T5

Pitch: 5.0 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
T5-165	165.0	33	-	○
T5-185	185.0	37	-	○
T5-200	200.0	40	-	○
T5-215	215.0	43	-	○
T5-220	220.0	44	-	○
T5-225	225.0	45	-	○
T5-245	245.0	49	-	○
T5-250	250.0	50	-	○
T5-255	255.0	51	-	○
T5-260	260.0	52	-	○
T5-270	270.0	54	-	○
T5-275	275.0	55	-	○
T5-280	280.0	56	-	○
T5-295	295.0	59	-	○
T5-300	300.0	60	-	○
T5-305	305.0	61	-	○
T5-325	325.0	65	-	○
T5-330	330.0	66	-	○
T5-340	340.0	68	-	○
T5-350	350.0	70	-	○
T5-355	355.0	71	-	○
T5-365	365.0	73	-	○
T5-375	375.0	75	-	○
T5-390	390.0	78	-	○
T5-400	400.0	80	-	○
T5-410	410.0	82	-	○
T5-420	420.0	84	-	○
T5-425	425.0	85	-	○
T5-450	450.0	90	-	○
T5-455	455.0	91	-	○
T5-465	465.0	93	-	○
T5-475	475.0	95	-	○
T5-480	480.0	96	-	○
T5-500	500.0	100	-	○
T5-510	510.0	102	-	○
T5-525	525.0	105	-	○
T5-545	545.0	109	-	○
T5-550	550.0	110	-	○
T5-560	560.0	112	-	○
T5-575	575.0	115	-	○
T5-600	600.0	120	-	○
T5-610	610.0	122	-	○
T5-620	620.0	124	-	○
T5-630	630.0	126	-	○
T5-640	640.0	128	-	○
T5-650	650.0	130	-	○
T5-660	660.0	132	-	○
T5-675	675.0	135	-	○
T5-690	690.0	138	-	○
T5-695	695.0	139	-	○
T5-700	700.0	140	-	○
T5-720	720.0	144	-	○
T5-750	750.0	150	-	○
T5-780	780.0	156	-	○
T5-800	800.0	160	-	○
T5-815	815.0	163	-	○
T5-840	840.0	168	-	○
T5-850	850.0	170	-	○
T5-900	900.0	180	-	○
T5-940	940.0	188	-	○
T5-990	990.0	198	-	○
T5-1000	1000.0	200	-	○
T5-1075	1075.0	215	-	○
T5-1100	1100.0	220	-	○
T5-1140	1140.0	228	-	○
T5-1215	1215.0	243	-	○
T5-1380	1380.0	276	-	○
T5-1440	1440.0	288	-	○

Type T10

Pitch: 10.0 mm

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
T10-260	260.0	26	-	○
T10-370	370.0	37	-	○
T10-400	400.0	40	-	○
T10-410	410.0	41	-	○
T10-440	440.0	44	-	○
T10-450	450.0	45	-	○
T10-500	500.0	50	-	○
T10-530	530.0	53	-	○
T10-560	560.0	56	-	○
T10-610	610.0	61	-	○
T10-630	630.0	63	-	○
T10-660	660.0	66	-	○
T10-690	690.0	69	-	○
T10-700	700.0	70	-	○
T10-720	720.0	72	-	○
T10-750	750.0	75	-	○
T10-780	780.0	78	-	○
T10-810	810.0	81	-	○
T10-840	840.0	84	-	○
T10-880	880.0	88	-	○
T10-890	890.0	89	-	○
T10-900	900.0	90	-	○
T10-920	920.0	92	-	○
T10-960	960.0	96	-	○
T10-970	970.0	97	-	○
T10-980	980.0	98	-	○
T10-1000	1000.0	100	-	○
T10-1010	1010.0	101	-	○
T10-1080	1080.0	108	-	○
T10-1100	1100.0	110	-	○
T10-1110	1110.0	111	-	○
T10-1140	1140.0	114	-	○
T10-1150	1150.0	115	-	○
T10-1210	1210.0	121	-	○
T10-1240	1240.0	124	-	○
T10-1250	1250.0	125	-	○
T10-1300	1300.0	130	-	○
T10-1320	1320.0	132	-	○
T10-1350	1350.0	135	-	○
T10-1390	1390.0	139	-	○
T10-1400	1400.0	140	-	○
T10-1420	1420.0	142	-	○
T10-1440	1440.0	144	-	○
T10-1450	1450.0	145	-	○
T10-1460	1460.0	146	-	○
T10-1500	1500.0	150	-	○
T10-1560	1560.0	156	-	○
T10-1610	1610.0	161	-	○
T10-1750	1750.0	175	-	○
T10-1780	1780.0	178	-	○
T10-1880	1880.0	188	-	○
T10-1960	1960.0	196	-	○
T10-2250	2250.0	225	-	○

Rubber Synchronous Belt standard widths

Nominal width			025	031	037	050	075	100	150	200	300	400	500	600
Width (mm)	3.2	4.8	6.4	7.9	9.5	12.7	19.1	25.4	38.1	50.8	76.2	101.6	127.0	152.4
MXL	●	●	●		●	●								
XL(DXL)			●	●	●	●	●							
L(DL)						●	●	●	●	●				
H(DH)							●	●	●	●	●			
XH										●	●	●	●	●
XXH										●	●	●	●	●

Bancollan Synchronous Belt (polyurethane) standard widths

Nominal width			025	031	037	050	075	100	150	200	3	5	7	10	13	15	20	25	30	50
Width (mm)	3.2	4.8	6.4	7.9	9.5	12.7	19.1	25.4	38.1	50.8	3	5	7	10	13	15	20	25	30	50
MXL	○	○	○	○	○	○														
XL(DXL)			○	○	○	○	○													
L						○	○	○	○	○										
T2.5											○	○	○		○					
T5(DT5)												○		○		○	○	○		
T10(DT10)																○	○	○	○	○

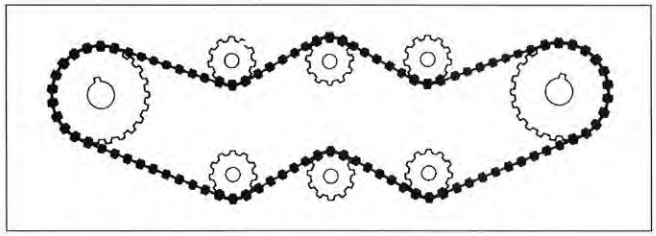
3. Double-Sided Synchronous Belt (Rubber/Polyurethane) Product Introduction

The Double-Sided Synchronous Belt [rubber/polyurethane (Bancollan)] has identical tooth profiles on the top and back surfaces of the belt, and a single belt of this belt can synchronously transmit power with multiple shafts. The Bancollan Double-Sided Synchronous Belt is suitable when it is subject to oil or ozone or when dispersion of rubber pieces should be avoided.

Features

■ Multi-shaft synchronous power transmission possible

A single belt can synchronously transmit power with many shafts.



■ Easy maintenance

Unlike chains, it has no need to re-tension or lubricate and is easy to maintain.

■ Low noise

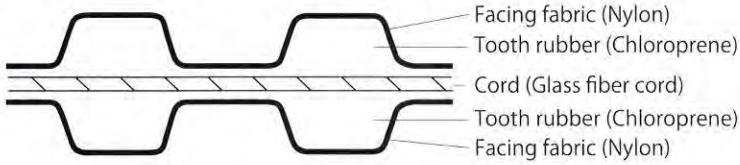
No metal-to-metal contact allows quiet power transmission.

■ Clean

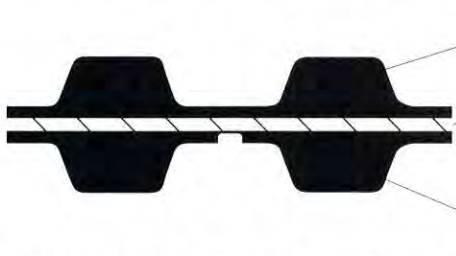
Unlike chains or gears, it has no need for lubrication, eliminating oil dispersion, which provides cleanliness in the sections around the belt.

Structure

Double-Sided Synchronous Belt (Types DXL/DL/DH)



Bancollan Double-Sided Synchronous Belt (Type DXL)



Bancollan Double-Sided Synchronous Belt (Types DT5/DT10)

The beads type (⊸⊸) and the zigzag type (⊸⊸) exist taking into consideration domestic and foreign standards and compatibility with other companies' products and have no difference in performance.

Indication Method

Double-Sided Synchronous Belt

600 D H 100 G

- 600: Belt pitch length (60 inches: 1524 mm)
- D: Double-Sided Synchronous Belt
- H: Belt type (Type H)
- 100: Belt nominal width (1 inch: 25.4 mm)
- G: Cord symbol (Glass fiber)

Bancollan Double-Sided Synchronous Belt

180 D XL 025 UK

- 180: Belt pitch length (18 inches: 457.2 mm)
- D: Double-Sided Synchronous Belt
- XL: Belt type (Type XL)
- 025: Belt nominal width (0.25 inches: 6.4 mm)
- U: Material symbol (Polyurethane)
- K: Cord symbol (Aramid)

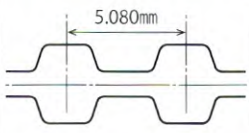
25 D T10 - 1800

- 25: Belt nominal width (25mm)
- D: Double-Sided Synchronous Belt
- T10: Belt type (Type T10)
- 1800: Belt pitch length (1800mm)

Rubber Double-Sided Synchronous Belt standard lengths

R: Rubber
U: Polyurethane

Type DXL



Belt standard widths

Nominal width	Width (mm)
025	6.4
031	7.9
037	9.5
050	12.7
075	19.1

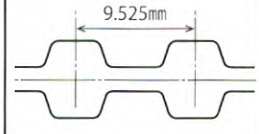
Belt size (Type DXL)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
160DXL	406.40	80	●	-
162DXL	411.48	81	●	-
164DXL	416.56	82	●	-
166DXL	421.64	83	●	-
168DXL	426.72	84	●	-
170DXL	431.80	85	●	-
172DXL	436.88	86	●	-
174DXL	441.96	87	●	-
176DXL	447.04	88	●	-
178DXL	452.12	89	●	-
180DXL	457.20	90	●	-
182DXL	462.28	91	●	-
184DXL	467.36	92	●	-
188DXL	477.52	94	●	-
190DXL	482.60	95	●	-
194DXL	492.76	97	●	-
196DXL	497.84	98	●	-
198DXL	502.92	99	●	-
200DXL	508.00	100	●	-
202DXL	513.08	101	●	-
206DXL	523.24	103	●	-
208DXL	528.32	104	●	-
210DXL	533.40	105	●	-
212DXL	538.48	106	●	-
214DXL	543.56	107	●	-
216DXL	548.64	108	●	-
220DXL	558.80	110	●	-
222DXL	563.88	111	●	-
224DXL	568.96	112	●	-
228DXL	579.12	114	●	-
230DXL	584.20	115	●	-
234DXL	594.36	117	●	-
240DXL	609.60	120	●	-
244DXL	619.76	122	●	-
248DXL	629.92	124	●	-
250DXL	635.00	125	●	-
260DXL	660.40	130	●	-
262DXL	665.48	131	●	-
266DXL	675.64	133	●	-
270DXL	685.80	135	●	-
276DXL	701.04	138	●	-
280DXL	711.20	140	●	-
282DXL	716.28	141	●	-
290DXL	736.60	145	●	-
300DXL	762.00	150	●	-
310DXL	787.40	155	●	-
314DXL	797.56	157	●	-
320DXL	812.80	160	●	-
322DXL	817.88	161	●	-
330DXL	838.20	165	●	-
340DXL	863.60	170	●	-
344DXL	873.76	172	●	-
348DXL	883.92	174	●	-
352DXL	894.08	176	●	-
356DXL	904.24	178	●	-
360DXL	914.40	180	●	-
364DXL	924.56	182	●	-
370DXL	939.80	185	●	-

Belt size (Type DXL)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
372DXL	944.88	186	●	-
376DXL	955.04	188	●	-
384DXL	975.36	192	●	-
386DXL	980.44	193	●	-
388DXL	985.52	194	●	-
390DXL	990.60	195	●	-
396DXL	1005.84	198	●	-
400DXL	1016.00	200	●	-
408DXL	1036.32	204	●	-
424DXL	1076.96	212	●	-
430DXL	1092.29	215	●	-
450DXL	1143.00	225	●	-
456DXL	1158.24	228	●	-
460DXL	1168.40	230	●	-
470DXL	1193.80	235	●	-
490DXL	1244.60	245	●	-
496DXL	1259.84	248	●	-
510DXL	1295.40	255	●	-
564DXL	1432.56	282	●	-
592DXL	1503.68	296	●	-
608DXL	1544.32	304	●	-
630DXL	1600.20	315	●	-
638DXL	1620.52	319	●	-

Type DL



Belt standard widths

Nominal width	Width (mm)
050	12.7
075	19.1
100	25.4
150	38.1
200	50.8

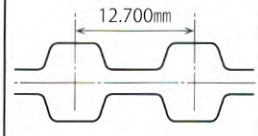
Belt size (Type DL)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
165DL	419.10	44	●	-
169DL	428.63	45	●	-
172DL	438.15	46	●	-
187DL	476.25	50	●	-
203DL	514.35	54	●	-
210DL	533.40	56	●	-
218DL	552.45	58	●	-
225DL	571.50	60	●	-
240DL	609.60	64	●	-
248DL	628.65	66	●	-
255DL	647.70	68	●	-
263DL	666.75	70	●	-
270DL	685.80	72	●	-
277DL	704.85	74	●	-
285DL	723.90	76	●	-
300DL	762.00	80	●	-
304DL	771.53	81	●	-
315DL	800.10	84	●	-
320DL	809.63	85	●	-
322DL	819.15	86	●	-
334DL	847.73	89	●	-
337DL	857.25	90	●	-
345DL	876.30	92	●	-
360DL	914.40	96	●	-
367DL	933.45	98	●	-
375DL	952.50	100	●	-
382DL	971.55	102	●	-
390DL	990.60	104	●	-
394DL	1000.13	105	●	-
420DL	1066.80	112	●	-

Belt size (Type DL)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
427DL	1085.85	114	●	-
436DL	1104.90	116	●	-
439DL	1114.43	117	●	-
446DL	1133.48	119	●	-
450DL	1143.00	120	●	-
465DL	1181.10	124	●	-
480DL	1219.20	128	●	-
510DL	1295.40	136	●	-
514DL	1304.93	137	●	-
525DL	1333.50	140	●	-
540DL	1371.60	144	●	-
548DL	1390.65	146	●	-
581DL	1476.38	155	●	-
600DL	1524.00	160	●	-
605DL	1533.53	161	●	-
619DL	1571.63	165	●	-
630DL	1600.20	168	●	-
640DL	1619.25	170	●	-
653DL	1657.35	174	●	-
660DL	1676.40	176	●	-
697DL	1771.65	186	●	-
728DL	1847.85	194	●	-
731DL	1857.38	195	●	-
767DL	1952.63	205	●	-
780DL	1981.20	208	●	-
788DL	2000.25	210	●	-
806DL	2047.88	215	●	-
855DL	2171.70	228	●	-
863DL	2190.75	230	●	-
881DL	2238.38	235	●	-
915DL	2324.10	244	●	-
919DL	2333.63	245	●	-
938DL	2381.25	250	●	-
1294DL	3286.13	345	●	-

Type DH



Belt standard widths

Nominal width	Width (mm)
075	19.1
100	25.4
150	38.1
200	50.8
300	76.2

Belt size (Type DH)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
185DH	469.90	37	●	-
225DH	571.50	45	●	-
230DH	584.20	46	●	-
240DH	609.60	48	●	-
245DH	622.30	49	●	-
270DH	685.80	54	●	-
280DH	711.20	56	●	-
300DH	762.00	60	●	-
310DH	787.40	62	●	-
315DH	800.10	63	●	-
320DH	812.80	64	●	-
330DH	838.20	66	●	-
340DH	863.60	68	●	-
350DH	889.00	70	●	-
360DH	914.40	72	●	-
370DH	939.80	74	●	-
375DH	952.50	75	●	-
390DH	990.60	78	●	-
400DH	1016.00	80	●	-
410DH	1041.40	82	●	-

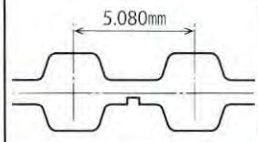
R: Rubber
U: Polyurethane

Belt size (Type DH)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
420DH	1066.80	84	●	-
430DH	1092.20	86	●	-
450DH	1143.00	90	●	-
465DH	1181.10	93	●	-
480DH	1219.20	96	●	-
490DH	1244.60	98	●	-
510DH	1295.40	102	●	-
530DH	1346.20	106	●	-
540DH	1371.60	108	●	-
560DH	1422.40	112	●	-
565DH	1435.10	113	●	-
570DH	1447.80	114	●	-
580DH	1473.20	116	●	-
600DH	1524.00	120	●	-
605DH	1536.70	121	●	-
630DH	1600.20	126	●	-
640DH	1625.60	128	●	-
650DH	1651.00	130	●	-
660DH	1676.40	132	●	-
680DH	1727.20	136	●	-
700DH	1778.00	140	●	-
730DH	1854.20	146	●	-
750DH	1905.00	150	●	-
760DH	1930.40	152	●	-
770DH	1955.80	154	●	-
800DH	2032.00	160	●	-
810DH	2057.40	162	●	-
820DH	2082.80	164	●	-
840DH	2133.60	168	●	-
850DH	2159.00	170	●	-
860DH	2184.40	172	●	-
880DH	2235.20	176	●	-
900DH	2286.00	180	●	-
950DH	2413.00	190	●	-
985DH	2501.90	197	●	-
1000DH	2540.00	200	●	-
1020DH	2590.80	204	●	-
1050DH	2667.00	210	●	-
1100DH	2794.00	220	●	-
1130DH	2870.20	226	●	-
1140DH	2895.60	228	●	-
1250DH	3175.00	250	●	-
1325DH	3365.50	265	●	-
1350DH	3429.00	270	●	-
1400DH	3556.00	280	●	-
1680DH	4267.20	336	●	-
1700DH	4318.00	340	●	-

Bancollan Double-Sided Synchronous Belt (polyurethane) standard lengths

Type DXL



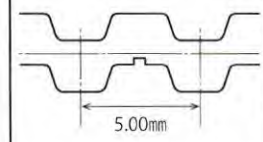
Belt standard widths

Nominal width	Width (mm)
025	6.4
031	7.9
037	9.5
050	12.7
075	19.1

Belt size (Type DXL)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
140DXL	355.60	70	-	○
146DXL	370.84	73	-	○
150DXL	381.00	75	-	○
166DXL	421.64	83	-	○
170DXL	431.80	85	-	○
180DXL	457.20	90	-	○
190DXL	482.60	95	-	○
200DXL	508.00	100	-	○
210DXL	533.40	105	-	○
220DXL	558.80	110	-	○
230DXL	584.20	115	-	○
240DXL	609.60	120	-	○
270DXL	685.80	135	-	○
290DXL	736.60	145	-	○
300DXL	762.00	150	-	○
320DXL	812.80	160	-	○
376DXL	955.04	188	-	○
400DXL	1016.00	200	-	○
430DXL	1092.20	215	-	○
490DXL	1244.60	245	-	○

