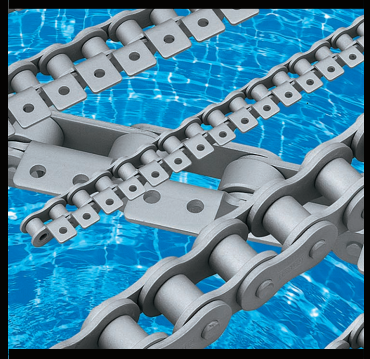
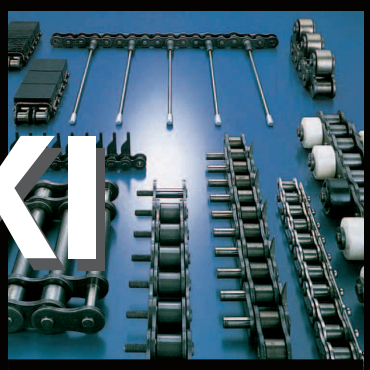
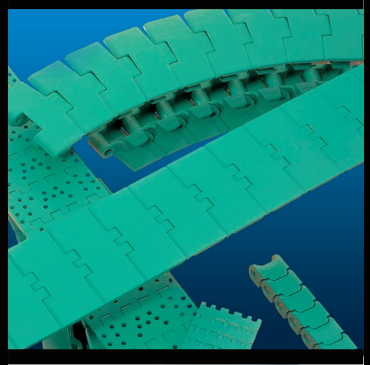
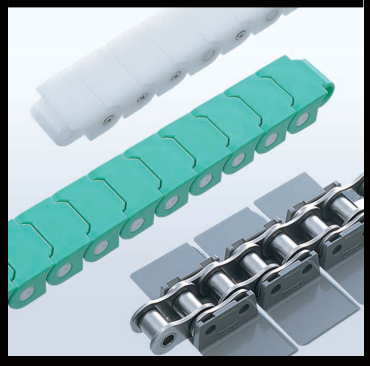
TSUBAKI

TSUBAKI CHAIN PRODUCTS



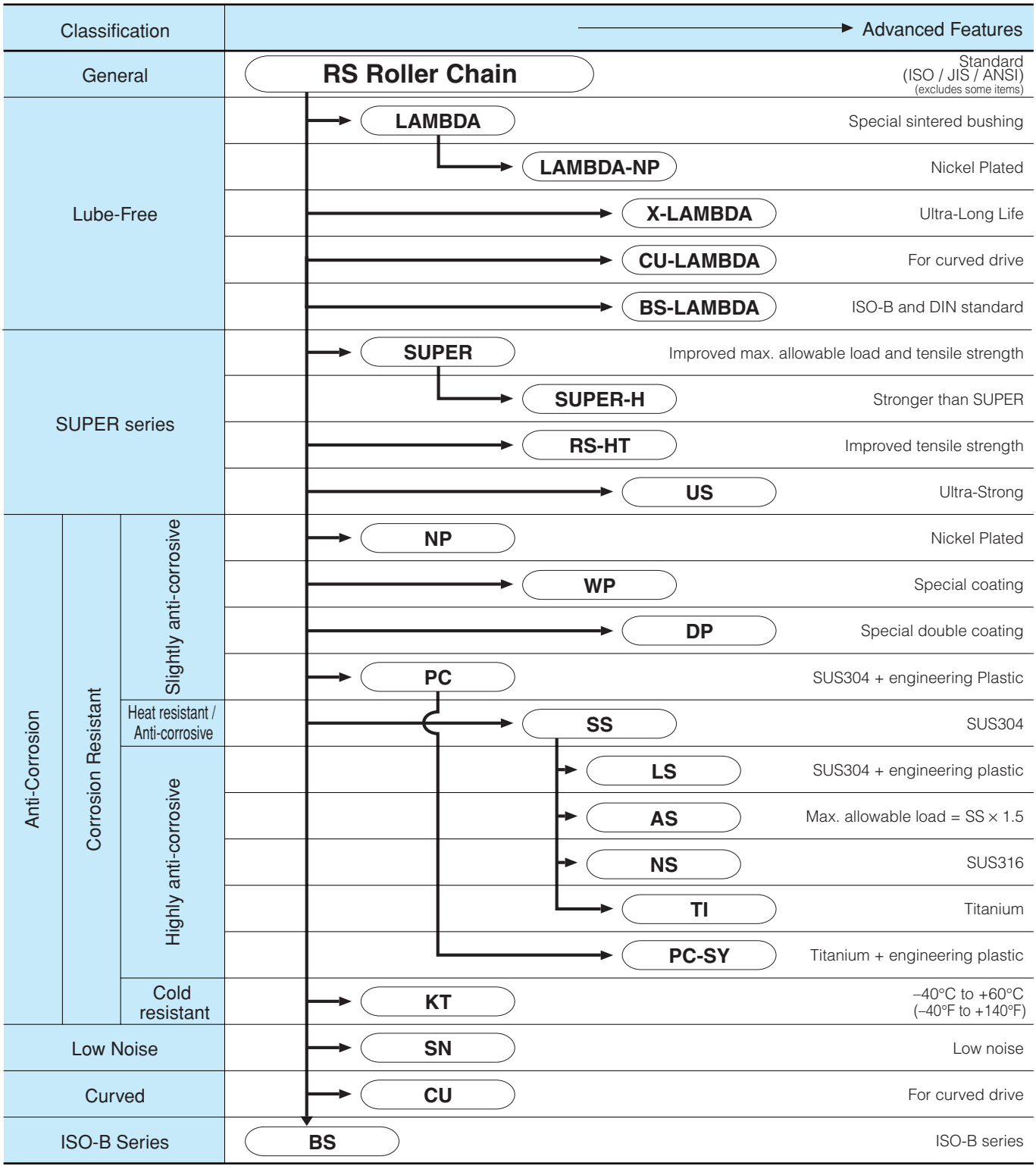



Contents

Roller Chain Types / Selection

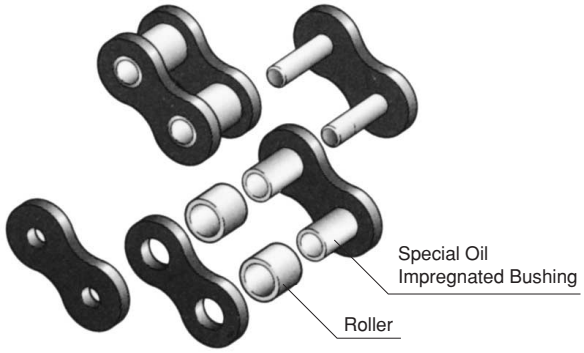
1. New applications: Carefully check required classifications/features.
2. Replacements: Check suitability of current type.



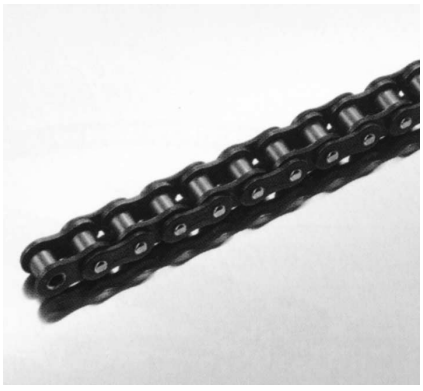
NEW GENERATION Lambda®

Tsubaki Lambda Chain was first introduced to the market in 1988. Since then Lambda Chain has gained an outstanding reputation in a variety of industries and applications due to its unequaled wear resistant performance. Our new generation Lambda Chain provides even higher levels of performance and quality. Increase your productivity by taking advantage of Lambda Chain - lower maintenance requirements, cleaner operation, increased productivity and longer life.

Basic Construction



Lambda Chain (Std.): Inner/Outer Plates are Blackened
Lambda Chain (Nickel Plated): All Nickel Plated
Except for Bushing

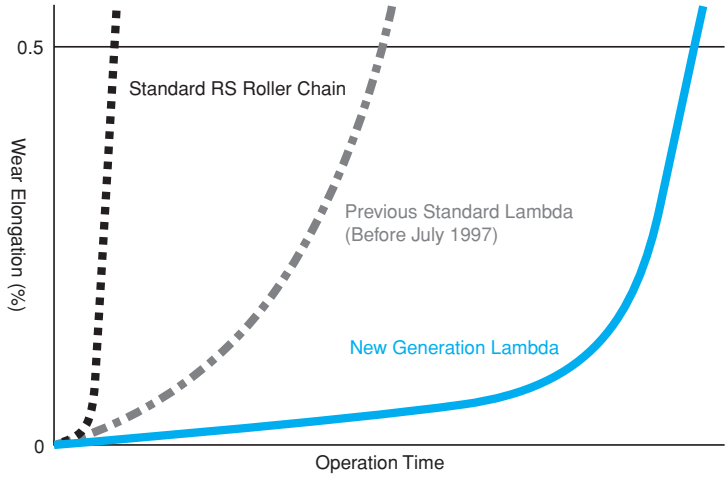


Long Life Without Lubrication

Even without lubrication, long life is made possible through the effectiveness of Lambda's specially oil impregnated bushing.

Ambient temperature range (-10˚C to +60˚C / +14˚F to +140˚F)

In-house comparison (non-lubricated operation)



- Twice the wear elongation of previous Standard Lambda (-10˚C to +60˚C / +14˚F to +140˚F)
- More the 14 times the wear elongation of Standard RS Roller Chain (N.B. #35, #120 and #140 have 5 times the life of RS Roller Chain)

High Quality

Each inner and outer link plate has been individually blackened. As well as increasing corrosion-resistant functions, blackening improves the overall appearance of the chain.

⚠ Safety precautions regarding nickel-plated specifications
Do not use nickel-plated chain under any circumstances where the chain comes into direct contact with food products and/or coating flakes or wear dust may mix with and contaminate such products.

The Definitive Lube-Free Roller Chain

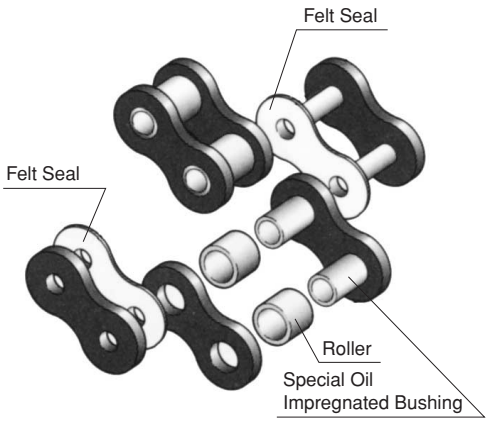
X Exceeder Λ Lambda®

Through the effectiveness of an oil impregnated "Felt Seal", X-Λ® Lambda Chain vastly outperforms the anti-wear functions of all previous Lambda specifications. (Pat.)

Ultra Long Life

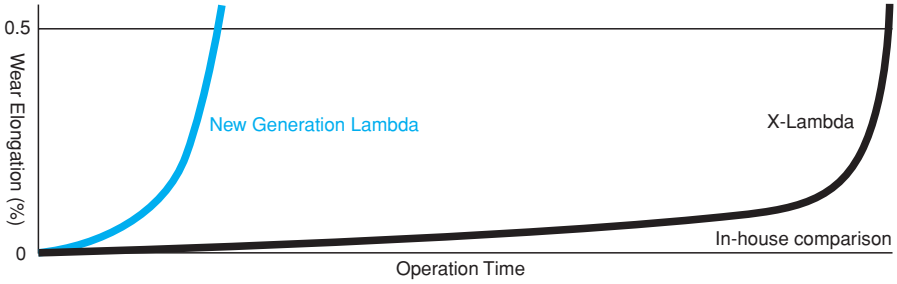
The inclusion of a felt seal in the construction of X-Λ has increased the anti-wear performance to more than 5 times that of Tsubaki's new generation LAMBDA Chain.
(In-company comparison at -10˚C to +60˚C / +14 F to +140˚F)

Basic Construction

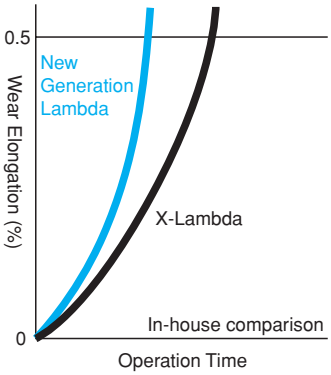


Inner/Outer Plates: Blackened

Ambient temperature range (-10˚C to +60˚C / +14˚F to +140˚F)



Mid-Temperature Range (+150˚C / +302˚F)