Type DT5



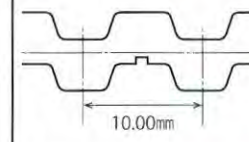
Belt standard widths

Nominal width	Width (mm)
5	5
10	10
15	15
20	20
25	25

Belt size (Type DT5)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
DT5- 300	300.0	60	-	○
DT5- 410	410.0	82	-	○
DT5- 460	460.0	92	-	○
DT5- 480	480.0	96	-	○
DT5- 515	515.0	103	-	○
DT5- 550	550.0	110	-	○
DT5- 590	590.0	118	-	○
DT5- 620	620.0	124	-	○
DT5- 650	650.0	130	-	○
DT5- 700	700.0	140	-	○
DT5- 750	750.0	150	-	○
DT5- 800	800.0	160	-	○
DT5- 815	815.0	163	-	○
DT5- 860	860.0	172	-	○
DT5- 900	900.0	180	-	○
DT5- 940	940.0	188	-	○
DT5-1075	1075.0	215	-	○
DT5-1100	1100.0	220	-	○

Type DT10



Belt standard widths

Nominal width	Width (mm)
15	15
20	20
25	25
30	30
50	50

Belt size (Type DT10)

Belt nominal length	Pitch length (mm)	No. of teeth	R	U
DT10- 260	260.0	26	-	-
DT10- 400	400.0	40	-	○
DT10- 530	530.0	53	-	○
DT10- 630	630.0	63	-	○
DT10- 660	660.0	66	-	○
DT10- 700	700.0	70	-	○
DT10- 720	720.0	72	-	○
DT10- 800	800.0	80	-	○
DT10- 840	840.0	84	-	○
DT10- 900	900.0	90	-	○
DT10- 980	980.0	98	-	○
DT10-1100	1100.0	110	-	○
DT10-1210	1210.0	121	-	○
DT10-1240	1240.0	124	-	○
DT10-1250	1250.0	125	-	○
DT10-1320	1320.0	132	-	○
DT10-1350	1350.0	135	-	○
DT10-1420	1420.0	142	-	○
DT10-1500	1500.0	150	-	○
DT10-1610	1610.0	161	-	○
DT10-1800	1800.0	180	-	○
DT10-1880	1880.0	188	-	○

Long Synchronous Belt

1. Long Synchronous Belt (Rubber) Product Introduction

This belt allows synchronous power transmission and synchronous conveyance over long spans. It is lighter and more quiet than chains and requires no lubrication.
Please utilize it in place of chains, flat belts, and conveyor belts for factory automation.

Structure and Tooth Profile Dimensions

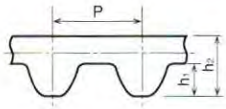
Belt type

Structure

Long STS Belt

Long Synchronous Belt

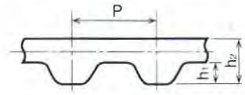
Tooth profile dimensions



The dimensions in ( ) are of seamless type.

(Unit: mm)

Type \ Item	P	h_1	h_2
S2M	2.0	0.76	1.31
S3M	3.0	1.14	2.10
S4.5M	4.5	1.71	2.70
S5M	5.0	1.91	3.61
S8M	8.0	3.05	5.30(6.05)
S14M	14.0	5.30	(11.3)



The dimensions in ( ) are of seamless type.

(Unit: mm)

Type \ Item	P	h_1	h_2
MXL	2.032	0.51	1.10
XL	5.080	1.25	2.25
L	9.525	1.90	3.50
H	12.700	2.30	4.30(5.30)
XH	22.225	6.30	11.3(12.3)
XXH	31.75	9.60	15.8(16.1)

Type / Features / Standard Sizes / Indications

Type

Seamless (no joint)

Features

- The absence of a joint allows power transmission and conveyance with the same performance as that of standard synchronous belts.
- The effective length can be freely made in units of tooth.
- Special specifications (such as back face design and white color) can also be manufactured.

Standard size

Type	Standard nominal width	Manufacturable range
H	100, 200, 400 600, 800, 1000 (inches × 100)	4.7~30 (m)
XH		
XXH		
S8M	250, 500, 1000 1500, 2000, 2800 (mm×10)	4.7~30 (m)
S14M	* For other widths than the above, please contact us.	

Indication

- Synchronous Belt

200 XH 10000
- 10000: Effective length (mm)
- XH: Belt type (Type XH)
- 200: Belt nominal width (2 inches: 50.8 mm)

- STS Belt

500 S14M 7770
- 7770: Effective length (mm)
- S14M: Belt type (Type S14M)
- 500: Belt nominal width (50 mm)

Open-ended (band form)

- Accurate reciprocal motions.

(Unit: m)

Nominal width	019	025	031	037	050	075	100	150	200	300
Width (mm)	4.8	6.4	7.9	9.5	12.7	19.1	25.4	38.1	50.8	76.2
MXL	41	30	24	41	30					
XL		54	43	36	26	34				
L					49	31	46			
H						41	30	38	27	16

Nominal width	50	60	70	80	100	140	150	200	250	300	400	500	600
Width (mm)	5	6	7	8	10	14	15	20	25	30	40	50	60
S2M	43	36	30	53									
S3M	50	42											
S4.5M		45			40	28							
S5M				53	42		42	30	24				
S8M					56		55	40	31	52	37	28	22

Indication

- Synchronous Belt

XL 025 53m
- 53m: Effective length (m)
- 025: Belt nominal width (0.25 inches: 6.4 mm)
- XL: Belt type (Type XL)

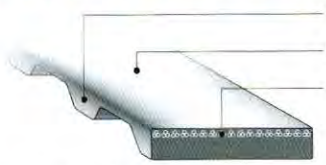
- STS Belt

250 S8M 30m
- 30m: Effective length (m)
- S8M: Belt type (Type S8M)
- 250: Belt nominal width (25 mm)

2. Bancollan Long Synchronous Belt (Polyurethane)

This belt made of polyurethane allows synchronous power transmission and synchronous conveyance over long spans. It is suitable for food processing machines, clean power transmission, and conveyance. Various profiles can be fused on the back face of the belt to enhance the conveyance function.

Structure and Features



Steel: Suitable for applications that require responsiveness, dimensions, positioning.
Aramid: Suitable for food stuff applications.

- **Little dust generation and excellent cleanliness**
- **Joint of any length possible**
- **Back face profile processing possible**
- **The steel cord specification has little belt elongation.**
- **Direct conveyance of food stuffs possible** (passed Notice No. 370 of the Ministry of Health and Welfare concerning food hygiene)
- **Synchronous power transmission over long spans possible**

How to Understand Product Name

[Inch-pitch trapezoidal teeth] (XL/L/H)

037 XL-1015 S W-C
- C: Cut (open-ended)
- W: Cord material (symbol)
- S: Rubber material (symbol)
- 1015: No. of teeth of belt
- XL: Belt tooth profile (Type XL)
- 037: Belt nominal width (0.37 inches: 9.5 mm)

[Round teeth] (S2M/S3M/S5M/S8M/S14M/S25M)

240 S3M-1000 L W-C
- C: Cut (open-ended)
- W: Cord material (symbol)
- L: Rubber material (symbol)
- 1000: No. of teeth of belt
- S3M: Belt tooth profile (Type S3M)
- 240: Belt width (240: 24 mm)

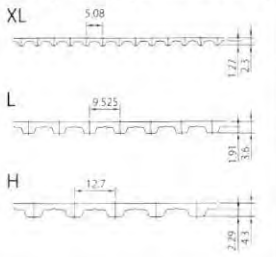
[Millimeter-pitch trapezoidal teeth] (T5/T10/AT5/AT10/AT20)

25 T10-890 S W Z-J(P)
- (P): Special processing
- J: Joint
- Z: Special specifications
- W: Cord material (symbol)
- S: Rubber material (symbol)
- 890: No. of teeth of belt
- T10: Belt tooth profile (Type T10)
- 25: Belt width (mm)

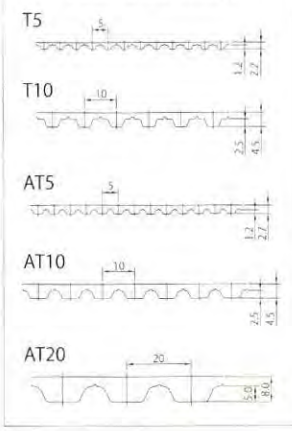
- **Rubber material symbols**
  S: Standard, semi-transparent / W: Standard, white / L: Low friction, white / B: Low friction, blue / M: Moisture- and heat-resistant, white
- **Cord material symbols**
  W: Steel cord / K: Aramid cord
- **Special specifications**
  Z: Canvas on mating flank / G: Back face polishing
- **Joints and special processing**
  C: Cut (open-ended) / J: Joint / (P): Special processing (such as profile)

Tooth Profiles / Standard Sizes / Joints

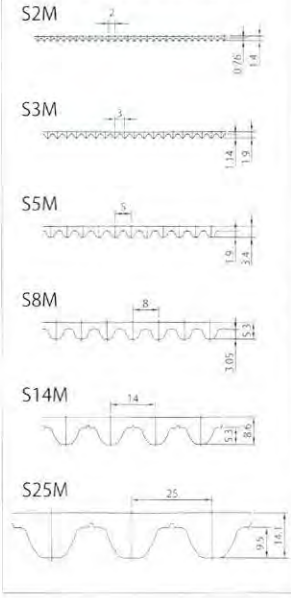
[Inch-pitch trapezoidal teeth]



[Millimeter-pitch trapezoidal teeth]



[Round teeth]



Tooth profile	Standard nominal width	Width (mm)	Maximum nominal width	Maximum length	Joint	Minimum joint length
XL	025	6.4	200	50m	○	0.5m
	031	7.9				
	037	9.5				
	050	12.7				
	075	19.1				
	100	25.4				
	150	38.1				
	200	50.8				
L	050	12.7	200	50m	○	0.5m
	075	19.1				
	100	25.4				
	150	38.1				
	200	50.8				
H	075	19.1	400	50m	○	0.5m
	100	25.4				
	150	38.1				
	200	50.8				
	300	76.2				2m
	400	101.6				
T5	7	7	50	50m	○	0.5m
	10	10				
	15	15				
	20	20				
	25	25				
	30	30				
	40	40				
	50	50				
T10	15	15	100	50m	○	0.5m
	20	20				
	25	25				
	30	30				
	40	40				
	50	50				
	60	60				2m
	75	75				
	100	100				
AT5	10	10	50	50m	○	0.5m
	15	15				
	20	20				
	25	25				
	30	30				
	40	40				
	50	50				

Tooth profile	Standard nominal width	Width (mm)	Maximum nominal width	Maximum length	Joint	Minimum joint length
AT10	15	15	100	50m	○	0.5m
	20	20				
	25	25				
	30	30				
	40	40				
	50	50				
	60	60				2m
	75	75				
	100	100				
AT20	25	25	100	50m	×	—
	50	50				
	75	75				
	100	100				
S2M	50	5	400	60m	×	—
	100	10				
	150	15				
	200	20				
	250	25				
	300	30				
	350	35				
	400	40				
S3M	60	6	480	60m	×	—
	120	12				
	180	18				
	240	24				
	300	30				
	360	36				
	420	42				
	480	48				
S5M	100	10	500	50m	○	0.5m
	150	15				
	200	20				
	250	25				
	300	30				
	400	40				
	500	50				
S8M	150	15	1000	50m	○*1	0.5m
	200	20				
	250	25				
	300	30				
	400	40				
	500	50				
	750	75				2m
	1000	100				
S14M	1000	100	1000	30m	×	—
S25M	250	25	1000	20m	×	—
	330	33				
	1000	100				

* The maximum joint length for connectable product types is 50 m.
If this is exceeded, please consult our sales company or distributor.
* If you need other widths than the standard widths, please consult our sales company or distributor.
*1 There is a limitation on use; please make an inquiry.

Bancollan Long Synchronous Belt System Table

Tooth profile	Cord type	Rubber type					Canvas affixation
		S: Standard	W: Standard	L: Low friction	B: Low friction	M: Moisture- and heat-resistant	Mating flank
		Semi-transparent	White	White	Blue	White	
XL	Steel cord	○	○			○	
	Aramid cord	○					
L	Steel cord	○	○			○	
	Aramid cord	○					
H	Steel cord	○	○			○	
	Aramid cord	○	○			○	
T5	Steel cord	○	○			○	○
	Aramid cord	○	○				
T10	Steel cord	○	○			○	○
	Aramid cord	○	○			○	
AT5	Steel cord	○	○				
AT10	Steel cord	○	○				
AT20	Steel cord	○	○				
S2M	Steel cord			○			
S3M	Steel cord			○			
S5M	Steel cord		○				
	Aramid cord		○				
S8M	Steel cord		○				
	Aramid cord		○*				
S14M	Steel cord			○			
S25M	Steel cord			○			
	Aramid cord				○*		

* The ○ mark indicates that it is manufacturable.
* Cord symbol Steel: W
Aramid: K
* S14M and S25M are used for conveyance; please contact us for details.
* For the aramid specifications of S8M and S25M, please contact us.

Frictional (Frictional Transmission Belts)

List of Frictional Transmission Belt Product Systems

Classification	Name	Belt type		M	A	B	C	D	E	Product introduction page	Design calculation page
General V-belt	V-Belt Standard	Material	R		●	●	●	●	●	231	245
	V-Belt Red		R	●	●	●	●	●	●	231	
	Energy-Saving Red		R		●	●	●	●		224	
	Power Scrum (V-belt type)		R		●	●	●	●		234	

Classification	Name	Belt type			3V		5V		8V	Product introduction page	Design calculation page
Narrow V-belt	Power Ace	Material	R		●		●		●	225	245
	Power Ace Cog		R		●		●			227	
	Energy-Saving Power Ace		R		●		●		●	224	
	Power Scrum (Power Ace type)		R		●		●		●	228	
	Power Ace Aramid Combo		R				●		●	229	

Classification	Name	Belt type		H	J/PJ	PK	PL			Product introduction page	Design calculation page
V-ribbed belt	Bancollan Polybanrope	Material	U	○	○					274	245
	Rib-Ace 2		R		●	●	●			236	

Classification	Name	Belt type			5MS	7MS	11MS			Product introduction page	Design calculation page
High-performance V-belt	Banflescrum	Material	U		○	○	○			279	282

Classification	Name	Belt type		3M	5M	7M	11M			Product introduction page	Design calculation page
High-performance V-belt	Banflex	Material	U	○	○	○	○			279	282

Classification	Name	Belt type		VC	DC					Product introduction page	Design calculation page
Light-duty belt	Bancollan V-Belt	Material	U	○	○					293	295

Classification	Name	Belt type		ϕ2	ϕ3	ϕ4	ϕ5			Product introduction page	Design calculation page
Light-duty belt	Bancollan round belt	Material	U	○	○	○	○			297	299

List of Frictional Transmission Belt Product Systems

Classification	Name	Belt type		1.5	2	2.5	3	3.5	4	5	6	7	8	9	10	11	12	15	Product introduction page	Design calculation page
Light-duty belt	Bancord round belt	Material	#480	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	302	305
			#485N				○		○	○	○									
			#485T						○	○	○									
			#485RB						○	○	○		○							
			#489	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
			#490	○	○	○	○	○	○	○	○	○	○	○	○	○	○			
			#490 (Charge prevention)		○	○			○	○										
	Name	Belt type		M	A	B														
	Bancord V-Belt	Material	U	○	○	○														

Classification	Name	List of belt specifications								Product introduction page	Design calculation page
Belt for precision conveyance (PS belt)	A-series high-speed transmission	A-1C	A-1N	A-1U	A-1H	A-4C	A-4N	A-4U	A-4H	318	327
		A-10C	A-10N	A-10U	A-10H	A-13C	A-13N	A-13U	A-13H		
	B-series Light article conveyance, such as sheets and tickets	B-2C	B-2N	B-2U	B-2H						
		B-3C	B-3N	B-3U	B-3H	B-6C	B-6N	B-6U	B-6H		
	C-series Precision transmission at 100 W or less, light article conveyance	C-8C	C-8N	C-8U	C-8H	C-16C	C-16N	C-16U	C-16H		
	Z-series (for heat resistance)	Z-H250X						Z-H250X			
	E-series (light article conveyance)			E-8U				EXL-101			

Energy-Saving V-Belt

Product Introduction

By reducing losses by belt bending stress, CO_2 emissions reduction and energy-saving effects can be expected.

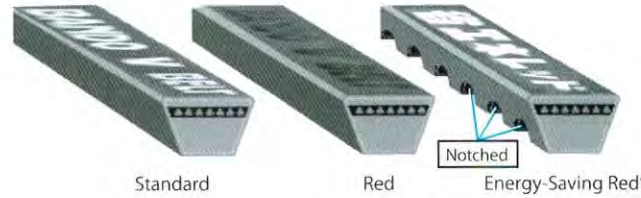
Product Features

■ **Energy-saving (power-saving) and CO_2 emissions reduction can be expected.**
Although it depends on the conditions, a maximum of approximately 6% power can be reduced.

■ **No change of pulleys is necessary.**
It can be used just by replacing the previous V-belt with Energy-Saving Red and replacing Power Ace with Energy-Saving Power Ace.

■ **Long service life.** *Based on our bench tests.
Due to the belt structure, internal heating is little, and the service life is long.

■ **Cost reduction possible.**
The cost can be reduced by the energy-saving (power-saving) effect and the reduction in the number of belts.



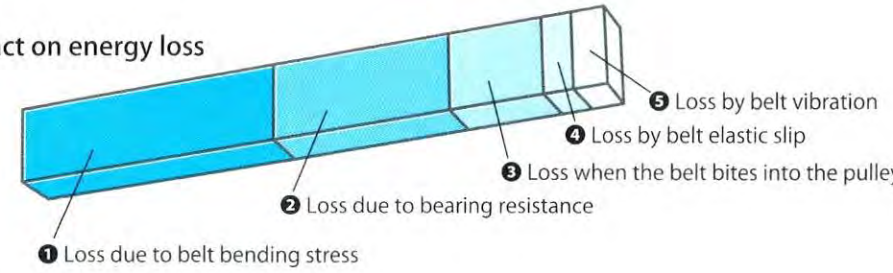
Standard Red Energy-Saving Red®

Power Ace® Energy-Saving Power Ace®

Why Can the Energy-Saving (Power-Saving) Effect Be Obtained?