LAMBDA CHAIN

Drive Chain

RS Roller Chain Λ
P.5

Duplex Chain D-Λ
Duplex type
(* Special sprockets required)
CONSULT Tsubaki

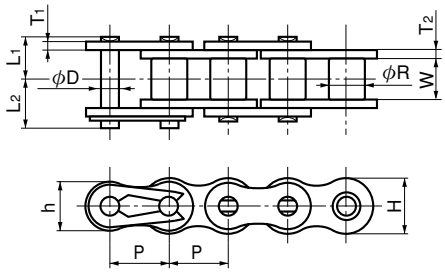
RS Roller Chain NP-Λ
Improved corrosion-resistance through nickel plating
P.5

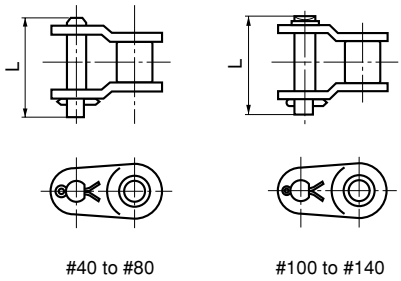
Curved® Chain Λ
Side flexing type
P.6

BS Roller Chain Λ
Interchangeable with BS Standard Roller Chain
P.6

RS Roller Chain X-Λ
Ultra long life through felt seal
P.7

Lambda Chain (Λ)





#40 to #80

#100 to #140

■ STANDARD

(Dimensions in mm)

TSUBAKI Chain No.	Pitch **P**	Roller Diam. **R**	Width b/w Roller Link Plates **W**	Plate			
				Thickness T_1	Thickness T_2	Height **H**	Height **h**
RSD 40-Λ	12.70	7.95	7.55	1.5	2.0	12.0	10.4
RSD 50-Λ	15.875	10.16	9.26	2.0	2.4	15.0	13.0
RSD 60-Λ	19.05	11.91	12.28	2.4	3.2	18.1	15.6
RSD 80-Λ	25.40	15.88	15.48	3.2	4.0	24.1	20.8
RSD100-Λ	31.75	19.05	18.70	4.0	4.8	30.1	26.0
RSD120-Λ	38.10	22.23	24.75	4.8	5.6	36.2	31.2
RSD140-Λ	44.45	25.40	24.75	5.6	6.4	42.2	36.4

TSUBAKI Chain No.	Pin				Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m
	D	L_1	L_2	**L**			
RSD 40-Λ	3.97	8.78	10.45	20.0	19.1 (1,950)	3.63 (370)	0.70
RSD 50-Λ	5.09	10.75	12.45	24.0	31.4 (3,200)	6.37 (650)	1.11
RSD 60-Λ	5.96	13.75	15.65	32.0	44.1 (4,500)	8.83 (900)	1.72
RSD 80-Λ	7.94	17.15	20.25	39.9	78.5 (8,000)	14.7 (1,500)	2.77
RSD100-Λ	9.54	20.65	23.85	47.5	118 (12,000)	22.6 (2,300)	4.30
RSD120-Λ	11.11	25.75	29.95	59.0	167 (17,000)	30.4 (3,100)	6.40
RSD140-Λ	12.71	27.70	32.20	63.7	216 (22,000)	40.2 (4,100)	8.10

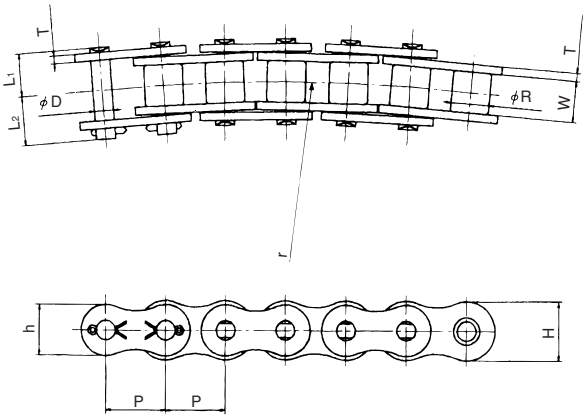
■ NICKEL PLATED

TSUBAKI Chain No. Nickel Plated	Pitch **P**	Roller Diam. **R**	Width b/w Roller Link Plates **W**	Plate			
				Thickness T_1	Thickness T_2	Height **H**	Height **h**
RSD 40NP-Λ	12.70	7.95	7.55	1.5	2.0	12.0	10.4
RSD 50NP-Λ	15.875	10.16	9.26	2.0	2.4	15.0	13.0
RSD 60NP-Λ	19.05	11.91	12.28	2.4	3.2	18.1	15.6
RSD 80NP-Λ	25.40	15.88	15.48	3.2	4.0	24.1	20.8
RSD100NP-Λ	31.75	19.05	18.70	4.0	4.8	30.1	26.0
RSD120NP-Λ	38.10	22.23	24.75	4.8	5.6	36.2	31.2
RSD140NP-Λ	44.45	25.40	24.75	5.6	6.4	42.2	36.4

TSUBAKI Chain No. Nickel Plated	Pin				Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m
	D	L_1	L_2	**L**			
RSD 40NP-Λ	3.97	8.78	10.45	20.0	19.1 (1,950)	3.04 (310)	0.70
RSD 50NP-Λ	5.09	10.75	12.45	24.0	31.4 (3,200)	5.39 (550)	1.11
RSD 60NP-Λ	5.96	13.75	15.65	32.0	44.1 (4,500)	7.26 (740)	1.72
RSD 80NP-Λ	7.94	17.15	20.25	39.9	78.5 (8,000)	12.7 (1,300)	2.77
RSD100NP-Λ	9.54	20.65	23.85	47.5	118 (12,000)	19.1 (1,950)	4.30
RSD120NP-Λ	11.11	25.75	29.95	59.0	167 (17,000)	25.5 (2,600)	6.40
RSD140NP-Λ	12.71	27.70	32.20	63.7	216 (22,000)	34.3 (3,500)	8.10

Notes: 1. RSD80-Λ connecting links have cottered pins.
2. Chain itself and connecting links are all cottered type for RSD100-Λ and over.
3. In case of multi-strands, please consult TSUBAKI.

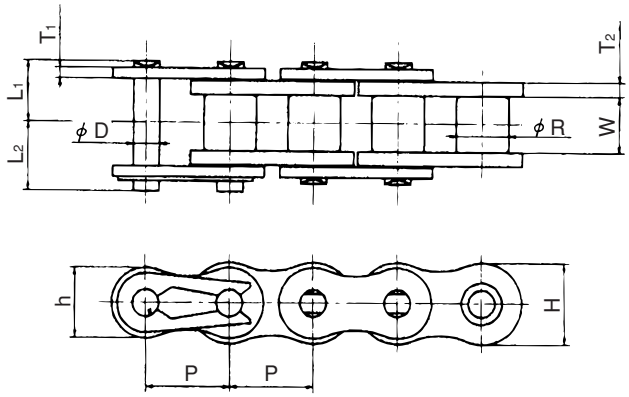
Curved Λ Lambda Chain



TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate Thickness T	Link Plate Height H	Link Plate Height h	Pin Diam. D	Pin L1 + L2	Pin L1	Pin L2	Min. Radius r	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m	No. of Links/Unit
RSC40CU-Λ	12.70	7.92	7.95	1.5	12.0	10.4	3.59	18.2	8.45	9.75	400	12.4(1260)	1.86(190)	0.61	240
RSC50CU-Λ	15.875	10.16	9.53	2.0	15.0	13.0	4.45	22.0	10.3	11.7	500	19.2(1960)	2.84(290)	1.01	192
RSC60CU-Λ	19.05	11.91	12.70	2.4	18.1	15.6	5.35	27.5	12.95	14.55	600	27.9(2840)	4.02(410)	1.40	160

■ **Operating Temperature:** –10°C to +150°C (+14°F to +302°F)
■ **Sprocket:** RS Standard sprockets can be used.
■ Chain with attachments can also be manufactured.

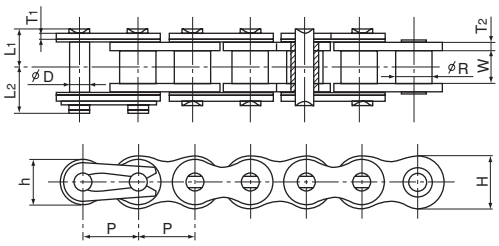
BS/DIN Lambda Roller Chain



TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate Thickness T1	Link Plate Thickness T2	Link Plate Height H	Link Plate Height h	Pin Diam. D	Pin L1	Pin L2	Pin L	Ave. Tensile Strength kN(kgf)	Approx. Mass kg/m	No. of Links/Unit
RSD08B-Λ	12.70	8.51	7.75	1.5	2.0	11.8	10.4	3.97	8.75	10.45	20.0	18.8(1920)	0.7	240
RSD10B-Λ	15.875	10.16	9.65	2.0	2.0	15.0	13.0	5.09	10.3	12.0	22.5	26.0(2650)	1.04	192
RSD12B-Λ	19.05	12.07	11.68	2.4	2.4	18.1	15.6	5.96	12.4	14.3	28.9	33.3(3400)	1.50	160
RSD16B-Λ	25.40	15.88	17.02	3.2	3.4	24.1	20.8	7.94	17.15	20.25	39.9	73.5(7490)	2.81	120

■ **Operating Temperature:** –10°C to +150°C (+14°F to +302°F)
■ **Sprocket:** Please use sprockets for BS Chain (ISO standard “B” series).

X-Lambda Chain (X-Λ)



There are no offset links available for X-Lambda.

For #80 size and above, the connecting links are cottered pin type.

X-Lambda	Pitch	Roller Diam.	Width b/w Roller Link Plates	Plate				Pin		
				Thickness	Thickness	Height	Height	Diam.		
	P	**R**	**W**	**T_1**	**T_2**	**H**	**h**	**D**	**L_1**	**L_2**
RSD 40X-Λ	12.70	7.92	7.55	1.5	2.0	12.0	10.4	3.97	9.4	11.1
RSD 50X-Λ	15.875	10.16	9.26	2.0	2.4	15.0	13.0	5.09	11.4	13.1
RSD 60X-Λ	19.05	11.91	12.28	2.4	3.2	18.1	15.6	5.96	14.8	16.5
RSD 80X-Λ	25.40	15.88	15.48	3.2	4.0	24.1	20.8	7.94	18.3	20.9
RSD100X-Λ	31.75	19.05	18.70	4.0	4.8	30.1	26.0	9.54	21.8	24.5
RSD120X-Λ	38.10	22.23	24.75	4.8	5.6	36.2	31.2	11.11	26.7	30.75

X-Lambda	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m	No. of Links/Unit	Allowable Speed m/min
RSD 40X-Λ	19.1 (1950)	363.0 (370)	0.70	240	150
RSD 50X-Λ	31.4 (3200)	6.37 (650)	1.11	192	135
RSD 60X-Λ	44.1 (4500)	8.83 (900)	1.72	160	120
RSD 80X-Λ	78.5 (8000)	14.7 (1500)	2.77	120	90
RSD100X-Λ	118.0 (12000)	22.6 (2300)	4.30	96	80
RSD120X-Λ	167.0 (17000)	30.4 (3100)	6.4	80	50

■ Operating Temperature: –10°C to +150°C (+14°F to +302°F)

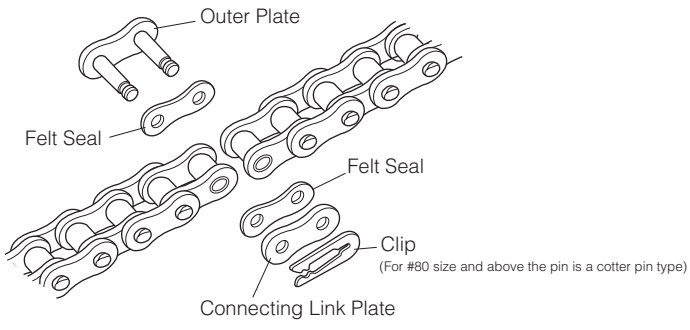
■ Sprocket: Standard RS Roller Chain sprockets can be used. (Only for Single Strand Chain)

■ Attention for Use:

- Inner plate is thicker than Standard RS Roller Chain. Also, the pin is longer due to the insertion of the Felt Seal (L_1, L_2). Please check for any interference.
- Offset links are not available. Please use an even number of links.
- As the Felt Seal is oil impregnated, the surface of X-Lambda has more oil on it than Standard Lambda Chain.

■ Method of Connecting

When connecting the chain, please use an X-Lambda Chain connecting link (with a Felt Seal). As shown in Diag. 1, insert felt seals between the outer plate and the connecting link plate then attach the link. (Please refer to page 72 for essentials on cutting/connecting).