■ Energy losses by a belt (explanatory drawing)
Any power transmission device has losses (energy losses), and belt power transmission devices have the following energy losses.

■ Degree of impact on energy loss



The Energy-Saving V-Belt can be bent with a small force structurally; hence, the reduction of "losses by bending stress," whose energy loss ratio is high, can provide the energy-saving (power-saving) effect.

* The belt bending rigidity EI is an index of the ease of bending. The lower the value, the more easily the belt can be bent.

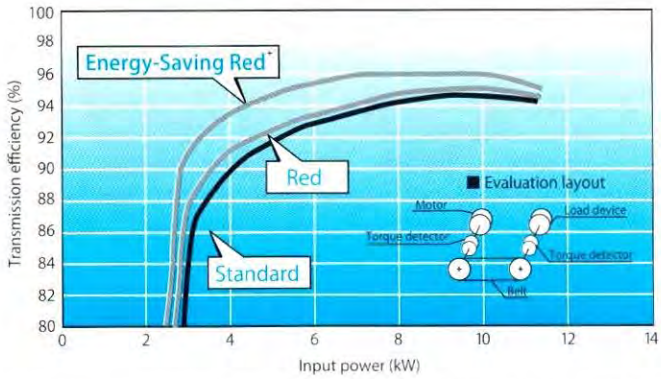
1. Energy-Saving Red™

Belt type	Range of manufacturable sizes
JIS Type A	20 to 360 inches
JIS Type B	25 to 360 inches
JIS Type C	35 to 360 inches
JIS Type D	100 to 360 inches

[Note] Effective length (mm) = 25.4 × size (nominal designation)

■ Power transmission efficiency verification result

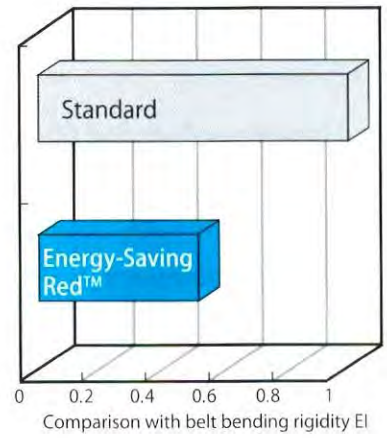
Input power and power transmission efficiency
<Power Standard> Tension 50 kgf | B-50 | 3 belts | ϕ118-ϕ118



- The design transmission efficiency in the range of use of Energy-Saving Red* is 4% higher than that of the standard.

■ Comparison of belt bending rigidities <Belt Type B>

(When the standard is 1)



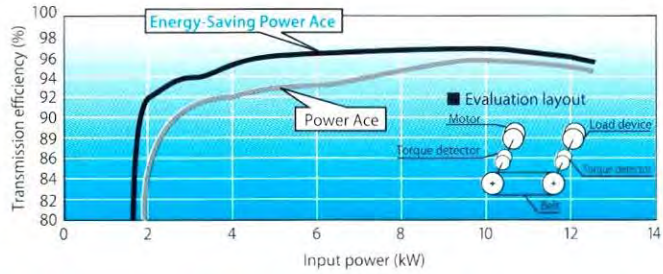
2. Energy-Saving Power Ace™

Belt type	Range of manufacturable sizes
Type 3V	250～1400
Type 5V	500～3550
Type 8V	1000～3550

*Please specify the effective length with a nominal number.
*Effective length = Effective outside length (mm) = 25.4 × Nominal No. / 10

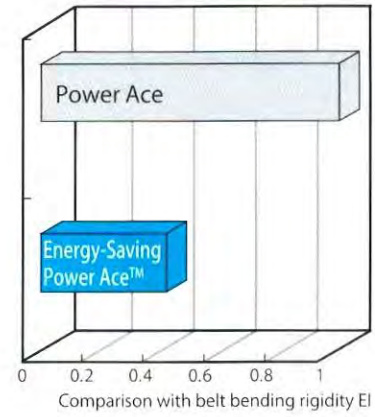
■ Power transmission efficiency verification result

Input power and power transmission efficiency
<Power Standard> Tension 50 kgf | 5V530 | 1 belts | ϕ150-ϕ150



■ Comparison of belt bending rigidities <Belt Type 5V>

(When Power Ace is 1)



3. How to Design an Energy-Saving V-Belt

The transmission capacity of the Energy-Saving V-Belt is the same as that of the standard belt.
Refer to the design calculation page for the respective standard type belt.

Energy-Saving V-Belt	Reference product	Design calculation page
Energy-Saving Power Ace	Power Ace	245～273
Energy-Saving Red	V-Belt Red	

Power Ace / Power Ace Cog / Power Scrum
Power Ace Aramid Combo

1. Power Ace Product Introduction

Power Ace is a narrow V-belt for high power transmission capability that significantly enhanced various characteristics and performance such as power transmission capability, high speed, and reliability by changing the cross-sectional structure of the previous V-belt. (Prescribed as Narrow V-belts for power transmission in JIS K 6368.)

Features

■ Allows miniaturization and cost reduction of power transmission devices.

Power Ace has an extremely high power transmission capability, and the space for the power transmission device is about one-third of that of the standard V-belt.
Unlike chain transmission or gear transmission, it requires no lubrication device, allowing the equipment cost and maintenance cost to be reduced.

■ Allows high-speed operation.

Power Ace has an extremely high power transmission capability per belt and has a reduced loss in power transmission by centrifugal force; hence, it is also suitable for high-speed operation and can be used up to a speed of 40 m/s.

■ Allows labor-saving in maintenance.

Power Ace has little belt elongation during operation and rarely requires re-tensioning. Unlike chain transmission and gear transmission, it requires no lubrication, allowing significant labor-saving in maintenance.

■ Long belt service life and excellent reliability.

Power Ace, based on the ideal profile that was made by studying the power transmission theory as well as on the manufacturing technology on the highest standard, has a long service life and rarely incurs trouble during operation.

■ Excellent physical characteristics.

● Excellent heat resistance.
Generally, the higher the ambient temperature, the shorter the belt service life becomes; however, Power Ace can withstand high temperature compared to the standard V-belt.

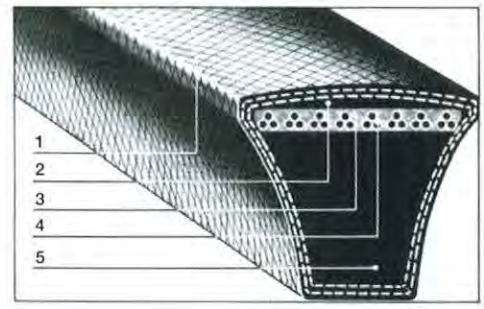
● Static electricity prevention.
It has an electric resistance performance that conforms to the U.S. RMA standard.
*RMA (An abbreviation for Rubber Manufacturers Association)

● Excellent flame resistance.
The specially compounded chloroprene rubber used in Power Ace has a self-anti-inflammation property and therefore can be used at ease.

● Excellent oil resistance.
It can be used even with slight adhesion of oil mist, oil, or grease.

● Excellent weather resistance and ozone resistance.
It can also be used outdoors and in coastline areas without problems. Where the belt is exposed to direct sunlight, please protect the belt with a belt cover of the like if possible.

Structure



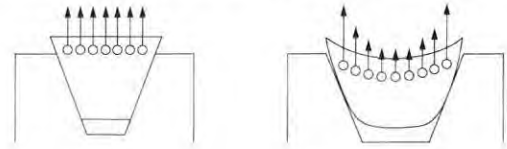
1. Cover fabric
2. Tension rubber
3. Adhesion rubber
4. Cord
5. Compression rubber

● Cord
It uses a polyester cord, has extremely little elongation, and has no concern for peeling of the cord layer.

● Compression rubber
The specially compounded chloroprene rubber reduces heat generation during running and increases the belt service life.

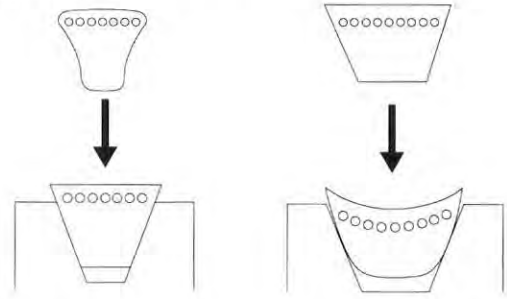
● Cover canvas
The special canvas has only a little tension and strain on the fiber even when it is wound around a small-diameter pulley, reducing losses in power transmission due to bending stress. It is also excellent in protection of the inside of the belt.

● Arched top
At the time of operation, it prevents cross-sectional deformation of the belt and maintains the group of tension members at a normal position; hence the group of tension members receives a uniform force, leading to a longer belt service life.



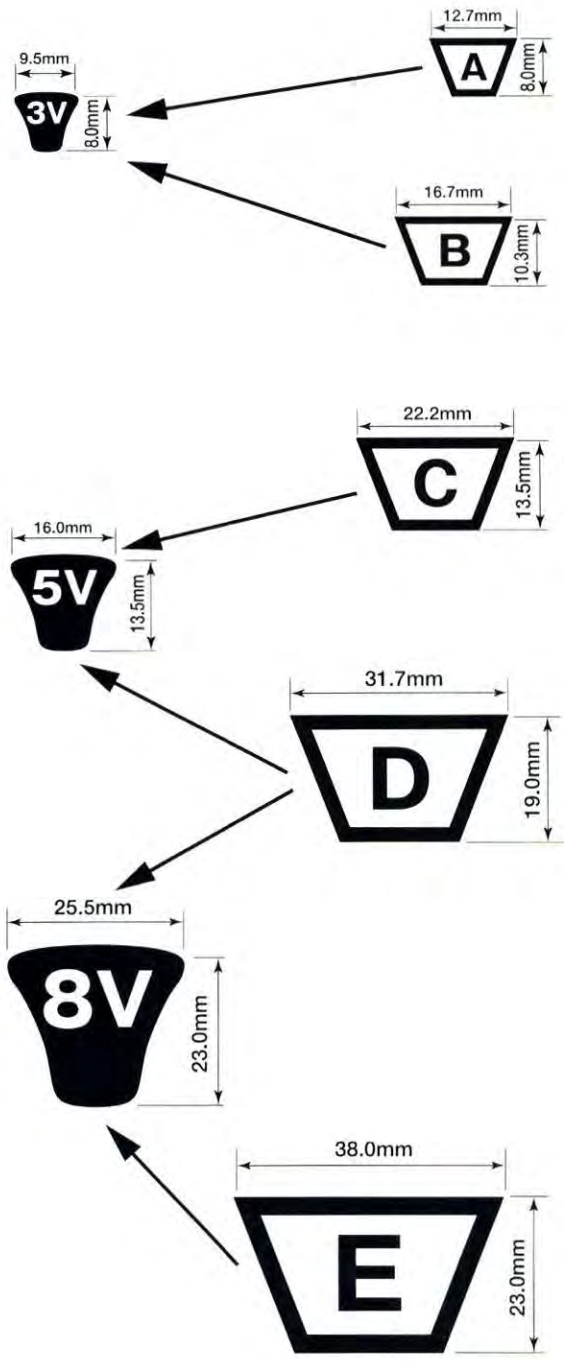
Power Ace　　Standard V-belt

● Concave side wall
When the belt is wound around a pulley, the belt side face becomes straight and comes in uniform contact with the pulley, which increases the power transmission capability. The abrasion on the belt side face is uniform, which extends the belt service life.



Power Ace　　Standard V-belt

Type



(Note) The cross-sectional dimensions of Power Ace are nominal dimensions.

■ Belt size

Type 3V		Type 5V		Type 8V	
Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)
250	635	500	1270	1000	2540
265	673	530	1346	1060	2692
280	711	560	1422	1120	2845
300	762	600	1524	1180	2997
315	800	630	1600	1250	3175
335	851	670	1702	1320	3353
355	902	710	1803	1400	3556
375	953	750	1905	1500	3810
400	1016	800	2032	1600	4064
425	1080	850	2159	1700	4318
450	1143	900	2286	1800	4572
475	1207	950	2413	1900	4826
500	1270	1000	2540	2000	5080
530	1346	1060	2692	2120	5385
560	1422	1120	2845	2240	5690
600	1524	1180	2997	2360	5994
630	1600	1250	3175	2500	6350
670	1702	1320	3353	2650	6731
710	1803	1400	3556	2800	7112
750	1905	1500	3810	3000	7620
800	2032	1600	4064	3150	8001
850	2159	1700	4318	3350	8509
900	2286	1800	4572	3550	9017
950	2413	1900	4826	3750	9525
1000	2540	2000	5080	4000	10160
1060	2692	2120	5385	4250	10795
1120	2845	2240	5690	4500	11430
1180	2997	2360	5994	4750	12065
1250	3175	2500	6350	5000	12700
1320	3353	2650	6731	5600	14224
1400	3556	2800	7112		
		3000	7620		
		3150	8001		
		3350	8509		
		3550	9017		

When using multiple belts, please specify a matched set.

Indication Example

5V 1250

Nominal No.
Effective outside length (125 inches: 3175 mm)

Belt type (Type 5V)
Top width (5/8 inches: 16 mm)

2. Power Ace Cog Product Introduction

This is an additional specification of the high power transmission narrow V-belt "Bando Power Ace" and is a raw-edge cogged type narrow V-belt that can meet the requirements of high transmission capacity and miniaturization. *For other widths than the above, please contact us.

Features

■ Allows miniaturization and cost reduction of power transmission devices.

Power Ace Cog has a higher transmission capacity than that of Power Ace and can also be used for small pulley diameters and high-speed revolution.

■ Transmission capacity

Although the rate of increase of transmission capacity varies slightly depending on the pulley diameter and the revolution, in generally used operating conditions, it has 20 to 30% higher transmission capacity than that of Power Ace.

■ Minimum pulley diameter

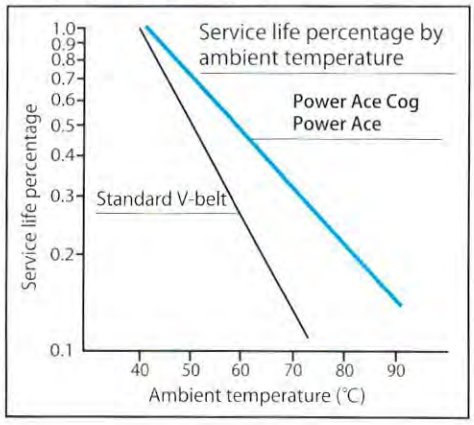
Power Ace Cog has a cogged profile at the bottom of the belt and therefore can be used for small pulley diameters as well.

Belt type	Minimum pulley diameter	
	Power Ace Cog	Power Ace
Type 3V	56 (3VX)	67 (3V)
Type 5V	112 (5VX)	150 (5V)

■ Allows high-speed operation.

Power Ace Cog has a high power transmission capacity per belt and has a small loss in power transmission by centrifugal force; hence, it is also suitable for high-speed operation and can be used up to a speed of 40 m/s.

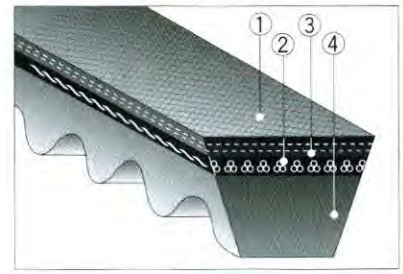
■ Excellent heat resistance.



■ Excellent oil resistance.

As this belt uses a synthetic rubber and takes oil resistance into consideration, it can be used even with slight adhesion of oil mist, oil, or grease.

Structure



1. Top canvas
2. Cord
3. Adhesion rubber
4. Compression rubber

● **Top canvas**
The highly elastic biased canvas protects the belt.

● **Adhesion rubber**
While it maintains the cord at an appropriate position, it also improves the adhesion between the cord and the rubber layer.

● **Cord**
It users a polyester cord and completely adheres to the adhesion rubber; hence, it rarely has belt elongation during running. In addition, it has no concern for peeling of the cord, allowing stable power transmission.

● **Compression rubber**
The specially compounded synthetic rubber mitigates fatigue during running and provides high side pressure resistance.

● **Cogged profile**
The cogged profile at the bottom of the belt allows a smaller-diameter pulley than the previous pulley diameter to be used and provides high flexibility; hence, it generates only little heat during running and has a longer belt service life.

Belt profile and size range

● **The bottom of the belt is "cogged."**

● **Because Power Ace Cog is often used in small to medium-sized machines that generally use small-diameter pulleys; hence, the types and sizes of the belt are limited.**

Type	Size
3VX	3VX250～3VX1400
5VX	5VX500～5VX2000

When using multiple belts, please specify a matched set.
For details of the size, refer to the **table on P. 230**.

For Power Ace Cog Scrum (3VX), please contact us.

3. Power Scrum Product Introduction

Bando Power Scrum is a combined belt that combines the top sections of Power Ace using tie bands.
As the cross-sectional profile of the belt is the same as Power Ace, our Power Ace pulleys can be used.

Features

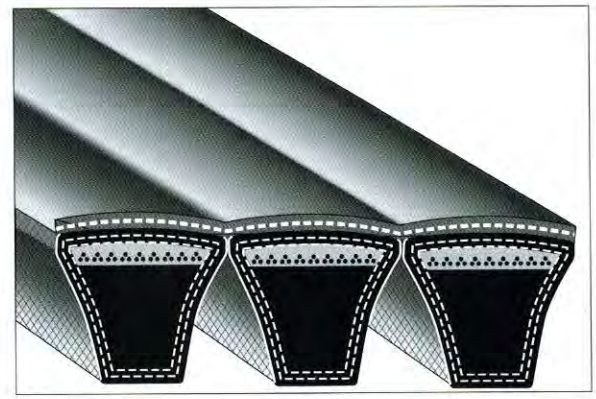
■ Stable operation even under violent load fluctuations

Even when the machine involves shock loads and pulsating loads, the belt tied with tie bands vibrates little and can operate stably, and it does not flip over to the side or come off of a pulley.

■ Belt most suitable for vertical shaft drives

The tying with tie bands allows the belt to be used even in a vertical shaft drive with no detachment from the pulleys.

Structure



How to Design

Refer to Power Ace belt design **(P. 245 to P. 273)**.

Belt Indication

■ Indication example

10 - 5V 1250

- 10 — No. of ridges
- 5V — Belt type (Type 5V)
- 1250 — Nominal No. (1250 inches: 3175 mm)

■ Standard effective lengths

Type 3V		Type 5V		Type 8V	
Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)
400	1016	**600**	1524	**1000**	2540
425	1080	**630**	1600	**1060**	2692
450	1143	**670**	1702	**1120**	2845
475	1207	**710**	1803	**1180**	2997
500	1270	**750**	1905	**1250**	3175
530	1346	**800**	2032	**1320**	3353
560	1422	**850**	2159	**1400**	3556
600	1524	**900**	2286	**1500**	3810
630	1600	**950**	2413	**1600**	4064
670	1702	**1000**	2540	**1700**	4318
710	1803	**1060**	2692	**1800**	4572
750	1905	**1120**	2845	**1900**	4826
800	2032	**1180**	2997	**2000**	5080
850	2159	**1250**	3175	**2120**	5385
900	2286	**1320**	3353	**2240**	5690
950	2413	**1400**	3556	**2360**	5994
1000	2540	**1500**	3810	**2500**	6350
1060	2692	**1600**	4064	**2650**	6731
1120	2845	**1700**	4318	**2800**	7112
1180	2997	**1800**	4572	**3000**	7620
1250	3175	**1900**	4826	**3150**	8001
1320	3353	**2000**	5080	**3350**	8509
1400	3556	**2120**	5385	**3550**	9017
		2240	5690	**3750**	9525
		2360	5994	**4000**	10160
		2500	6350	**4250**	10795
		2650	6731	**4500**	11430
		2800	7112	**4750**	12065
		3000	7620	**5000**	12700
		3150	8001	**5600**	14224
		3350	8509		
		3550	9017		

■ Belt combination

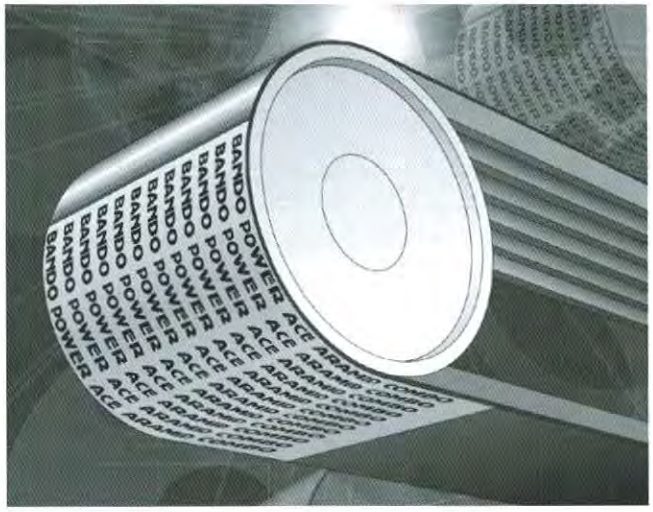
No. of ridges	Combination	No. of ridges	Combination
-	-	11	4+3+4
2	2	12	4+4+4
3	3	13	4+5+4
4	4	14	5+4+5
5	5	15	5+5+5
6	3+3	16	4+4+4+4
7	3+4	17	4+4+5+4
8	4+4	18	5+4+4+5
9	4+5	19	5+4+5+5
10	5+5	20	5+5+5+5

■ Matched set

When using multiple belts, please specify a matched set.

4. Power Ace™ Aramid Combo Product Introduction

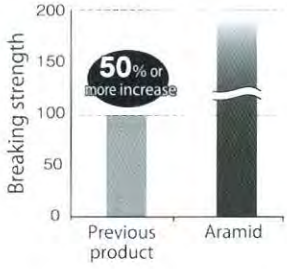
Power Ace™ Aramid Combo is a belt that employs a high-elasticity aramid cord and has improved dimensional stability and shock resistance. It also has excellent heat resistance and electric conductivity.



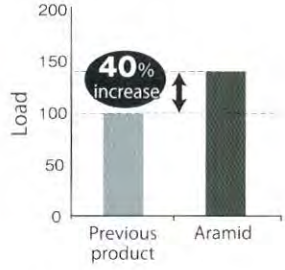
Features

- **The new tie band structure is resistant to peeling.**
- **The high-elasticity aramid cord provides a 50% or higher breaking strength than the previous products.**
- **The belt has a 40% or higher transmission capacity than the previous products.**
- **The belt has an electric conductivity that conforms to the ARPM (RMA) standard.**

● Breaking strength

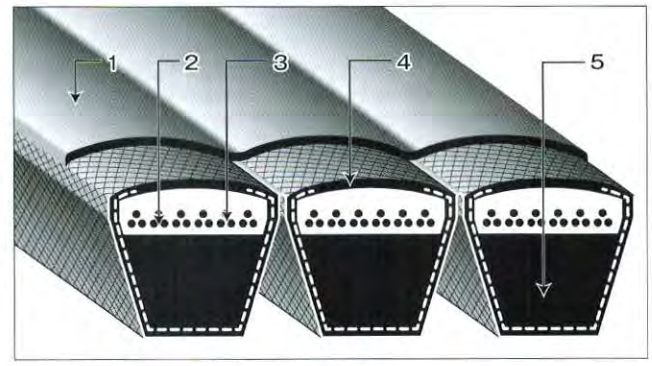


●Transmission capacity



*Pay due attention to the installation tension of the belt.

Structure



1. Tie band 2. High-elasticity aramid cord
3. Adhesion rubber 4. Cover fabric 5. Compression rubber

● **Tie band**

A peeling-resistant new type tie band structure is employed.

● **High-elasticity aramid cord**

The high-elasticity aramid cord provides a 50% or higher breaking strength than the previous products.

The belt has a 40% or higher transmission capacity than the previous products.

● **Cover fabric**

The belt has an electric conductivity that conforms to ARPM (RMA).

Belt Indication

■ Indication example

3 - 8VK 1250

No. of ridges

Belt type (Type 8VK)

Nominal No. (1250 inches: 3175 mm)

■ Standard effective lengths

5VK				8VK			
Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)	Nominal No.	Effective outside length (mm)
600	1524	**2120**	5385	**1060**	2692	**3750**	9525
630	1600	**2240**	5690	**1120**	2845	**4000**	10160
670	1702	**2360**	5994	**1180**	2997	**4250**	10795
710	1803	**2500**	6350	**1250**	3175	**4500**	11430
750	1905	**2650**	6731	**1320**	3353	**4750**	12065
800	2032	**2800**	7112	**1400**	3556	**5000**	12700
850	2159	**3000**	7620	**1500**	3810	**5600**	14224
900	2286	**3150**	8001	**1600**	4064		
950	2413	**3350**	8509	**1700**	4318		
1000	2540	**3550**	9017	**1800**	4572		
1060	2692			**1900**	4826		
1120	2845			**2000**	5080		
1180	2997			**2120**	5385		
1250	3175			**2240**	5690		
1320	3353			**2360**	5994		
1400	3556			**2500**	6350		
1500	3810			**2650**	6731		
1600	4064			**2800**	7112		
1700	4318			**3000**	7620		
1800	4572			**3150**	8001		
1900	4826			**3350**	8509		
2000	5080			**3550**	9017		

● 5VK can be manufactured with up to 16 ridges, and 8VK can be manufactured with up to 10 ridges.
(For other sizes than the indicated sizes, please contact us.)

■ Belt combination

No. of ridges	Combination	No. of ridges	Combination
-	-	11	4+3+4
2	2	12	4+4+4
3	3	13	4+5+4
4	4	14	5+4+5
5	5	15	5+5+5
6	3+3	16	4+4+4+4
7	3+4	17	4+4+5+4
8	4+4	18	5+4+4+5
9	4+5	19	5+4+5+5
10	5+5	20	5+5+5+5

For pulleys, our Power Ace pulleys can be used as with Power Ace and Power Scrum.

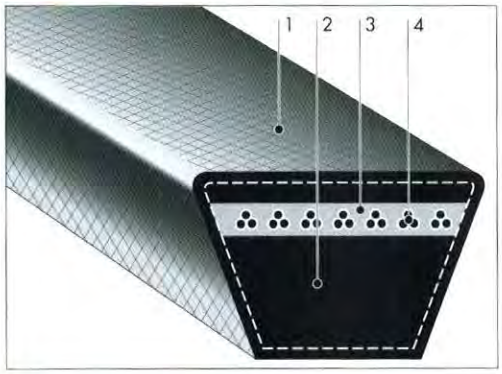
■ List of belt sizes of Power Ace / Power Ace Cog / Power Scrum / Power Ace Aramid Combo

		3V					5V					8V		
Belt nominal No.	Effective outside length (mm)	Power Ace	Power Scrum	Power Ace Cog 3VX	Belt nominal No.	Effective outside length (mm)	Power Ace	Power Scrum	Power Ace Cog 5VX	Power Ace Aramid Combo 5VK	Belt nominal No.	Effective outside length (mm)	Power Ace	Power Scrum	Power Ace Aramid Combo 8VK
250	635	○		○	**500**	1270	○		○		**1000**	2540	○	○	
265	673	○		○	**530**	1346	○		○		**1060**	2692	○	○	○
280	711	○		○	**560**	1422	○		○		**1120**	2845	○	○	○
300	762	○		○	**600**	1524	○	○	○	○	**1180**	2997	○	○	○
315	800	○		○	**630**	1600	○	○	○	○	**1250**	3175	○	○	○
335	851	○		○	**670**	1702	○	○	○	○	**1320**	3353	○	○	○
355	902	○		○	**710**	1803	○	○	○	○	**1400**	3556	○	○	○
375	953	○		○	**750**	1905	○	○	○	○	**1500**	3810	○	○	○
400	1016	○	○	○	**800**	2032	○	○	○	○	**1600**	4064	○	○	○
425	1080	○	○	○	**850**	2159	○	○	○	○	**1700**	4318	○	○	○
450	1143	○	○	○	**900**	2286	○	○	○	○	**1800**	4572	○	○	○
475	1207	○	○	○	**950**	2413	○	○	○	○	**1900**	4826	○	○	○
500	1270	○	○	○	**1000**	2540	○	○	○	○	**2000**	5080	○	○	○
530	1346	○	○	○	**1060**	2692	○	○	○	○	**2120**	5385	○	○	○
560	1422	○	○	○	**1120**	2845	○	○	○	○	**2240**	5690	○	○	○
600	1524	○	○	○	**1180**	2997	○	○	○	○	**2360**	5994	○	○	○
630	1600	○	○	○	**1250**	3175	○	○	○	○	**2500**	6350	○	○	○
670	1702	○	○	○	**1320**	3353	○	○	○	○	**2650**	6731	○	○	○
710	1803	○	○	○	**1400**	3556	○	○	○	○	**2800**	7112	○	○	○
750	1905	○	○	○	**1500**	3810	○	○	○	○	**3000**	7620	○	○	○
800	2032	○	○	○	**1600**	4064	○	○	○	○	**3150**	8001	○	○	○
850	2159	○	○	○	**1700**	4318	○	○	○	○	**3350**	8509	○	○	○
900	2286	○	○	○	**1800**	4572	○	○	○	○	**3550**	9017	○	○	○
950	2413	○	○	○	**1900**	4826	○	○	○	○	**3750**	9525	○	○	○
1000	2540	○	○	○	**2000**	5080	○	○	○	○	**4000**	10160	○	○	○
1060	2692	○	○	○	**2120**	5385	○	○		○	**4250**	10795	○	○	○
1120	2845	○	○	○	**2240**	5690	○	○		○	**4500**	11430	○	○	○
1180	2997	○	○	○	**2360**	5994	○	○		○	**4750**	12065	○	○	○
1250	3175	○	○	○	**2500**	6350	○	○		○	**5000**	12700	○	○	○
1320	3353	○	○	○	**2650**	6731	○	○		○	**5600**	14224	○	○	○
1400	3556	○	○	○	**2800**	7112	○	○		○					
					3000	7620	○	○		○					
					3150	8001	○	○		○					
					3350	8509	○	○		○					
					3550	9017	○	○		○					

V-Belt Power Scrum

1. V-Belt (Red Standard) Product Introduction

Structure



① **Cover fabric**
The cover fabric has a sufficient abrasion resistance to friction with the pulleys and is made of a strong, elastic, and bias special cloth. The further reinforcement with the abrasion-resistant rubber protects the inside sufficiently.

② **Compression rubber**
It keeps the normal belt cross-sectional profile, has extremely little heat generation against bending, and is very flexible.

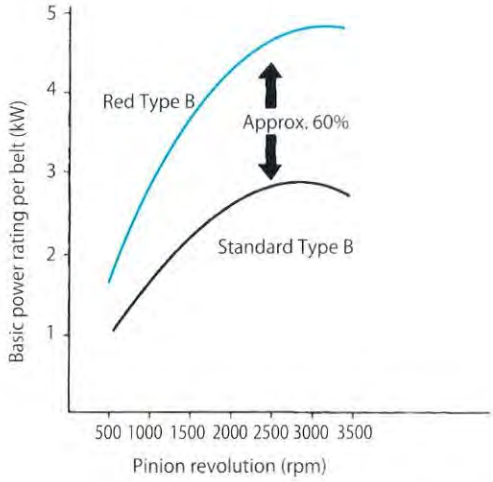
③ **Adhesion rubber**
While it maintains the cord layer at an appropriate position, it also improves the adhesion between the cord layer and the rubber layer.

④ **Cord**
It is the main part that transmits power and uses a polyester cord that has a high strength, has little elongation, and has little flex fatigue. It strongly adheres to and is integrated with the rubber layer; hence, in power transmission, each cord receives uniform force and can perform stable power transmission.

Features/Red

■ High-quality and high-power-transmission V-belt

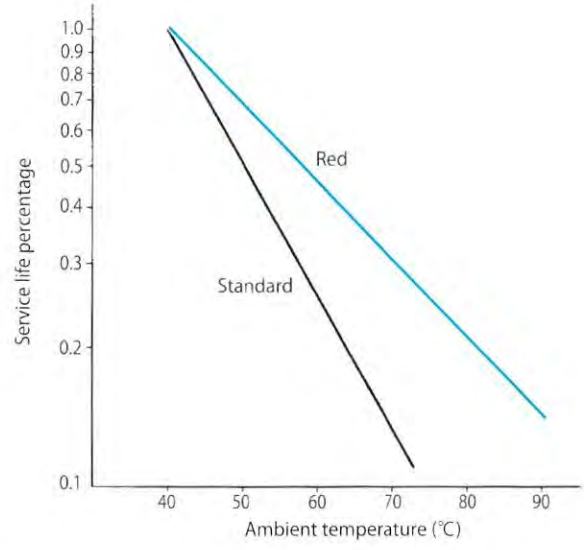
It employs polyester cords that are strong and have little elongation and a synthetic rubber compound, and has about 60% higher power than the previous Standard.



This graph plots the transmission power per belt as compared to revolution when a Type-B 125-mm-dia. pulley is used.

■ Excellent heat resistance

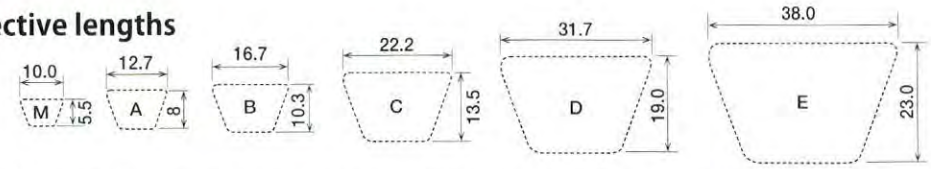
Generally, when the ambient temperature increases, the belt service life decreases as shown in the graph below. However, Bando Red has a lower reduction rate than Standard; hence, when the ambient temperature is high (normally 60 °C or more), it is recommended to use Bando Red.



■ Excellent flame resistance.

Because it does not have a self-burning property, the risk of ignition due to excessive slipping is low.

Table of effective lengths



Manufacturable range for Standard *: Standard dimension prescribed in JIS Effective dimension: Represents effective outside length for
Manufacturable range for Red ○: Bando's standard dimension Type M and effective pitch length for Types A, B, C, D, and E.

Nominal No.	Effective dimension (mm)	Belt type											
		M		A		B		C		D		E	
11	279												
12	305												
13	330												
14	356												
15	381												
16	406												
17	432												
18	457												
19	483												
20	508	◎		◎		◎							
21	533	◎		◎		◎							
22	559	◎		◎		◎							
23	584	◎		◎		◎							
24	610	◎		◎		◎							
25	635	◎		◎		◎							
26	660	◎		◎		◎							
27	686	◎		◎		◎							
28	711	◎		◎		◎							
29	737	◎		◎		◎							
30	762	◎		◎		◎	◎						
31	787	◎		◎		◎	◎						
32	813	◎		◎		◎	◎						
33	838	◎		◎		◎	◎						
34	864	◎		◎		◎	◎						
35	889	◎		◎		◎	◎						
36	914	◎		◎		◎	◎						
37	940	◎		◎		◎	◎						
38	965	◎		◎		◎	◎						
39	991	◎		◎		◎	◎						
40	1016	◎		◎		◎	◎						
41	1041	◎		◎		◎	◎						
42	1067	◎		◎		◎	◎						
43	1092	◎		◎		◎	◎						
44	1118	◎		◎		◎	◎						
45	1143	◎		◎		◎	◎	◎	◎				
46	1168	◎		◎		◎	◎						
47	1194	◎		◎		◎	◎						
48	1219	◎		◎		◎	◎	◎	◎				
49	1245	◎		◎		◎	◎						
50	1270	◎		◎		◎	◎	◎	◎				
51	1295			◎		◎	◎	○					
52	1321			◎		◎	◎	◎	◎				
53	1346			◎		◎	◎	○					
54	1372			◎		◎	◎	◎	◎				
55	1397			◎		◎	◎	◎	◎				
56	1422			◎		◎	◎	○					
57	1448			◎		◎	◎	○					
58	1473			◎		◎	◎	◎	◎				
59	1499			◎		◎	◎	○					
60	1524			◎		◎	◎	◎	◎				
61	1549			◎		◎	◎	○					
62	1575			◎		◎	◎	◎	◎				
63	1600			◎		◎	◎	○					
64	1626			◎		◎	◎	○					
65	1651			◎		◎	◎	◎	◎				
66	1676			◎		◎	◎	○					
67	1702			◎		◎	◎	○					
68	1727			◎		◎	◎	◎	◎				
69	1753			◎		◎	◎	○					
70	1778			◎		◎	◎	◎	◎				
71	1803			◎		◎	◎	○					
72	1829			◎		◎	◎	◎	◎				
73	1854			◎		◎	◎	○					

Nominal No.	Effective dimension (mm)	Belt type											
		M		A		B		C		D		E	
74	1880			◎	◎	◎	◎	○					
75	1905			◎	◎	◎	◎	◎	◎				
76	1930			◎	◎	◎	◎	○					
77	1956			◎	◎	◎	◎	○					
78	1981			◎	◎	◎	◎	◎	◎				
79	2007			◎	◎	◎	◎	○					
80	2032			◎	◎	◎	◎	◎	◎				
81	2057			◎	◎	◎	◎	○					
82	2083			◎	◎	◎	◎	◎	◎				
83	2108			◎	◎	◎	◎	○					
84	2134			◎	◎	◎	◎	○					
85	2159			◎	◎	◎	◎	◎	◎				
86	2184			◎	◎	◎	◎	○					
87	2210			◎	◎	◎	◎	○					
88	2235			◎	◎	◎	◎	◎	◎				
89	2261			◎	◎	◎	◎	○					
90	2286			◎	◎	◎	◎	◎	◎				
91	2311			◎	◎	◎	◎	○					
92	2337			◎	◎	◎	◎	◎	◎				
93	2362			◎	◎	◎	◎	○					
94	2388			◎	◎	◎	◎	○					
95	2413			◎	◎	◎	◎	◎	◎				
96	2438			◎	◎	◎	◎	○					
97	2464			◎	◎	◎	◎	○					
98	2489			◎	◎	◎	◎	◎	◎				
99	2515			◎	◎	◎	◎	○					
100	2540			◎	◎	◎	◎	◎	◎	◎	◎		
101	2565												
102	2591			◎	◎	◎	◎	◎	◎				
103	2616												
104	2642												
105	2667			◎	◎	◎	◎	◎	◎	◎	◎		
106	2692												
107	2718												
108	2743			◎	◎	◎	◎	◎	◎				
109	2769												
110	2794			◎	◎	◎	◎	◎	◎	◎	◎		
111	2819												
112	2845			◎	◎	◎	◎	◎	◎				
113	2870												
114	2896												
115	2921			◎	◎	◎	◎	◎	◎	◎	◎		
116	2946												
117	2972												
118	2997			◎	◎	◎	◎	◎	◎				
119	3023												
120	3048			◎	◎	◎	◎	◎	◎	◎	◎		
121	3073												
122	3099			◎	◎	◎	◎	◎	◎				
123	3124												
124	3150												
125	3175			◎	◎	◎	◎	◎	◎	◎	◎		
126	3200												
127	3226												
128	3251			◎	◎	◎	◎	◎	◎				
129	3277												
130	3302			◎	◎	◎	◎	◎	◎	◎	◎		
131	3327												
132	3353					◎	◎	◎	◎				
133	3378												
134	3404												
135	3429			◎	◎	◎	◎	◎	◎	◎	◎		
136	3454												

V-Belt Power Scrum

Table of effective lengths

Manufacturable range for Standard
Manufacturable range for Red

*: Standard dimension prescribed in JIS
◯: Bando's standard dimension

Effective dimension: Represents effective outside length for Type M and effective pitch length for Types A, B, C, D, and E.