Diag. 1 Attaching the connecting link

The trusted brand around the world

TSUBAKI RS® ROLLER CHAIN

In its never ending pursuit of improvement, Tsubaki, with more than 80 years of chain production experience and technology and with the International Standard ISO9001 accreditation for Quality Assurance, is delivering the best value to its customers.

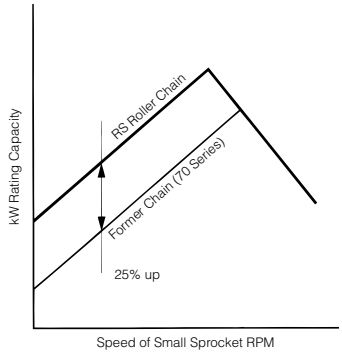
80th Series RS Roller Chain: a roller chain, which has received a vast improvement in kW rating capacity, not to mention improvements in performance capabilities across the range of sizes.

1 25% Increase in kW rating capacity

Through the improvement in Ring Coin (RC) processing*1 of the connecting link (M-type*2) and two-pitch offset link, kW rating capacity has been increased 25% compared to the previous series (70 series). (RS35, RS40 to RS240)

Ring Coin Processing on Connecting Link

Improved KW Rating Capacity



Compact Drive

Through the improved kW rating capacity, a reduction in the number of sprocket teeth allows for a more compact drive compared to the 70 series.

(Ex) Number of small sprocket teeth for RS80 when small sprocket speed is 50 r/min and at 2.2 kW.

	No. of small sprocket teeth (Outer Diameter : mm)
80th Series	More than 12 teeth (108)
Former Series (70 Series)	More than 15 teeth (135)

*1 **Ring Coin (RC) processing**
The Ring Coining process, an original Tsubaki design, creates a plastic deformation around the pinhole on the cover of the connecting link plate. This design generates residual stress around the area.

*2 **M-Type Connecting Link**
A connecting link with a connecting plate in which the pin and pinhole are slip-fit.

2 Identical maximum allowable load as main chain...(M-Type connecting link and two-pitch offset link)

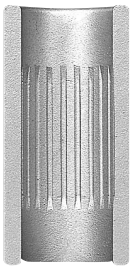
The maximum allowable tension on the M-Type connecting link and the two-pitch offset link have been improved*3 to the level of the main chain, thereby allowing full exploitation of the chain's performance for slow speed chain selection. Therefore, waste-free and economical chain drive is possible. (RS35, RS40 to RS240)

*3 Strength to maximum allowable load

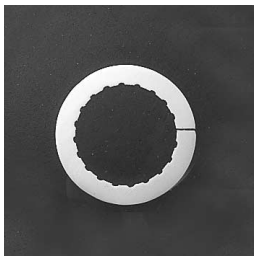
	80th Series	Former Series (70 Series)
Main chain	100%	100%
M-Type (Slip-fit) connecting link	100%	80%
F-Type (Semi Press-fit) connecting link	100%	100%
Two-pitch offset link	100%	75%
One-pitch offset link	65%	65%

3 30% increase in wear life

Through lube groove processing*4 of the inner surface of the lubricated bushing, pre-lubricant is retained longer and wear life is increased 30% compared to the former 70 series. (RS80 to RS140)

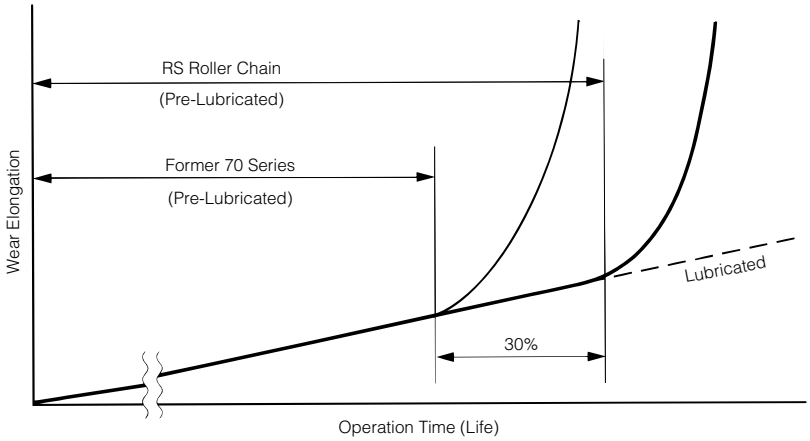


Inner view of vertically cut bushing



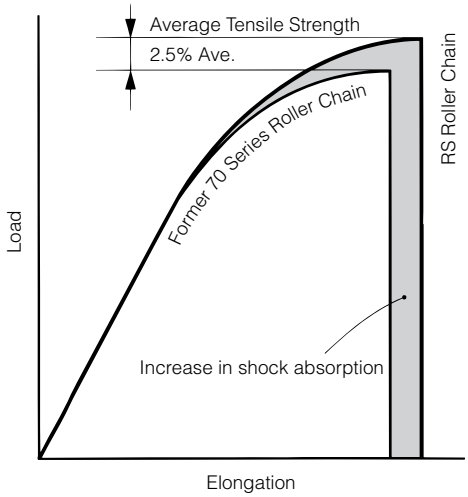
Side view of cut bushing

***4 Lube groove processing (PAT.)**
So as to retain pre-lubricant within the bushing longer, the inner surface of the bushing has been specially processed as shown in the photo.



4 Greater Tensile Strength and Shock Resistance

For large size chain over RS160, tensile strength and elasticity have been improved through the use of optimal steel and heat treatment processes. Compared to the former 70 series, there is a 10% increase in shock resistance, through the improvement of the elastic absorption functioning (shaded area in graph on right).



5 Improvement in Handling Ease

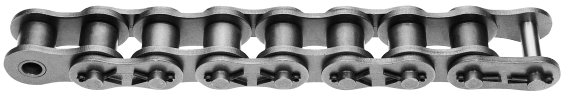
Simple and cleaner handling is made possible through Tsubaki's specialized method of applying corrosion-preventive lubrication.