Nominal No.	Effective dimension (mm)	Belt type											
		M		A		B		C		D		E	
137	3480												
138	3505					◯	◯	◯	◯				
139	3531												
140	3556			◯	◯	◯	◯	◯	◯	◯	◯		
141	3581												
142	3607							◯	◯				
143	3632												
144	3658												
145	3683			◯	◯	◯	◯	◯	◯	◯	◯		
146	3708												
147	3734												
148	3759							◯	◯				
149	3785												
150	3810			◯	◯	◯	◯	◯	◯	◯	◯		
151	3835												
152	3861												
153	3886												
154	3912												
155	3937			◯	◯	◯	◯	◯	◯	◯	◯		
156	3962												
157	3988												
158	4013												
159	4039												
160	4064			◯	◯	◯	◯	◯	◯	◯	◯		
161	4089												
162	4115												
163	4140												
164	4166												
165	4191					◯	◯	◯	◯	◯	◯		
166	4216												
167	4242												
168	4267												
169	4293												
170	4318			◯	◯	◯	◯	◯	◯	◯	◯		
171	4343												
172	4369												
173	4394												
174	4420												
175	4445												
176	4470												
177	4496												
178	4521												
179	4547												
180	4572			◯	◯	◯	◯	◯	◯	◯	◯		
181	4597												
182	4623												
183	4648												
184	4674												
185	4699												
186	4724												
187	4750												
188	4775												
189	4801												
190	4826					◯	◯	◯	◯	◯	◯		
191	4851												
192	4877												
193	4902												
194	4928												
195	4953												
196	4978												
197	5004												
198	5029												
199	5055												
200	5080					◯	◯	◯	◯	◯	◯		
205	5207												
210	5334					◯	◯	◯	◯	◯	◯		

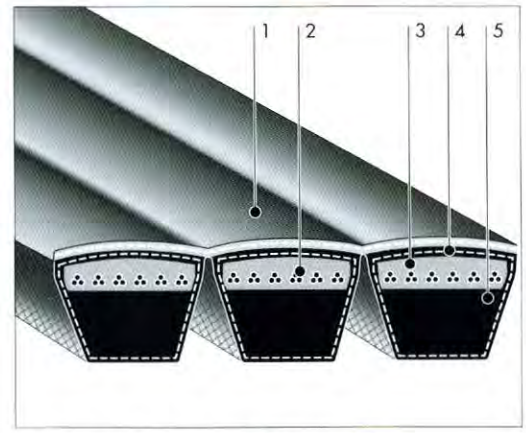
Nominal No.	Effective dimension (mm)	Belt type											
		M		A		B		C		D		E	
215	5461												
220	5588							◯	◯	◯	◯		
225	5715												
230	5842							◯	◯	◯	◯		
235	5969												
240	6096							◯	◯	◯	◯		
245	6223												
250	6350							◯	◯	◯	◯		
255	6477												
260	6604									◯	◯		
265	6731												
270	6858									◯	◯		
275	6985												
280	7112									◯	◯		
285	7239												
290	7366												
295	7493												
300	7620									◯	◯		
305	7747												
310	7874									◯	◯		
315	8001												
320	8128												
325	8255												
330	8382									◯	◯		
335	8509												
340	8636												
345	8763												
350	8890												
355	9017												
360	9144												
365	9271												
370	9398												
375	9525												
380	9652												
385	9779												
390	9906												
395	10033												
400	10160												
410	10414												
420	10668												
430	10922												
440	11176												
450	11430												
460	11684												
470	11938												
480	12192												
490	12446												
500	12700												
510	12954												
520	13208												
530	13462												
540	13716												
550	13970												
560	14224												
570	14478												
580	14732												
590	14986												
600	15240												
610	15494												
620	15748												
630	16002												
640	16256												
650	16510												

When using multiple belts, please specify a matched set.

2. Power Scrum Product Introduction

Bando Power Scrum is a combined belt that combines the top sections of V-Belt Red using tie bands. As the cross-sectional profile of the belt is the same as V-belts, JIS V-grooved pulleys can be used.

Structure (V-Belt Type)



1. Tie band 2. Cord 3. Adhesion rubber
4. Cover fabric 5. Compression rubber

Features

■ **Stable operation even under violent load fluctuations**

Even when the machine involves shock loads and pulsating loads, the belt tied with tie bands vibrates little and can operate stably, and it does not flip over to the side or come off of a pulley.

■ **Belt most suitable for vertical shaft drives**

The tying with tie bands allows the belt to be used even in a vertical shaft drive with no detachment from the pulleys.

■ **Allows V-flat power transmission.**

Deceleration at a high speed ratio is possible with V-flat power transmission, allowing inexpensive power transmission.

■ **Can also be used for conveyance.**

■ Manufacturable range for Power Scrum

Belt type	P (mm)	Nominal No.*
A	15.0	60~200
B	19.0	60~350
C	25.5	100~350
D	37.0	100~350

*The nominal numbers for V-belt type represent the effective pitch length of the belt in units of inches.

- The V-belt type is made to order. Please use the Power Ace type if possible.

Belt Indication

■ Indication example

5 - C 100

No. of ridges | Belt type (Type C) | Nominal No. (100 inches: 2540 mm)

Standard Combination by the Number of Ridges

A single Power Scrum belt consists of a combination of two, three, four, and/or five ridges. For six ridges or more, the standard combinations are shown in the following table.

No. of ridges	Standard combination	No. of ridges	Standard combination
6	3+3	13	4+5+4
7	3+4	14	5+4+5
8	4+4	15	5+5+5
9	4+5	16	4+4+4+4
10	5+5	17	4+4+5+4
11	4+3+4	18	5+4+4+5
12	4+4+4	19	5+4+5+5

When using multiple belts, please specify a matched set.

Pulley

For pulleys for Power Scrum, the groove pitch is especially important.
Use JIS pulleys.

Rib-Ace 2

It is generally called V-ribbed belt and is a belt that combines a flat belt and a V-belt to make use of the features of both. Previously, the application of this belt was limited to driving of auxiliary machinery for automobiles; however, even for general-purpose machinery, it is a power transmission belt that can meet such requirements as miniaturization, machinery functional improvement, and labor-saving in maintenance.

1. Product Introduction

Features

Already from around 1980, "Bando Rib-Ace Auto" started to be used as a belt for automobiles, and it has been providing such features as pulley miniaturization, labor-saving in belt maintenance, and belt service life extension for such purposes as weight reduction, space-saving, and energy-saving of automotive engines.

■ Allows miniaturization of power transmission devices.

It can be used with small-diameter pulleys and allows compact designs.

■ Allows high-speed operation.

It has little losses in power transmission by centrifugal force, is suitable for high-speed operation, and can be used up to a belt speed of 50 m/s.

■ It has high rotation accuracy and has little belt vibration.

The rib section is combined with the belt and is ground, it has little rotation non-uniformity during each rotation of the belt in running, allowing you to expect smooth operation.

■ High transmission efficiency (little power loss).

The belt is thinner than V-belts and has little loss from bending, which provides high transmission efficiency.

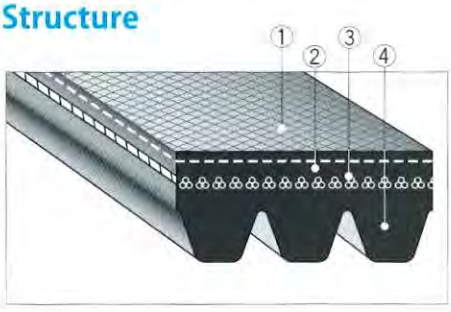
■ Advantageous in tension retention and maintenance.

Compared to V-belts, it has less belt deformation and has less sink into the pulley groove due to abrasion, allowing the maintenance period, such as re-tensioning, to be extended.

■ Characteristics

Heat resistance: It compounds heat-resistant rubber.
Oil resistance: It can be used even with slight adhesion of oil or grease. (Be careful that adhesion of dispersed cutting oil etc. can cause slipping.)
Water resistance: Be careful that slip tends to occur when water splashes over directly or when the belt is constantly used in a high-temperature condition.
Static electricity prevention: When you need static electricity prevention, please contact us.

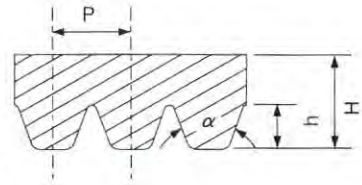
Structure



1. Top canvas
2. Adhesion rubber
3. Cord
4. Rib rubber

Indication

■ Belt designation example



4 PK 1000

No. of ribs | Belt type (Type PK) | Effective length (1000 mm)

	P	H	h	α
	mm	mm	mm	(°)
Type PJ	2.34	3.4	1.3	40
Type PK	3.56	4.3	2.0	40
Type PL	4.70	6.0	3.3	40

■ Standard size

(Unit: mm)

Effective length					
Type PJ		Type PK		Type PL	
273	887	600	1220	540	1520
294	911	615	1250	605	1555
332	937	630	1280	655	1645
353	962	650	1320	700	1720
401	988	670	1360	730	1750
454	1013	690	1400	825	1850
480	1089	710	1450	850	1900
502	1140	730	1500	870	1975
530	1165	750	1550	875	2065
556	1191	775	1600	880	2115
567	1201	800	1650	905	2190
594	1242	825	1700	915	2360
607	1318	850	1750	950	2470
619	1343	875	1800	975	2575
634		900	1850	1000	2695
657		925	1900	1035	2840
704		950	1950	1050	3045
708		975	2000	1055	
759		1000	2120	1070	
777		1030	2240	1190	
797		1060	2360	1240	
817		1090	2500	1305	
835		1120	2650	1340	
852		1150	2800	1365	
861		1180	3000	1445	

■ Standard No. of ribs

Type PJ	3PJ～18PJ
Type PK	3PK～12PK
Type PL	3PL～12PL

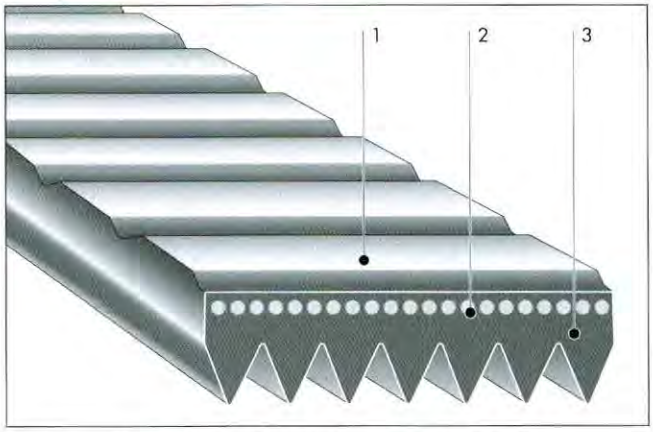
* When using multiple belts, please specify a matched set. However, please note that Rib-Ace is used in a multiple quantity with the same number of ribs.

Bancollan Polybanrope

1. Product Introduction

Bancollan Polybanrope is a polyurethane light-duty belt that combines the flexibility of flat belts and the high power transmission capability of V-belts. Many light-duty machines are generally assembled in a line and require simple belt installation and a high transmission capacity.
Bancollan Polybanrope is an easily installable and tough belt that exactly meets these requirements.

Structure and Features



1. **Tension rubber** (polyurethane rubber)
2. **Cord** (polyamide cord)
3. **V-rib** (polyurethane rubber)

Bancollan Polybanrope provides the following features due to its unique structure.

■ Installable with a fixed center distance

It uses polyamide cords, and the belt has appropriate elasticity. When this elasticity is used, the belt can be installed with the pulleys fixed to the center distance in accordance with the initial stretch rate (normally 1.3%). Because pulley relocation and tension adjustment are unnecessary, the installation cost can be reduced.

■ Shock resistance

The polyamide cords have instantaneous elasticity, which has an effect of absorbing shock loads.

■ Clean transmission

The use of abrasion-resistant polyurethane rubber in the V-ribs prevents most of rubber dropping. Therefore, the transmission system and its peripheral areas can be kept clean.

■ High speed ratio

Because Type H can be used with a small pulley outside diameter of 13 mm and Type J can be used with a small pulley diameter of 23 mm, a high speed ratio is available within a fixed space.

■ High transmission capacity

The large friction surface and the uniform arrangement of the cords in the upper section of the V-ribs provide a high transmission capacity.

■ Excellent high-speed revolution

The light belt and the uniform arrangement of the cords allow smooth transmission even with ϕ23 / 14000 rpm (Type J) ϕ13 / 16000 rpm (Type H).

Major applications

Electric tools
Electric planes, compact grinders, belt sanders, groove-cutting machines

Office machines and automization equipment
Blowers for computers, vending machines, automatic ticket gate, financial system terminal machines, line printers, typewriters, card-making machines, bill-processing machines, paper-cutting machines

Fiber machines
Temporary twisting machines, high-speed winders, spinning machines

Rotary electric equipment
Electric rice-cake-making machines, noodle-making machines, juicers/mixers, electric cooking apparatuses, electric grass cutters, electric massage machines, hemming machines, industrial sawing machines, projectors

Compact machine tools
Desktop lathes, riveters, punching machines, marking presses, mini drill presses, spindle units

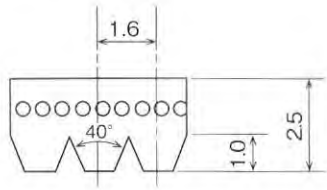
Others
Food cutters (ham/bread slicers), compact winding machines, wrapping machines

Belt Dimensions

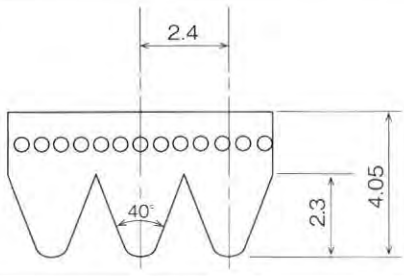
Please use Bancollan Polybanrope of sizes indicated in **Table 1** if possible.

■ Cross-sectional dimensions

Type H



Type J



■ Belt size indication example

108 J 5

- 108: Nominal length (10.8 inches: 273.8 mm)
- J: Belt type (Type J)
- 5: No. of ridges (5)

Dimensional Tolerance

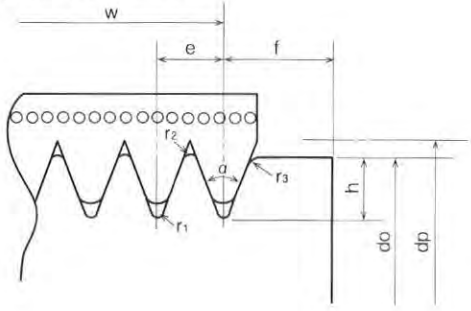
■ Thickness

(Unit: mm)

Type H	2.5±0.2
Type J	4.05±0.2

Pulley groove dimensions

Please use Bancollan Polybanrope with pulleys having the following groove dimensions.



■ Table 1 Table of belt sizes

Type H		Type J	
Nominal length	Pitch length (mm)	Nominal length	Pitch length (mm)
63H	160.0	81J	205.3
71H	180.3	82J	209.1
80H	203.2	85J	215.9
85H	215.9	90J	228.6
90H	228.6	95J	241.3
95H	241.3	97J	247.3
100H	254.0	99J	251.3
106H	269.2	103J	261.6
112H	284.5	108J	273.8
118H	299.7	116J	293.5
125H	317.5	117J	297.0
132H	335.3	122J	310.9
136H	345.6	125J	317.5
140H	355.6	130J	330.0
147H	373.4	135J	343.8
150H	381.0	139J	351.5
160H	406.4	142J	363.3
170H	431.8	145J	368.3
180H	457.2	153J	389.3
190H	482.6	160J	406.4
200H	508.0	171J	431.3
214H	543.2	175J	442.3
215H	547.0	180J	457.2
221H	562.0	189J	480.2
230H	584.2	194J	492.8
235H	596.9	201J	510.5
304H	772.2	234J	594.0
		236J	599.4
Please note that some sizes have a different pitch length from the value obtained by converting the nominal length into millimeters.		250J	630.8
		260J	660.4
		264J	670.0
		280J	711.2
		300J	762.0
		312J	792.5
		318J	807.7
		323J	819.3

■ Outside length

(Unit: mm)

270 or less	+1 −2
Over 270 to 500 or less	+1 −3
Over 500 to 700 or less	+1 −4
Over 700 to 850 or less	+2 −4

Note) The outside length tolerance is based on our measurement method.

Banflescrum/Banflex

1. Product Introduction

Features

Features of Banflescrum

■ Vibration-free stable transmission

The belt bonds two or three ridges and therefore is mostly vibration-free. Hence, it allows stable transmission without the belt flipping over or detachment from the pulleys.

■ Most suitable for vertical shaft drive operation

The bonding of the belt prevents contact between belts and detachment from the pulleys. Therefore, even in the case of a vertical shaft drive, there is no need to use special pulleys (such as deep-grooved pulleys).

Features common to Banflescrum and Banflex

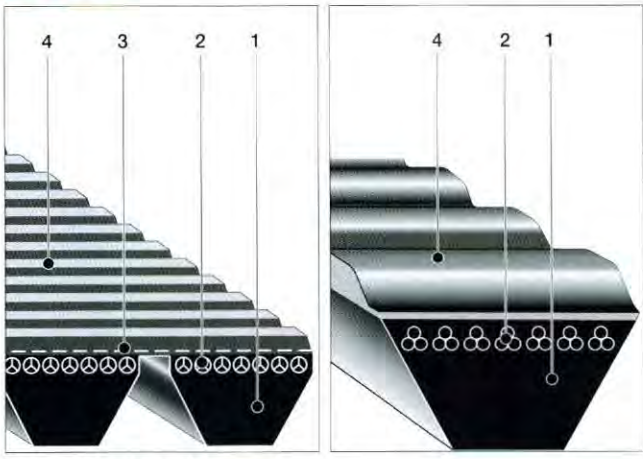
■ High-speed and smooth power transmission

The high accuracy of the belt cross-section and effective length and no variation of belt sink on the pulleys allow high-speed smooth power transmission close to flat belts. Although the previous V-belts can be used up to 30 to 40 m/s, Banflescrum can be designed to be used with a speed up to 60 m/s.

■ Lightweight and compact design

It can be used with small pulley diameters, allows for a high speed ratio, and allows the power transmission system to be light and compact. For example, a device that had used two-stage deceleration with V-belts can be changed to one-stage deceleration.

Structure



1. Compression rubber
   - Polyurethane rubber with excellent abrasion resistance and large friction factor and allowable compression stress
   - 60° belt angle that gives uniform load distribution
2. Cord
   Polyester cord with a large tensile strength, little flex fatigue, and little permanent elongation
3. Reinforcing canvas
   Polyamide fiber that increases the widthwise rigidity and ensures stable running
4. Back face rib
   Unique ribs that reduce bending stress

Note)
- When you use multiple Banflex belts, be sure to use the Scrum type.
- To provide the dynamic performance of the belt, a "lubricant" is compounded in the belt. This compounding ingredient may become deposited in white on the belt surface due to changes in ambient temperature etc. or may become slightly wet due to a liquid. This will be absorbed into the belt with time and is no abnormality.

Belt Combinations

Banflescrum has two or three ridges as the standard. For four or more ridges, please use a combination of belts with two and three belts as shown in the **following table**.
(The recommended maximum number of ridges is 12.)

■ Belt combination

No. of ridges	Combination	No. of ridges	Combination
2	2	7	2+3+2
3	3	8	3+2+3
4	2+2	9	3+3+3
5	2+3	10	2+3+3+2
6	3+3	12	3+3+3+3

Matched set

When using a combination of multiple belts, please specify a matched set. We deliver a set of belts of lengths within the allowable range shown in the **following table**.

■ Allowable range of effective lengths for use of multiple belts (matching limit)

Nominal outside length	Allowable range of length (mm)
180~500	0.25
515~1000	0.50
1030~1500	0.75
1550~2300	1.00

Standard length of Banflescrum

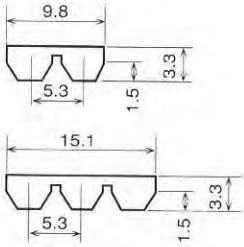
■ Belt indication method

7 - 5MS 1000

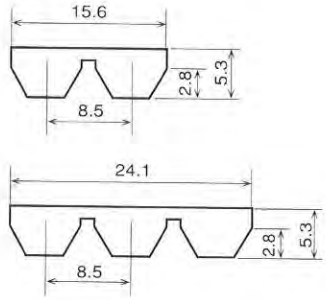
- 7 — No. of ridges (Combination 2+3+2)
- 5MS — Belt type (Type 5MS)
- 1000 — Nominal length (1000 mm)

■ Cross-sectional profile of Banflescrum belt

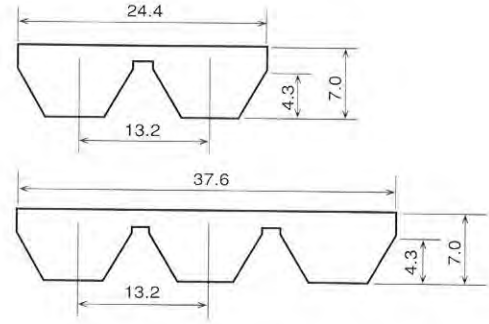
5MS



7MS



11MS



■ Standard effective lengths (Banflescrum)

(Unit: mm)

5MS				7MS				11MS			
Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length
280	277	670	667	500	494	1090	1084	710	701	1280	1271
290	287	690	687	515	509	1120	1114	730	721	1320	1311
300	297	710	707	530	524	1150	1144	750	741	1360	1351
307	304	730	727	545	539	1180	1174	775	766	1400	1391
315	312	750	747	560	554	1220	1214	800	791	1450	1441
325	322	775	772	580	574	1250	1244	825	816	1500	1491
335	332	800	797	600	594	1280	1274	850	841	1550	1541
345	342	805	802	615	609	1320	1314	875	866	1600	1591
355	352	825	822	630	624	1360	1354	900	891	1650	1641
365	362	850	847	650	644	1400	1394	925	916	1700	1691
375	372	875	872	670	664	1450	1444	950	941	1750	1741
387	384	900	897	690	684	1500	1494	975	966	1800	1791
400	397	925	922	710	704	1550	1544	1000	991	1850	1841
412	409	950	947	730	724	1600	1594	1030	1021	1900	1891
425	422	975	972	750	744	1650	1644	1060	1051	1950	1941
437	434	1000	997	775	769	1700	1694	1090	1081	2000	1991
450	447	1030	1027	800	794	1750	1744	1120	1111	2060	2051
462	459	1060	1057	825	819	1800	1794	1150	1141	2120	2111
475	472	1090	1087	850	844	1850	1844	1180	1171	2180	2171
487	484	1120	1117	875	869	1900	1894	1220	1211	2240	2231
500	497	1150	1147	900	894	1950	1944	1250	1241	2300	2291
515	512	1180	1177	925	919	2000	1994				
518	515	1220	1217	950	944	2060	2054				
530	527	1250	1247	975	969	2120	2114				
545	542	1280	1277	1000	994	2180	2174				
560	557	1320	1317	1030	1024	2240	2234				
580	577	1360	1357	1060	1054	2300	2294				
600	597	1400	1397								
615	612	1450	1447								
630	627	1500	1497								
650	647	1850	1847								

■ Belt outside length tolerance

Nominal outside length	Outside length tolerance (mm)
180~ 307	±2.5
315~ 615	±4.0
630~1090	±5.0
1120~1500	±6.5
1550~1900	±7.5
1950~2300	±9.0

(Note) Please note that when you switch from Banflex to Banflescrum, the center distance becomes shorter (3 to 5 mm for 5M → 5MS, 5 to 6 mm for 7M → 7MS, 6 to 8 mm for 11M → 11MS).

Banflex standard length

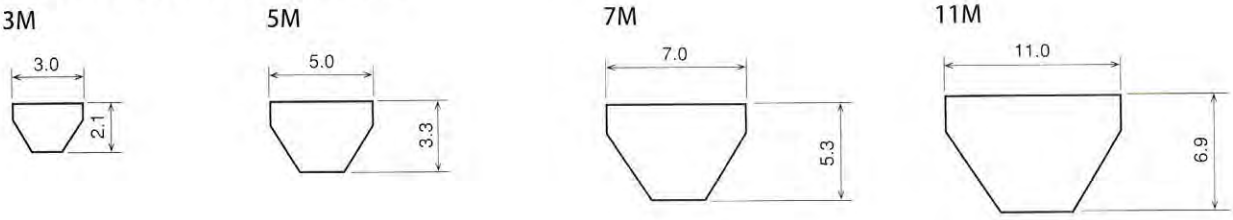
■ Belt indication method

5M - 1000

Nominal length (1000 mm)

Belt type (Type 5M)

■ Cross-sectional profile of Banflex belt



■ Standard effective lengths (Banflex)

(Unit: mm)

3M				5M				7M				11M			
Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length	Nominal length	Pitch length
180	178	437	435	280	278	670	668	500	496	1220	1216	710	703	1750	1743
185	183	450	448	290	288	690	688	515	511	1250	1246	730	723	1800	1793
190	188	462	460	300	298	710	708	530	526	1280	1276	750	743	1850	1843
195	193	475	473	307	305	730	728	545	541	1320	1316	775	768	1900	1893
200	198	487	485	315	313	750	748	560	556	1360	1356	800	793	1950	1943
206	204	500	498	325	323	775	773	580	576	1400	1396	825	818	2000	1993
212	210	515	513	335	333	800	798	600	596	1450	1446	850	843	2060	2053
218	216	530	528	345	343	805	803	615	611	1500	1496	875	868	2120	2113
224	222	545	543	355	353	825	823	630	626	1550	1546	900	893	2180	2173
230	228	560	558	365	363	850	848	650	646	1600	1596	925	918	2240	2233
236	234	580	578	375	373	875	873	670	666	1650	1646	950	943	2300	2293
243	241	600	598	387	385	900	898	690	686	1700	1696	975	968		
250	248	615	613	400	398	925	923	710	706	1750	1746	1000	993		
258	256	630	628	412	410	950	948	730	726	1800	1796	1030	1023		
265	263	650	648	425	423	975	973	750	746	1850	1846	1060	1053		
272	270	670	668	437	435	1000	998	775	771	1900	1896	1090	1083		
280	278	690	688	450	448	1030	1028	800	796	1950	1946	1120	1113		
290	288	710	708	462	460	1060	1058	825	821	2000	1996	1150	1143		
300	298	730	728	475	473	1090	1088	850	846	2060	2056	1180	1173		
307	305	750	748	487	485	1120	1118	875	871	2120	2116	1220	1213		
315	313			500	498	1150	1148	900	896	2180	2176	1250	1243		
325	323			515	513	1180	1178	925	921	2240	2236	1280	1273		
335	333			518	516	1220	1218	950	946	2300	2296	1320	1313		
345	343			530	528	1250	1248	975	971			1360	1353		
355	353			545	543	1280	1278	1000	996			1400	1393		
365	363			560	558	1320	1318	1030	1026			1450	1443		
375	373			580	578	1360	1358	1060	1056			1500	1493		
387	385			600	598	1400	1398	1090	1086			1550	1543		
400	398			615	613	1450	1448	1120	1116			1600	1593		
412	410			630	628	1500	1498	1150	1146			1650	1643		
425	423			650	648	1850	1848	1180	1176			1700	1693		

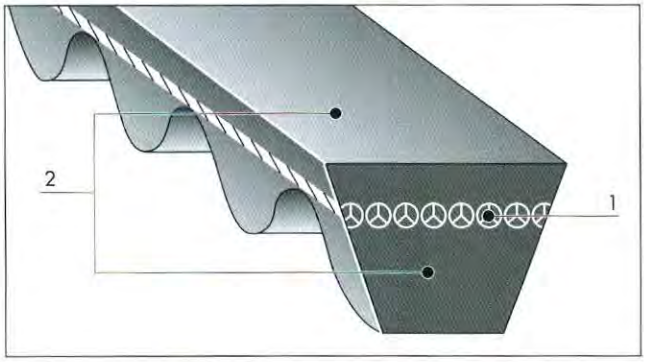
Bancollan V-Belt (VC/DC)

1. Product Introduction

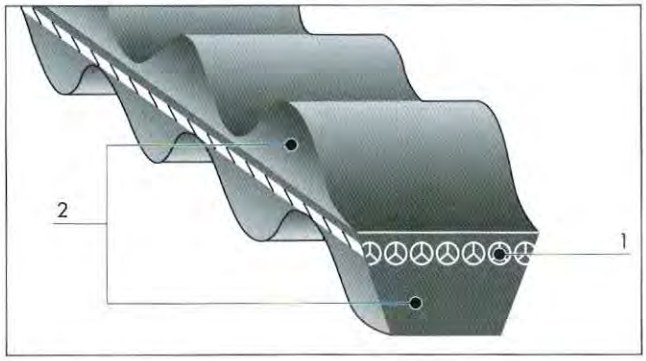
The Bancollan V-Belt is highly evaluated by users as an optimum belt for light-duty equipment. Recently it is widely used even in general industry and is called a standard V-belt in the light-duty field.

(1) Structure and Features

■ **VC (cogged on the inner surface)**



■ **DC (cogged on both sides)**



1. **Cord** (Polyester cord)
2. **Tension rubber/Base rubber** (polyurethane rubber)

The Bancollan V-Belt provides the following features.

■ **Economical power transmission**

Because it has a large friction factor and uses flexible polyurethane, it has little transmission loss and consumes less power.

■ **Compact design**

The cog effect and the highly flexible polyurethane provide fine fitting with pulleys, allowing use in a small space.

■ **Clean power transmission**

As it uses polyurethane, which has excellent abrasion resistance, it is rarely abraded, making it most suitable for use in a transmission system that should avoid dirt.

■ **Re-tensioning unnecessary**

As it uses polyester cords that have high strength, elongate little, and have little flex fatigue, the belt elongates little due to running and rarely requires re-tensioning.

(2) Major Applications

Household electric equipment
Sewing machines, pencil sharpeners, vacuum cleaners, dish-washing machines

Office machinery, optical machines
Typewriters, terminal devices, Blowers for computers, projectors

Compact machine tools, electric tools
Lathes, drill presses, grinders, electric planes

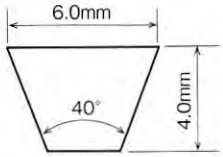
Labor-saving equipment
Automatic packaging machines, vending machines, automatic doors, bill and coin calculators, automatic shoe polishers, ticket vending machines

Chemical equipment
Stirring machines, sizing machines, winding machines, centrifugal separators

Others
Massage machines, radio-controlled gadgets (vehicles, helicopters), conveyance equipment (coins, cards)

(3) Belt Dimensions

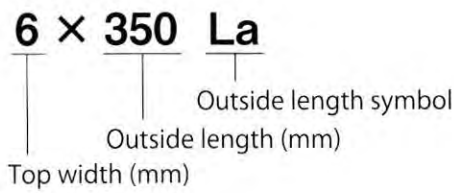
■ Cross-sectional dimensions



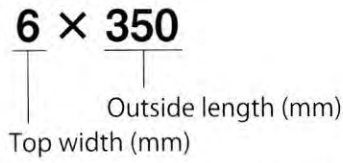
The same dimensions for the VC type and the DC type.

■ Belt size indication example

VC type



DC type



The VC type has a size indication on the back face of the belt; however, the DC type does not have the indication.

Table 1 Belt sizes

(Unit: mm)

VC type				DC type	
Nominal size	Outside length (mm)	Nominal size	Outside length (mm)	Nominal size	Outside length (mm)
6×207	207.0	6× 460	460.0	6×200	200.0
6×220	220.0	6× 466	466.0	6×210	210.0
6×232	232.0	6× 470	470.0	6×230	230.0
6×250	250.0	6× 480	480.0	6×240	240.0
6×260	260.0	6× 485	485.0	6×250	250.0
6×261	261.0	6× 490	490.0	6×260	260.0
6×270	270.0	6× 500	500.0	6×270	270.0
6×280	280.0	6× 511	511.0	6×277	277.0
6×289	289.0	6× 520	520.0	6×280	280.0
6×290	290.0	6× 530	530.0	6×290	290.0
6×297	297.0	6× 540	540.0	6×300	300.0
6×300	300.0	6× 550	550.0	6×310	310.0
6×315	315.0	6× 561	561.0	6×315	315.0
6×320	320.0	6× 587	587.0	6×320	320.0
6×330	330.0	6× 600	600.0	6×330	330.0
6×340	340.0	6× 613	613.0	6×340	340.0
6×343	343.0	6× 628	628.0	6×350	350.0
6×345	345.0	6× 650	650.0	6×360	360.0
6×349	349.0	6× 663	663.0	6×365	365.0
6×350	350.0	6× 700	700.0	6×370	370.0
6×360	360.0	6× 713	713.0	6×375	375.0
6×370	370.0	6× 730	730.0	6×380	380.0
6×380	380.0	6× 750	750.0	6×390	390.0
6×381	381.0	6× 760	760.0	6×400	400.0
6×390	390.0	6× 764	764.0	6×450	450.0
6×400	400.0	6× 800	800.0	6×500	500.0
6×407	407.0	6× 821	821.0	6×520	520.0
6×410	410.0	6× 850	850.0	6×540	540.0
6×414	414.0	6× 866	866.0		
6×420	420.0				
6×430	430.0				
6×432	432.0				
6×440	440.0				
6×444	444.0				
6×450	450.0				

Bancollan Round Belt

1. Product Introduction

We offer the Bancord round belt (joint type) of a long cord type as a round belt. However, for recent office equipment and optical machinery, the needs for round belts that do not require joining and have excellent low-temperature characteristics have been increasing. The Bancollan round belt is a high-performance round belt that has undergone our original quality improvements and meets those needs.

Features

■ Easy belt installation

The belt can be easily installed by stretching it even when the center distance is fixed. Unlike a belt containing tension members, there is no need to slide pulleys or take time for tension adjustment; hence, it reduces the installation man-hour.

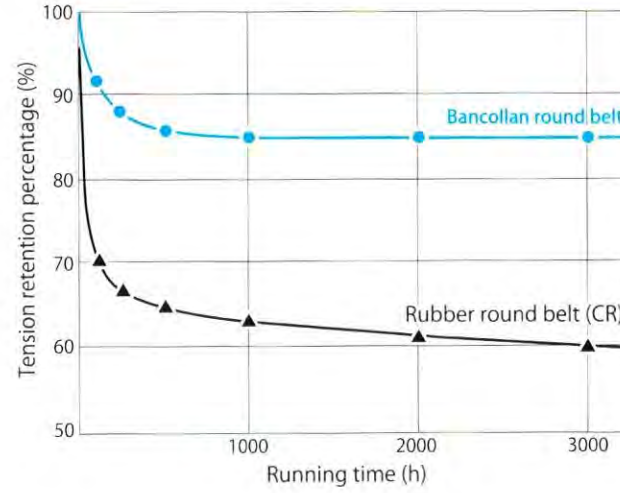
■ Stable tension

For belts without tension members, tension stability is especially important for belt performance. The Bancollan round belt has less changes in tension due to bending or permanent elongation than general rubber round belts or belts containing tension members, and can be used with almost no maintenance.