AMERICAN STANDARD ROLLER CHAINS-SINGLE STRAND

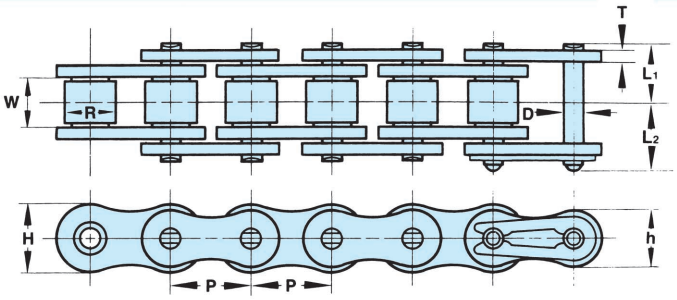
■ ANSI STANDARD ROLLER CHAINS

Single and Multiple Strand TSUBAKI Standard 80th Series Roller Chains conform to the ANSI (American National Standards Institute) and are interchangeable with other chains conforming to ANSI Standards. The Tsubaki 80th Series Roller Chains celebrate Tsubaki's 80 year history of constantly improving quality and customer satisfaction.

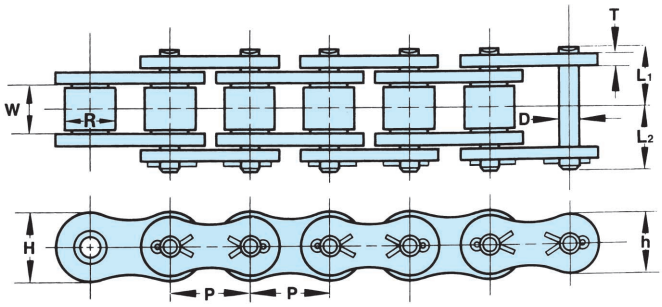
RIVETED TYPE



COTTERED TYPE



RIVETED TYPE



COTTERED TYPE

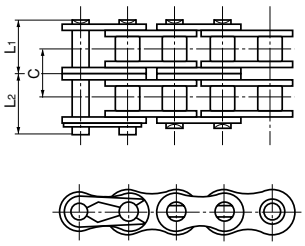
Dimensions-mm

TSUBAKI Chain No.	Ansi No.	Pitch P	Roller Dia. R	Width Between Roller Link Plates W	Link Plate Thickness T	Link Plate Height H	Link Plate Height h	Pin Dia. D	Pin From Pin Head to C.L L_1	Pin From Pin End to C.L L_2	Average Tensile Strength kN{kgf}	Maximum Allowable Load kN{kgf}	Approx Weight kg/m	Number of Links per unit
RS25 ✻ ▲	25	6.35	3.30	3.18	0.75	5.84	5.05	2.31	3.80	4.80	4.71 { 480}	0.64 { 65}	0.14	160
RS35 ✻ ▲	35	9.525	5.08	4.78	1.25	9.0	7.8	3.59	5.85	6.85	11.3 { 1,150}	2.16 { 220}	0.33	320
RS41 ✻	41	12.70	7.77	6.38	1.25	9.8	8.4	3.59	6.75	7.95	11.8 { 1,200}	2.26 { 230}	0.41	240
RS40 ✻	40	12.70	7.92	7.95	1.5	12.0	10.4	3.97	8.25	9.95	19.1 { 1,950}	3.63 { 370}	0.64	240
RS50 ✻	50	15.875	10.16	9.53	2.0	15.0	13.0	5.09	10.3	11.9	31.4 { 3,200}	6.37 { 650}	1.04	192
RS60	60	19.05	11.91	12.70	2.4	18.1	15.6	5.96	12.85	14.75	44.1 { 4,500}	8.83 { 900}	1.53	160
RS80	80	25.40	15.88	15.88	3.2	24.1	20.8	7.94	16.25	19.25	78.5 { 8,000}	14.7 { 1,500}	2.66	120
RS100	100	31.75	19.05	19.05	4.0	30.1	26.0	9.54	19.75	22.85	118.0 {12,000}	22.6 { 2,300}	3.99	96
RS120	120	38.10	22.23	25.40	4.8	36.2	31.2	11.11	24.9	28.9	167.0 {17,000}	30.4 { 3,100}	5.93	80
RS140	140	44.45	25.40	25.40	5.6	42.2	36.4	12.71	26.9	31.7	216.0 {22,000}	40.2 { 4,100}	7.49	68
RS160	160	50.80	28.58	31.75	6.4	48.2	41.6	14.29	31.85	36.85	279.0 {28,500}	53.0 { 5,400}	10.10	60
RS180	180	57.15	35.71	35.72	7.15	54.2	46.8	17.46	35.65	42.45	370.0 {37,700}	60.8 { 6,200}	13.45	54
RS200	200	63.50	39.68	38.10	8.0	60.3	52.0	19.85	39.0	44.8	471.0 {48,000}	71.6 { 7,300}	16.49	48
RS240	240	76.20	47.63	47.63	9.5	72.4	62.4	23.81	47.9	55.5	666.0 {70,000}	99.0 {10,100}	24.5	40

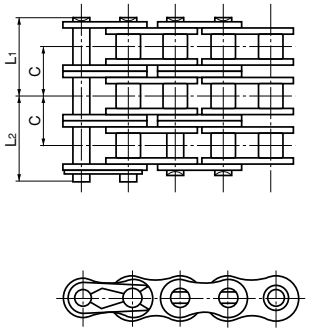
▲Rollerless
✻ Riveted only

AMERICAN STANDARD ROLLER CHAINS-MULTIPLE STRAND

RIVETED TYPE

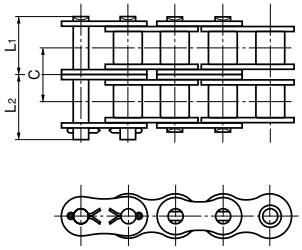


Double Strand

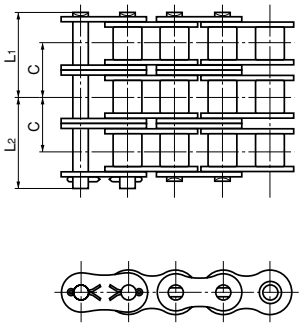


Triple Strand

COTTERED TYPE



Double Strand



Triple Strand

(Dimensions in mm)