■ Smooth start even at low temperature

The specially compounded polyurethane rubber mostly prevents the belt from hardening or becoming set even at -20 °C. Therefore, it starts smoothly with no trouble due to the starting torque.

Fig. 1 Tension changes of the Bancollan round belt (Initial stretch rate 6%)



Example of use

Office equipment
Copiers
Fax machines
Electric typewriters
Registers
Ticket vending machines, bill exchange machines
Automatic ticket gates
Weighing-pricing machines
Automatic cash payment machines

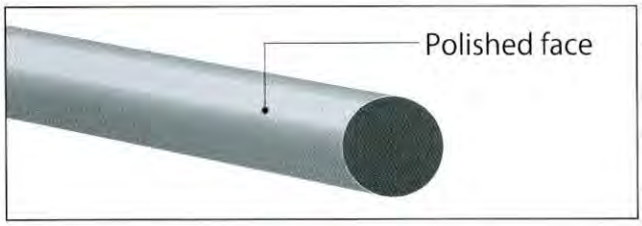
Optical equipment/music equipment
Tape decks
VTR

Others
Ultra-compact fans, air pollution measurement machines
Vacuum cleaners, spectroscopic analysis devices
Stirring machines, desktop winding machines
Roller conveyors
Rotating lights
Polishing machines

Structure and Characteristics

For orders for Bancollan round belts, please specify the belt sizes shown in Table 1 if possible. However, as this belt is made to order, please contact us about delivery period, lots, and prices.

■ Belt appearance



■ Belt indication example

4 × 305

Effective length (mm)
Cross-sectional diameter (mm)

Sizes are indicated in units of individual package.

■ Basic physical properties of the belt

Item \ Material		#267WLS
Hardness		72° (JIS)
Specific gravity		1.26
Tensile stress	When stretched by 4%	35×10^4 (Pa)
	When stretched by 6%	50×10^4 (Pa)
	When stretched by 8%	64×10^4 (Pa)
Tensile strength		3000 or more (N/cm^2)
Elongation at the time of break		600(%)

Belt Size

Table 1 Table of belt standard sizes

(Unit: mm)

φ2		φ3		φ4		φ5	
Effective length	Effective center perimeter	Effective length	Effective center perimeter	Effective length	Effective center perimeter	Effective length	Effective center perimeter
104	110.2	**107**	113.4	**135**	143.1	**157**	166.4
107	113.4	**108**	114.5	**140**	148.4	**168**	178.1
100	106.0	**113**	119.8	**142**	150.5	**182**	192.9
112	118.7	**115**	121.9	**160**	169.6	**200**	212.0
115	121.9	**120**	127.2	**165**	174.9	**210**	222.6
120	127.2	**128**	135.7	**170**	180.2	**220**	233.2
125	132.5	**132**	139.9	**173**	183.4	**225**	238.5
130	137.8	**138**	146.3	**175**	185.5	**230**	243.8
134	142.0	**140**	148.4	**184**	195.0	**247**	261.8
135	143.1	**145**	153.7	**197**	208.8	**248**	262.9
140	148.4	**150**	159.0	**200**	212.0	**250**	265.0
145	153.7	**153**	162.2	**206**	218.4	**275**	291.5
147	155.8	**155**	164.3	**213**	225.8	**290**	307.4
152	161.1	**160**	169.6	**225**	238.5	**300**	318.0
158	167.5	**165**	174.9	**230**	243.8	**305**	323.3
160	169.6	**170**	180.2	**235**	249.1	**310**	328.6
163	172.8	**172**	182.3	**240**	254.4	**315**	333.9
167	177.0	**175**	185.5	**250**	265.0	**320**	339.2
170	180.2	**180**	190.8	**254**	269.2	**330**	349.8
180	190.8	**182**	192.9	**258**	273.5	**345**	365.7
183	194.0	**190**	201.4	**264**	279.8	**348**	368.9
190	201.4	**193**	204.6	**270**	286.2	**363**	384.8
194	205.6	**200**	212.0	**275**	291.5	**374**	396.4
196	207.8	**201**	213.1	**284**	301.0	**375**	397.5
200	212.0	**204**	216.2	**285**	302.1	**380**	402.8
213	225.8	**213**	225.8	**290**	307.4	**402**	426.1
227	240.6	**223**	236.4	**300**	318.0	**416**	441.0
239	253.3	**230**	243.8	**305**	323.3	**422**	447.3
244	258.6	**236**	250.2	**316**	335.0	**434**	460.0
250	265.0	**240**	254.4	**323**	342.4	**440**	466.4
273	289.4	**250**	265.0	**332**	351.9	**460**	487.6
290	307.4	**260**	275.6	**346**	366.8		
330	349.8	**270**	286.2	**361**	382.7		
444	470.6	**275**	291.5	**367**	389.0		
		282	298.9	**374**	396.4		
		285	302.1	**377**	399.6		
		290	307.4	**385**	408.1		
		294	311.6	**390**	413.4		
		305	323.3	**415**	439.9		
		308	326.5	**440**	466.4		
		314	332.8	**450**	477.0		
		318	337.1				
		330	349.8				
		347	367.8				
		356	377.4				
		359	380.5				
		363	384.8				
		376	398.6				
		387	410.2				
		390	413.4				
		395	418.7				
		400	424.0				
		410	434.6				
		430	455.8				
		441	467.5				
		450	477.0				
		460	487.6				

- The effective length is the center perimeter with no stretch.
- The effective center perimeter represents the center perimeter when the belt is stretched by 6%.

Bancord Round Belt/V-Belt

They are long belts that use polyurethane "Bancollan" as a material and can be easily joined by heat adhesion.
The light-duty machinery industry has recently been developing considerably and requires more convenient and higher-performance belts.
Bancord has been highly evaluated by users as an industrial material as well as a belt that has foreseen the needs of the times since its development.
Please make use of the convenience and excellent performance of Bancord for your designs.

1. Product Introduction

Features

■ Flexible effective length

As it can be simply and strongly joined by heating, a belt with a required effective length can be obtained in an instant. As the effective length can be freely selected regardless of standards, it allows for a design that makes most of the performance of the machine.

■ Multi-shaft transmission and three-dimensional transmission are possible (round belt).

As the cross section has no direction, the belt allows multi-shaft transmission and three-dimensional complex transmission such as direction changes by idler pulleys.

■ Simple installation and management

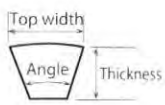
It can be installed without disassembling the machine and requires little management, such as troublesome tension adjustment.

■ Excellent mechanical characteristics

As it uses Bancollan (polyurethane), which has excellent abrasion resistance and tear resistance, it provides excellent performance as a belt as well as an industrial material.

Type/Size

Product type	Compound	Use example (application)	Color tone	Cross-sectional diameter (mm)														
				1.5	2	2.5	3	3.5	4	5	6	7	8	9	10	11	12	15
Round belt	#480	General-purpose and food stuff conveyance	Orange (standard) / Semi-transparent / Black	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	#485N	Roller conveyor driving	Semi-transparent	—	—	—	○	—	○	○	○	—	—	—	—	—	—	—
	#485T	Roller conveyor driving (durable and abrasion-resistant)	Semi-transparent	—	—	—	—	—	○	○	○	—	—	—	—	—	—	—
	#485RB	Paper and food stuff conveyance *1	Green	—	—	—	○	—	○	○	○	—	○	—	—	—	—	—
	#489	Abrasion-resistant (heavy-duty)	White (standard) / Semi-transparent / Blue / Red / Green	○	○	○	○	○	○	○	○	○	○	○	○	○	○	—
	#490																	
	#494C (Charge prevention)	Semi-conductor field	Black	—	○	○	—	—	○	○	—	—	—	—	—	—	—	—
	Winding length			#480 200 m/winding each #485N 200 m/winding each #485T 200 m/winding each #485RB 200 m/winding each #489 100 m/winding each #490 200 m/winding each #490C 200 m/winding each							100 m/winding each *2							

V-belt					
Type M (#480/#495)		Orange (#480) White (#495)	Top width (mm)	10.0	100 m/winding each
			Thickness (mm)	5.5	
			Angle (°)	40	
Type A (#480/#495)			Top width (mm)	12.7	
			Thickness (mm)	8.0	
			Angle (°)	40	
Type B (#480/#495)			Top width (mm)	16.7	
			Thickness (mm)	10.3	
			Angle (°)	40	

*1 Grain surface specification
*2 For [#480 Cross-sectional dia. 15 mm] and [#494C Cross-sectional dia. 5 mm], 50 m/winding is supplied.
* We perform joining if requested. (Only winding for a line diameter of 15 mm) The perimeters that can be joined are 125 mm or more for a line diameter of up to 2.5 mm and 50 times the line diameter or more for a line diameter of 3 mm or more.
* #480 (not including standard products) and #490 are made to order; hence, for delivery period and lots, please contact our sales company or distributer.
* For joining of belts with a line diameter of 15 mm, please contact our sales company or distributor.
* Passed Notice No. 370 of the Ministry of Health and Welfare concerning food hygiene (not including #480 black and #494C).

Mechanical Properties

Bancord is widely used as a general industrial material, such as a power transmission belt, for its excellent mechanical properties. The main mechanical properties of Bancord are as follows.

Characteristics	#480	#485N	#485T	#485RB	#489	#490	#494C	#495 (V type)
Color tone	Orange, semi-transparent, black	Semi-transparent	Semi-transparent	Green	White	Semi-transparent, blue, red, green	Black	White
Hardness (JIS-Hs)	85°	86°	86°	86°	90°		94°	95°
Specific gravity	1.23	1.23	1.23	1.23	1.23		1.23	1.23
Tensile modulus 3% (GPa)	2.9×10^{-4}	2.9×10^{-4}	2.9×10^{-4}	3.3×10^{-4}	9.8×10^{-4}		5.6×10^{-4}	1.7×10^{-3}
Tensile modulus 4% (GPa)	3.9×10^{-4}	3.9×10^{-4}	3.9×10^{-4}	4.4×10^{-4}	1.08×10^{-3}		8.3×10^{-4}	2.2×10^{-3}
Tensile modulus 5% (GPa)	4.9×10^{-4}	4.9×10^{-4}	4.9×10^{-4}	5.6×10^{-4}	1.47×10^{-3}		1.1×10^{-3}	2.6×10^{-3}
Tensile modulus 6% (GPa)	6.4×10^{-4}	6.4×10^{-4}	6.4×10^{-4}	7.3×10^{-4}	1.52×10^{-3}		1.4×10^{-3}	2.8×10^{-3}
Tensile modulus 7% (GPa)	6.9×10^{-4}	6.9×10^{-4}	6.9×10^{-4}	7.9×10^{-4}	1.72×10^{-3}		1.7×10^{-3}	3.1×10^{-3}
Tensile modulus 100% (GPa)	4.9×10^{-3}	5.4×10^{-3}	3.9×10^{-3}	5.4×10^{-3}	7.85×10^{-3}		8.8×10^{-3}	9.8×10^{-3}
Tensile break strength (GPa)	2.94×10^{-2} or more	2.94×10^{-2} or more	2.94×10^{-2} or more	2.94×10^{-2} or more	2.94×10^{-2} or more		1.96×10^{-2} or more	3.23×10^{-2} or more
Tensile break elongation rate (%)	450 or more	300 or more	400 or more	300 or more	350 or more		400 or more	350 or more
Linear expansion factor (1°C)	2.6×10^{-4}	2.6×10^{-4}	2.6×10^{-4}	2.6×10^{-4}	2.6×10^{-4}		2.6×10^{-4}	2.6×10^{-4}

Round belt

Cross-sectional diameter (mm)	1.5	2	2.5	3	3.5	4	5	6	7	8	9	10	11	12	15
Tensile strength (N/pc)	60	100	160	230	310	410	640	930	1150	1500	1900	2360	2850	3390	5300

V-belt

Type	M	A	B
Tensile strength (N/pc)	1450	2590	4400

Water Resistance

Bancord is especially studied and improved in water resistance; hence, it can be used for a very long period of time even under high humidity.

Variation per day in tensile strength under water (Material #489)				
Immersion period (day)	20	30	50	70
Remaining strength rate (%)	99	98	96	91

Note 1) The samples were immersed under water at a temperature of 40°C with 5% stretch.

Oil Resistance and Chemical Resistance

The following table shows a rough guide of applicability when oil or chemicals adhere to the belt at normal temperature.

Oil/chemical name	Applicability	Oil/chemical name	Applicability	Food name	Applicability
Oil-resistant ASTM #1	○	Strong acid	×	Water	○
Oil-resistant ASTM #3	○	Weak acid	○	Vinegar	○
Gasoline	○	Sodium hypochlorite	△	Soy sauce	○
Volatile oil	○	Sodium hypochlorite (600 ppm)	○	Sauce	○
Light oil	○	Ethanol	○	Syrup	○
Heavy oil	○	Acetone	×	Cream	○
Cutting oil	△	Benzine	×	Olive oil	○
Diesel oil	○	Methanol	△	Edible oil (salad oil)	○
Rust-inhibiting oil	△	Toluene (Toluol)	×	Butter	○
Machine oil	△			Sugar	○
Caustic soda (NaOH) solution (10%)	△			Flour	○
Strong alkali	×			Salt	○
Weak alkali	○			Bread	○
Soap	○			Vegetables	○
Hydrochloric acid (10%)	○			Meat	○
Acetic acid	×			Fish	○

○: Not affected at all.
△: Affected to some extent.
(There is a possibility of embrittlement, discoloration, or swelling after use.)
×: Completely affected.

* If the belt is completely affected or you use the belt at a higher-temperature range than normal temperature, please consult our sales company or distributor.

Bancord Round Belt/V-Belt

How to Join Bancord Belts

Join a Bancord with the following procedure.

Photo 1

Photo 2

Photo 3

Photo 4

■ Cutting a Bancord belt

① Calculate (or actually measure) the installation length of Bancord.
② Determine the joint length of the Bancord 3 to 7% (normally 5%) shorter than the installation length and cut the Bancord at right angles to the belt.
Example: When the installation length is 1 m, normally cut the belt to 950 mm.
Note: An excessively long Bancord causes slip, and an excessively short Bancord reduces the belt service life; be particularly careful.

■ Finishing the joint of the Bancord

① Put the Bancord lightly and uniformly in contact with both sides of the heating plate and melt the Bancord. (Photo 1)
The standard melting time is as follows. (Heating plate temperature: 240°C±10°C)

Compound	Diameter (mm)		
	1.5 to 5	6 to 10	11 to 15
#480	20 sec	50 sec	70 sec
#485N/485T	60 sec	80 sec	—
#485RB	60 sec	80 sec	—
#489/490	40 sec	60 sec	90 sec

* For a long V-belt, the time is 90 seconds for Types M, A, and B.

② If the Bancord melted, quickly press-fit the melted surfaces in alignment. (Photo 2)
③ While the Bancord is press-fit, hold it for one to two minutes and solidify the melted sections by cooling. (Photos 2 and 3)
④ Cut off protruding sections with scissors, a nail clipper, a grinder, etc. for finishing.
* If the joint is incomplete, a transparent layer as shown in (Photo 4) is created. (Especially with #489)

■ Bonding machine for Bancord

We also offer a bonding machine for Bancord (DX-81); please use it. (Standard setting temperature: 240°C±10°C)
* Bonding machine specifications: Width: 130 mm Depth: 210 mm Height: 130 mm Power supply: 100 VAC

■ For joining work, wear cotton work gloves or similar protective equipment to prevent a burn.

■ Avoid joining using a candle, a cigarette lighter, or other inappropriate tools.

Operating Conditions

Classification	Item	
Round belt	Belt tension rate	3 to 7% (normally 5%)
	Pulley used	Pulley for Bancord round belt
	Angle of contact of pinion	180°
	Belt speed	#480・485N・485T・485RB: 2~12m/s #489/490: 2 to 20 m/s
	Operating temperature	0 to 50°C
V-belt	Belt tension rate	3 to 7% (normally 5%)
	Pulley used	Pulley for Bancord V-Belt
	Angle of contact of pinion	180°
	Belt speed	2 to 20 m/s
	Operating temperature	0 to 50°C

Precautions for Storage and Transportation

- When you transport or handle a heavy belt or pulley, use a transporting apparatus or device suitable for the weight. Lifting up with hands may hurt your lower back etc.
- Do not bend belts with unreasonable force or place a heavy object on belts when transporting or storing them. The belts may remain bent or become damaged, leading to early breakage.
- Store belts in a low-humidity location at temperatures of -10°C to 40°C. In addition, do not expose stored belts to direct sunlight.

Belts for Precision Conveyance

PS Belt

1. Product Introduction

The PS Belt is an abbreviation for Precision Seamless Belt and is a thin, seamless, woven flat belt. It is a new type of high-performance flat belt that was developed to meet requests for little non-uniformity of rotation, little vibration, and reliable feed for sheets, tickets, cards, or the like in OA equipment, financial equipment, computer peripheral devices, and automization equipment that are recently showing remarkable developments.

Features

■ Most suitable for miniaturization
The thin, seamless, and highly flexible belt can be designed with small pulleys.

■ Smooth rotation
As the tension member is seamless and at a fixed position at all times, the belt provides vibration-free, smooth rotation.

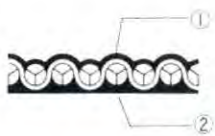
■ Re-tensioning is unnecessary
The specially processed tension member provides excellent dimensional stability and has little elongation during running.

■ Contributes to energy-saving
The thin, light, and highly flexible belt minimizes power transmission loss.

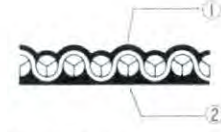
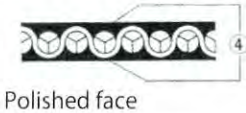
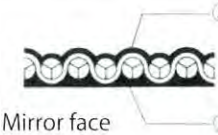
■ Rich selection
The wide selection of product types with various combinations of tension member, cover material, and surface profile allows optimum belt selection that matches the purpose of use and conditions.