TSUBAKI Chain No.	ANSI No.	Pitch P	Pin From Pin Head To C.L. L_1	Pin From Pin End To C.L. L_2	Transverse Pitch C	Ave. Tensile Strength kN(kgf)	Approx. Weight kg/m
RS25-2 ▲ ✻	25-2	6.35	7.0	8.0	6.4	9.41 (960)	0.27
RS25-3 ▲ ✻	25-3		10.2	11.2		14.1(1,440)	0.42
RS35-2 ▲ ✻	35-2	9.525	10.9	11.9	10.1	22.6(2,300)	0.69
RS35-3 ▲ ✻	35-3		16.0	16.9		33.8(3,450)	1.05
RS40-2	40-2	12.70	15.45	17.15	14.4	38.2(3,900)	1.27
RS40-3	40-3		22.65	24.15		57.4(5,850)	1.90
RS40-4	40-4		29.9	31.3		76.5(7,800)	2.53
RS40-5	40-5		37.1	38.6		95.6(9,750)	3.16
RS40-6	40-6		44.3	45.8		115 (11,700)	3.79
RS50-2	50-2	15.875	19.35	21.15	18.1	62.8(6,400)	2.07
RS50-3	50-3		28.4	30.2		94.1(9,600)	3.09
RS50-4	50-4		37.45	39.25		126 (12,800)	4.11
RS50-5	50-5		46.5	48.3		157 (16,000)	5.14
RS50-6	50-6		55.6	57.4		188 (19,200)	6.16
RS60-2	60-2	19.05	24.25	26.25	22.8	88.3(9,000)	3.04
RS60-3	60-3		35.65	38.15		132 (13,500)	4.54
RS60-4	60-4		47.05	49.55		177 (18,000)	6.04
RS60-5	60-5		58.5	61.0		221 (22,500)	7.54
RS30-6	60-6		69.9	72.5		265 (27,000)	9.05
RS80-2	80-2	25.40	30.9	33.9	29.3	157 (16,000)	5.27
RS80-3	80-3		45.6	48.5		235 (24,000)	7.89
RS80-4	80-4		60.25	63.25		314 (32,000)	10.50
RS80-5	80-5		74.95	77.95		392 (40,000)	13.11
RS80-6	80-6		89.6	92.5		471 (48,000)	15.73
RS100-2	100-2	31.75	37.7	40.8	35.8	235 (24,000)	7.85
RS100-3	100-3		55.65	58.75		353 (36,000)	11.77
RS100-4	100-4		73.55	76.65		471 (48,000)	15.70
RS100-5	100-5		91.5	94.6		588 (60,000)	19.53
RS100-6	100-6		109.45	112.55		706 (72,000)	23.48
RS120-2	120-2	38.10	47.6	51.6	45.4	333 (34,000)	11.70
RS120-3	120-3	38.10	70.4	74.4	45.4	500 (51,000)	17.53
RS120-4	120-4		93.1	97.1		667 (68,000)	23.36
RS120-5	120-5		115.85	119.85		834 (85,000)	29.16
RS120-6	120-6		138.55	142.55		1000(102,000)	34.96
RS140-2	140-2	44.45	51.35	56.15	48.9	431 (44,000)	14.83
RS140-3	140-3		75.85	80.75		647 (66,000)	22.20
RS140-4	140-4		100.3	105.2		863 (88,000)	28.52
RS140-5	140-5		124.8	129.6		1080(110,000)	36.97
RS140-6	140-6		149.3	154.2		1290(132,000)	44.30
RS160-2	160-2	50.80	61.15	66.15	58.5	559 (57,000)	20.04
RS160-3	160-3		90.45	95.45		838 (85,500)	30.02
RS160-4	160-4		119.75	124.65		1120(114,000)	40.06
RS160-5	160-5		149.05	153.95		1400(142,500)	49.89
RS160-6	160-6		178.3	183.3		1680(171,000)	59.93
RS180-2	180-2	57.15	68.75	75.35	65.8	739 (75,400)	26.52
RS180-3	180-3		101.7	108.5		1110(113,100)	38.22
RS180-4	180-4		134.65	141.45		1480(150,800)	50.90
RS180-5	180-5		167.6	174.4		1850(188,500)	63.59
RS180-6	180-6		200.55	207.35		2180(226,200)	76.27
RS200-2	200-2	63.50	74.85	80.65	71.6	941 (96,000)	32.63
RS200-3	200-3		110.75	116.45		1410(144,000)	49.02
RS200-4	200-4		146.6	152.3		1880(192,000)	65.16
RS200-5	200-5		182.4	188.2		2350(240,000)	81.32
RS200-6	200-6		218.25	224.05		2820(288,000)	97.59
RS240-2	240-2	76.20	91.9	99.4	87.8	1370(140,000)	48.10
RS240-3	240-3		135.85	143.15		2060(210,000)	71.60
RS240-4	240-4		179.8	187.3		2750(280,000)	95.10
RS240-5	240-5		223.75	231.25		3430(350,000)	118.60
RS240-6	240-6		267.7	275.1		4120(420,000)	142.10

▲ Rollerless

✻ Riveted only

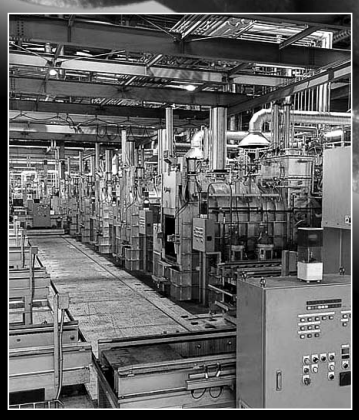
BS/DIN Standard Chain

Since 1917, Tsubakimoto Chain has maintained a line-up of cutting edge chain products with exceptional quality and performance that help end-users meet their power transmission and conveying requirements. Tsubaki presents the enhanced version of BS/DIN European standard chain, Tsubaki Runner. Tsubaki BS/DIN European standard chain is available in chain sizes from RS05B up to RS48B. Simplex, duplex and triplex executions are at your disposal.

Key factors for superior performance

- Increased transmission capacity
  - Reinforced connecting link with Ring Coining
- Easy disassembling - RS08B to RS16B only
  - New riveting style
- Higher fatigue strength
  - Shot peened parts
  - Higher and stable Pin & Bushing push-out force
- Higher tensile strength
  - Pin toughness
- Wear resistance
  - High quality chain lubricant
  - Bushing straightness
- Accuracy of chain length tolerance
  - State-of-the-art heat treatment facility
- Environmentally Friendly
  - Crush-free packaging

Applied on RS08B to RS40B


Environmentally friendly frameless-type gas furnace

Fatigue testing of chain

Fatigue strength has became a more widely used value for chain performance relating to link plate failure. In pursuit of outstanding quality, fatigue strength confirmation tests are conducted within Tsubaki.

Chain lubrication

Proper lubrication extends the life and improves the performance of a chain.
Tsubaki roller chain is pre-lubricated before packing, to get the best performance.....
to get the best performance from roller chain in general applications.