Structure

(Unit: mm)

Product type	Structure	Thickness	Width
A-1C	 ① Rough face ② Smooth face	0.22	3~300
A-1N		0.22	
A-1U		0.22	
A-1H		0.22	
A-4C		0.6	5~300
A-4N		0.6	
A-4U		0.45	
A-4H		0.6	
A-10C		1.0	5~300
A-10N		1.0	
A-10U		0.9	
A-10H		1.0	
A-13C		1.1	5~300
A-13N		1.1	
A-13U		1.0	
A-13H		1.1	
B-2C	 ① Rough face ② Smooth face	0.8	5~300
B-2N		0.8	
B-2U		0.8	
B-2H		0.8	
B-3C		0.6	10~300
B-3N		0.6	
B-3U		0.6	
B-3H		0.6	
B-6C		1.0	10~300
B-6N		1.0	
B-6U		0.9	
B-6H		1.0	

(Unit: mm)

Product type	Structure	Thickness	Width
C-8C	 ① Rough face ② Smooth face	0.7	3~300
C-8N		0.7	
C-8U		0.6	
C-8H		0.7	
C-16C		0.7	3~300
C-16N		0.7	
C-16U		0.6	
C-16H		0.7	
Z-H250X	 ③ Mirror face	0.9	10~300
E-8U	 ④ Polished face	0.65 0.8 1.0	8~200
EXL-101	 ③ Mirror face ② Polished face	0.65 0.8 1.0	8~200

Indication Method

A-10N 20 × 500

- A-10N: Product type
- 20: Width (20 mm)
- 500: Inside length (500 mm)

Table 1 Table for Characteristic and Functional Selections

Main use	Application	Belt specification (Note 1)	Structure						Color tone	Manufacturable dimensions (mm) (Note 3)		
			Face profile (Note 2)			Tension member		Cover material		Thickness	Width	Inside length
			Designation	Front face	Back face	Material	No. of sheets					
Conveyance	For food stuffs (Note 5)	A-1UDW	P/S	Pressed face	Impregnated face	Polyester	1	Polyurethane	White	0.2	3~200	400~1500
		A-4UDG	F/R	Smooth face	Rough face	Polyester	1	Polyurethane	Green	0.45	5~200	180~2700
		A-4UDGr	F/S	Smooth face	Impregnated face	Polyester	1	Polyurethane	Gray	0.45	5~200	180~2700
		A-4UDW	P/S	Pressed face	Impregnated face	Polyester	1	Polyurethane	White	0.4	5~200	180~2700
		A-4UDBL	P/S	Pressed face	Impregnated face	Polyester	1	Polyurethane	Blue	0.4	5~200	400~2700
	Paper (sandwiched)	B-2CB	R/F	Rough face	Smooth face	Polyester	1	Chloroprene rubber	Black	0.80	5~200	250~2600
		C-16UB	R/F	Rough face	Smooth face	Polyester	1	Polyurethane	Black	0.60	3~200	160~2500
	Paper (vacuumed)	A-4UEB	F/R-A	Smooth face	Rough face	Polyester	1	Polyurethane	Black	0.45	~360	180~2700
		E-8UB	M/K-A	Mirror face	Polished face	Polyester	1	Millable urethane	Black	0.65/0.8/1.0	8~200	50~1457
	Bill (sandwiched)	E-8UB	K/K	Polished face	Polished face	Polyester	1	Millable urethane	Black	0.65/0.8/1.0	8~200	50~1457
		EXL101B	M/K	Mirror face	Polished face	Polyester	1	Millable urethane	Black	0.65/0.8/1.0	8~200	50~1457
Power transmission	Low torque	A-4CB	R/F	Rough face	Smooth face	Polyester	1	Chloroprene rubber	Black	0.60	5~200	180~2700
		A-4NB	R/F	Rough face	Smooth face	Polyester	1	Nitrile rubber	Black	0.60	5~200	180~2700
		B-6NB	R/F	Rough face	Smooth face	Polyester	1	Nitrile rubber	Black	1.00	10~200	250~2800
	Medium torque	A-10CB	R/F	Rough face	Smooth face	Polyester	1	Chloroprene rubber	Black	1.00	5~200	300~3000
		A-10NB	R/F	Rough face	Smooth face	Polyester	1	Nitrile rubber	Black	1.00	5~200	300~3000
		A-13CB	R/F	Rough face	Smooth face	Polyester	1	Chloroprene rubber	Black	1.10	5~200	300~3000
Special	Chipping	A-1UEW	F/F	Smooth face	Smooth face	Polyester	1	Polyurethane	White	0.22	3~50	100~1500
		A-1NB	P/M	Pressed face	Mirror face	Polyester	1	Nitrile rubber	Black	0.22	3~50	100~1500
		A-4UEW	M/P	Mirror face	Pressed face	Polyester	1	Polyurethane	White	0.4	5~200	180~2700
	Ultra-heat-resistant	ZH250X	M/M	Mirror face	Mirror face	Aramid	1	Silicone rubber	Dark brown	0.90	10~200	460~1500
	Bend-resistant	A-P	S/S	Woven material	Woven material	Nylon	2, 4, 8	Chloroprene impregnation	Black	—	10~100	200~2700
		A-PW	O/O	Woven material	Woven material	Nylon	2, 4, 8	Stiffening agent impregnation	White	—	10~100	200~2700
	Heat- and weather-resistant	B-2HW	R/F	Rough face	Smooth face	Polyester	1	CSM	White	0.80	5~200	250~2600
		B-2HG	R/F	Rough face	Smooth face	Polyester	1	CSM	Green	0.80	5~200	250~2600
	Support for reverse conveyance	A-ESS2W	M/O	Mirror face	Woven material	Polyester	2	Polyurethane	White	1.10	620	2482
	Ear fraying prevention	TA-4UEB	M/D	Mirror face	Texture-adjusted surface	Polyester	1	Polyurethane	Black	0.65	4.5~200	350~2700
		TA-4UW	D/D	Texture-adjusted surface	Texture-adjusted surface	Polyester	1	Polyurethane	White	0.45	5~200	350~2700
	Blade-resistant	G-15TSDK	M/O	Mirror face	Woven material	Polyester	1	Silicone rubber	Light yellow (Woven material base color)	0.55	200~500	1000~3000

Note 1) In addition to the above product types, various combinations of cover material, surface profile, and color are available; please contact us.

Note 2) Select an appropriate surface to be used in accordance with the operating conditions. (Normally, use the smooth face as the pulley surface.) In addition to the above surface profiles; impregnation / smooth face, smooth face / smooth face, and mirror face / mirror face are also available; please contact us.

Note 3) If you need belt dimensions outside the manufacturable range, please contact us.

Note 4) The above items describe general physical characteristics of cover rubber. These are not guaranteed values. Please contact us and perform sufficient evaluation before use.

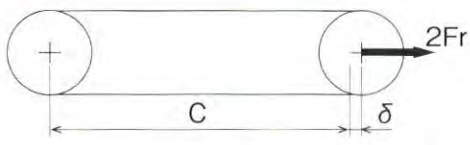
Note 5) For tones that conform to the Food Sanitation Law, select a tone from white, green, gray, and blue. Only the white tone conforms to AFD and PIM.

Note 6) These are a rough guide for belt selection and are not standard values.

Note 6) Tensile strength N/10 mm	Note 7) Stable shaft load with each stretch N/10mm	Minimum pulley diameter (mm)	Note 4) Abrasion resistance	Note 4) Oil resistance	Note 4) Conductivity	Note 4) Flame resistance	Note 4) Ozone resistance	Note 4) Heat and weather resistance	Note 4) Water and humidity resistance	Note 4) Food Sanitation	Operating limit temperature (°C) -40 -20 0 20 40 60 80 100 120 140 160 180 200 220 240 260	Belt specification
150	0.5% 30	5	◎	◎	○	○	◎	○	×	◎		A-1UDW
400	0.5% 45	10	◎	◎	○	○	◎	○	×	◎		A-4UDG
400	0.5% 45	10	◎	◎	○	○	◎	○	×	◎		A-4UDGr
400	0.5% 45	10	◎	◎	○	○	◎	○	×	◎		A-4UDW
400	0.5% 45	10	◎	◎	○	○	◎	○	×	◎		A-4UDBL
250	1% 30 2% 50 3% 60	10	○	○	◎	◎	◎	○	◎	×		B-2CB
160	1% 20 2% 30 3% 40	7	◎	◎	×	○	◎	○	×	×		C-16UB
400	0.5% 45	10	◎	◎	◎	○	◎	○	×	×		A-4UEB
—	5% 10 6% 12 7% 14	8/12/14	◎	○	×	○	◎	○	×	×		E-8UB
—	5% 10 6% 12 7% 14	8/12/14	◎	○	×	○	◎	○	×	×		E-8UB
—	5% 10 6% 12 7% 14	8/12/14	◎	○	◎	○	◎	○	×	×		EXL101B
400	0.5% 45	10	○	○	◎	◎	◎	○	◎	×		A-4CB
400	0.5% 45	10	◎	◎	◎	○	×	○	◎	×		A-4NB
600	1% 180 2% 280 3% 360	25	◎	◎	◎	○	×	○	◎	×		B-6NB
1000	0.5% 110	15	○	○	◎	◎	◎	○	◎	×		A-10CB
1000	0.5% 110	15	◎	◎	◎	○	×	○	◎	×		A-10NB
1350	0.5% 170	20	○	○	◎	◎	◎	○	◎	×		A-13CB
150	0.5% 30	5	◎	◎	○	◎	◎	○	◎	×		A-1UEW
150	0.5% 30	5	◎	◎	◎	○	×	○	◎	×		A-1NB
400	0.5% 45	10	◎	◎	◎	○	◎	○	×	×		A-4UEW
400	1% 120	30	×	○	×	○	◎	◎	◎	×		ZH250X
	1% 130 2% 210	50	○ ×	○ ◎	×	○ ×	○ ◎	○ ○	◎ ×	× ×		A-P A-PW
250	1% 30 2% 50 3% 60	10	○	○	×	◎	◎	◎	◎	×		B-2HW
250	1% 30 2% 50 3% 60	10	○	○	×	◎	◎	◎	◎	×		B-2HG
780	0.5% 80	10	○	○	×	◎	◎	○	×	◎		A-ESS2W
400	0.5% 40	10	◎	◎	◎	○	◎	○	×	×		TA-4UEB
400	0.5% 45	20	◎	◎	×	○	◎	○	×	×		TA-4UW
800	0.5% 180	30	×	○	○	○	◎	◎	◎	◎		G-15TSDK

◎: Most suitable ○: Suitable △: Slightly problematic ×: Not usable

Note 7)



■ How to understand belt product names

B - 2 U F Gr R/F

Belt type	Tensile strength factor	Cover material	Additional function Note 1)		Color				Face profile						
	N/10-mm width	For A, B, and C series, four types of materials can be selected.	E Conductivity on a 100-Ω level	F Passed Article 20 of the Notice of the Ministry of Health, Labour and Welfare concerning food hygiene.	B Black	W White	G Green	Gr Gray	R Rough face	F Smooth face	M Mirror face	S Impregnation	K Polished face	P Pressed face	O Woven material
A-1	The A series indicates 1/100 of the tensile strength.	C Chloroprene	○	×	○	—	—	—	○	○	We examine the manufacturability from the combination of the belt type and the cover material; please contact us.				
A-4															
A-10															
A-13															
B-2	The B series indicates 1/100 of the tensile strength.	N Nitrile rubber	×	×	○	—	—	—	○	○					
B-3															
B-6		U Polyurethane	×	×	○	—	—	—	—	—					
C-8	The C series indicates 1/10 of the tensile strength.			○	—	○	○	○	○	○					
C-16		H CSM	×	×	—	○	○	—	○	○					
E-8U	—	Urethane (Millable)	×	×	○	—	—	—	×	×	○ Note 2)	×	○	×	×
EXL-101	—		×	×	○	—	—	—	×	×	○ Note 2)	×	○ Note 2)	×	×

Note 1) Additional functions D: Charge prevention effect by conductive threads, E: 100-Ω-level conductivity by conductive rubber
F: Passed Notice No. 201 of the Ministry of Health, Labour and Welfare concerning food hygiene, AF: Passed the Food Sanitation Law and FDA, PF: Passed the Food Sanitation Law and PIM

Note 2) The mirror face profile of E-8U is only one side, and EXL-101 has a mirror face on one side and a polished face on the other side.

A, B, and C series: Dynamic friction factor (for PPC paper)

Face profile	Smooth face	Polished face	Mirror face	Rough face	Impregnation	Woven material
Friction factor	0.6～0.8	0.6～0.8	0.6～0.8	0.5	0.4	0.3

The above values differ slightly depending on the belt type (tension member and cover material); please contact us for details.

E series

Face profile	Mirror face	Polished face
Friction factor	0.8～1.3	0.6～1.0

Belt Dimensions and Tolerance

Table 2 Standard effective lengths

(Unit: mm)

Belt type	Inside length																			
A-1	125	132	140	150	160	170	180	190	200	212	224	236	250	265	280	300	315	335	355	375
	400	425	450	475	500	530	560	600	630	670	710	750	800	850	900	950	1000	1060	1120	1180
	1250	1320	1400	1500																
A-4	180	190	200	212	224	236	250	265	280	300	315	335	355	375	400	425	450	475	500	530
	560	600	630	670	710	750	800	850	900	950	1000	1060	1120	1180	1250	1320	1440	1500	1600	1700
	1800	1900	2000	2120	2240	2710														
A-10	300	315	335	355	375	400	425	450	475	500	530	560	600	630	670	710	750	800	850	900
A-13	950	1000	1060	1120	1180	1250	1320	1440	1500	1600	1700	1800	1900	2000	2120	2200				
B-2	250	265	280	300	315	335	355	375	400	425	450	475	500	530	560	600	630	670	710	750
B-3	800	850	900	950	1000	1060	1120	1180	1250	1320	1440	1500	1600	1700	1800	1900	2000	2120	2240	2600
B-6																				
C-8	180	190	200	212	224	236	250	265	280	300	315	335	375	400	425	450	475	500	530	560
C-16	600	630	670	710	750	800	850	900	950	1000	1060	1120	1180	1250	1320	1400	1500	1600	1700	1800
	1900	2000	2120	2240	2600															
E-8U	41	66	72	76	82	90	95	103	104	106	110	114	116	118	120	121	125	128	131	134
	136	138	140	145	148	149	151	152	154	155	157	159	162	164	165	166	167	168	170	173
	176	178	180	182	185	187	189	191	192	194	197	200	204	205	207	210	211	212	214	216
	219	221	224	228	232	235	239	240	241	243	245	247	248	250	253	256	258	261	262	264
	267	269	272	276	280	282	284	286	288	293	295	296	300	302	303	305	309	312	314	318
	321	323	328	331	335	336	338	341	342	343	347	348	353	354	356	358	360	363	366	368
	371	376	381	382	383	388	393	394	399	404	405	410	417	421	423	426	431	435	438	442
	444	445	447	453	457	462	467	471	477	479	482	484	487	490	494	497	499	502	505	509
	514	518	520	525	534	540	547	552	555	559	564	569	573	577	580	586	591	593	597	603
	608	613	619	625	632	643	650	658	661	667	672	674	683	690	698	705	715	735	750	755
	764	773	777	787	803	811	815	820	828	833	843	847	857	865	867	881	899	909	914	925
	934	943	947	949	965	969	994	995	1000	1012	1020	1029	1039	1055	1061	1072	1100	1103	1164	1219
	1264	1335	1337	1398	1457	1579	1611													
EKL-101	111	113	115	122	125	128	131	133	135	137	140	142	145	146	148	149	151	152	154	156
	159	161	162	164	165	166	168	171	174	176	178	180	183	185	187	189	190	192	195	197
	201	202	204	207	208	209	211	213	216	218	221	225	229	232	236	237	238	240	242	244
	245	247	250	253	255	258	259	261	264	266	269	273	277	279	281	283	285	290	292	293
	297	299	300	302	306	309	311	315	318	320	325	328	332	333	335	338	339	340	344	345
	350	351	353	355	357	360	363	365	368	373	378	379	380	385	390	391	396	401	402	407
	414	418	420	423	428	432	435	439	441	442	444	450	454	459	464	468	474	476	479	481
	484	487	491	494	496	500	503	507	512	516	518	523	532	538	545	550	553	557	562	565
	569	573	578	584	589	591	594	600	605	610	616	622	629	640	647	655	658	664	669	671
	680	687	694	699	709	729	744	749	758	767	771	781	797	805	809	814	822	827	837	842
	852	860	862	876	893	903	908	919	928	937	941	943	959	963	988	989	994	1006	1014	1023
	1033	1049	1055	1066	1093	1106	1157													

Note 1) For the A, B, and C series, if you need other lengths than the above, please consult us.

Note 2) The E series is molded; if you need other lengths than the above, please consult us.

Z series	For the standard effective lengths, please contact us.

Table 3 Thickness

(Unit: mm)

A series		B series		C series		Z series		E series
A-1	±0.05	B-2 B-3 B-6	±0.1	C-8 C-16	±0.1	Z-H250X	±0.1	±0.05
A-4,A-10,A-13	±0.1							

Table 4 Widths

(Unit: mm)

Manufactured dimensions	Manufacturing tolerance					
	A series	B series	C series	Z series	Manufactured dimensions	E series
Less than 30	±0.5	±0.5	±0.5	±0.5	Less than 12	±0.3
30 to less than 100	±1.0	±1.0	±1.0	±1.0	12 to less than 20	±0.5
100 to less than 150	±1.5	±1.5	±1.5	±1.5	20 to less than 100	±1.0
150 to less than 200	±2.0	±2.0	±2.0	±2.0	100	±1.5
200～	±2.5	±2.5	±2.5	±2.5		

Table 5 Inside lengths

(Unit: mm)

Manufactured dimensions	Manufacturing tolerance					
	A series	B series	C series	Z series	Manufactured dimensions	E series
Less than 300	±2	±2	±2	—	Less than 200	±2
300 to less than 600	±3	±3	±3	±5	200 to less than 400	±3
600 to less than 800	±4	±4	±4	±6	400 to less than 600	±5
800 to less than 1000	±5	±5	±5	±7	600 to less than 800	±6
1000	±0.5%	±0.5%	±0.5%	±0.5%	800 to less than 1000	±8
					1000	±0.8%

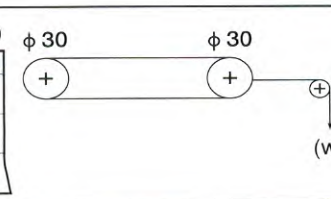
Note 1) If you need an accuracy higher than the above tolerance, please consult us.

Note 2) Matching tolerance: The tolerance between matches is as shown above. For tolerances within a match, 1 mm for a length of 1000 mm or less and 2 mm for longer lengths are available; please contact us.

Table 6 Table of measured loads (W) for inside length of belt

(Unit: N/mm width)

Belt type	Measured load	Belt type	Measured load	Belt type	Measured load	Belt type	Measured load
A-1	0.5	C-8,C-16	0.3	E-8U (1.0-mm thickness)	0.25	Z-H250X	0.98
A-10,A-13	2.0	E-8U (0.65-mm thickness)	0.15	EXL-101 (0.65-mm thickness)	0.15		
A-4,B-2,B-3,B-6	1.0	E-8U (0.8-mm thickness)	0.20				



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