Heat treatment

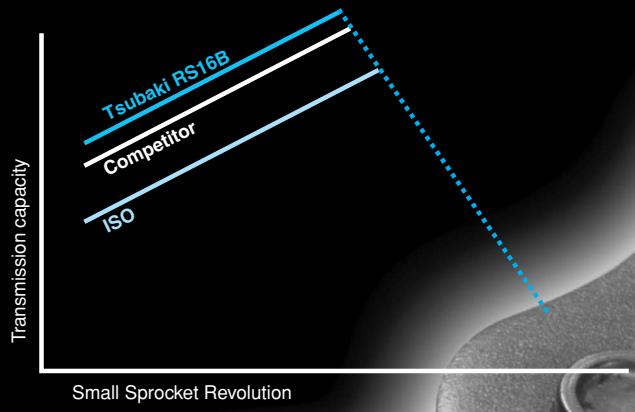
Tsubaki's advanced heat treatment facilities ensure that Tsubaki roller chain is built to conform to our exacting standards.

Chain fatigue test

Higher kW capacity

By using the Ring Coining (RC) process on the connecting link, transmission capacity has been increased.

In order to establish the same fatigue strength as the base chain, a connecting link design was needed that could satisfy both the user demand for easy assembly but also fatigue strength performance.
The Ring Coining process, an original Tsubaki design, creates a plastic deformation around the pinhole on the detachable plate of the connecting link. This design generates residual stress around the area.

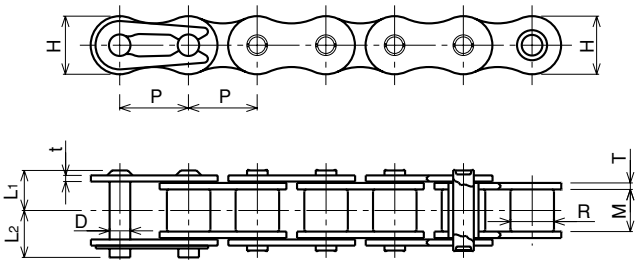


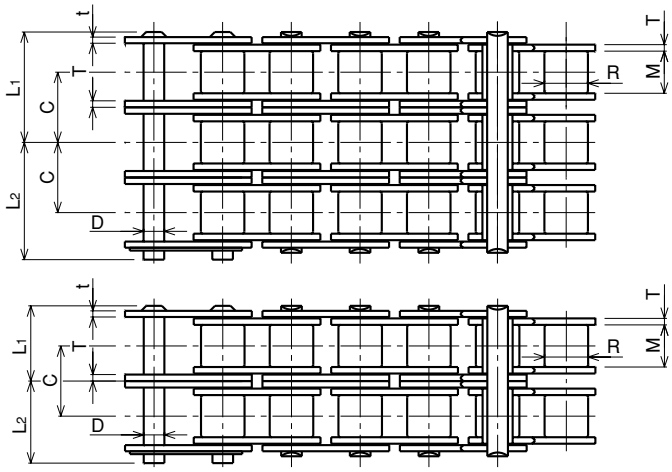
Tsubaki Pre-lubrication facility

BS/DIN CHAIN SERIES

■ BRITISH STANDARD ROLLER CHAINS

Single, Double and Triple Strand TSUBAKI BS Roller Chains are standardized in accordance with the ISO type “B”. The dimensions are fully interchangeable with chains built according to the BS228: 1970 and the DIN8187.





(Dimensions in mm)

TSUBAKI Chain No.	ISO BS/DIN No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Pin D	Pin L_1	Pin L_2	Link plate T (RL)	Link plate t (PL)	Link plate H (max)	Transverse Pitch C	Min. Tensile Strength kN(kgf)	Bearing Area (Nominal) cm²	Approx. Mass kg/m	No. of Links/Unit (5 mts)
SINGLE STRAND															
RS05B	05B	8.00	5.00	3.00	2.30	3.80	4.70	0.75	0.75	7.1	—	5.0 (510)	0.11	0.18	626
RF06B ★	06B	9.525	6.35	5.72	3.28	6.35	7.65	1.27	1.0	8.2	—	9.0 (920)	0.28	0.39	526
RS08B ●	08B	12.70	8.51	7.75	4.45	8.4	10.0	1.6	1.6	11.8	—	19.0 (1,930)	0.50	0.70	394
RS10B ●	10B	15.875	10.16	9.65	5.08	9.55	11.25	1.5	1.5	14.7	—	23.0 (2,340)	0.67	0.95	316
RS12B ●	12B	19.05	12.07	11.68	5.72	11.2	13.1	1.8	1.8	16.1	—	31.0 (3,160)	0.89	1.25	264
RS16B ●	16B	25.40	15.88	17.02	8.28	17.75	19.95	4.0	3.2	21.0	—	70.0 (7,100)	2.10	2.70	198
RS20B	20B	31.75	19.05	19.56	10.19	19.9	23.1	4.4	3.4	26.0	—	98.1(10,000)	2.95	3.85	158
RS24B	24B	38.10	25.40	25.40	14.63	26.65	31.85	6.0	5.6	33.4	—	167 (17,000)	5.54	7.45	132
RS28B	28B	44.45	27.94	30.99	15.90	32.45	37.45	7.5	6.3	36.4	—	200 (20,400)	7.40	9.45	114
RS32B	32B	50.80	29.21	30.99	17.81	32.1	37.7	7.0	6.3	42.2	—	255 (26,000)	8.11	10.25	100
RS40B	40B	63.50	39.37	38.10	22.89	39.25	45.05	8.5	8.0	52.9	—	373 (38,000)	12.76	16.35	80
DOUBLE STRAND															
RF06B-2 ★ ▲	06B-2	9.525	6.35	5.72	3.28	11.43	12.57	1.27	1.0	8.2	10.24	17.0 (1,730)	0.56	0.75	526
RS08B-2 ▲	08B-2	12.70	8.51	7.75	4.45	15.3	16.9	1.6	1.6	11.8	13.92	32.0 (3,260)	1.00	1.35	394
RS10B-2	10B-2	15.875	10.16	9.65	5.08	17.85	19.55	1.5	1.5	14.7	16.59	44.5 (4,540)	1.34	1.85	316
RS12B-2	12B-2	19.05	12.07	11.68	5.72	20.85	22.75	1.8	1.8	16.1	19.46	61.0 (6,220)	1.78	2.50	264
RS16B-2	16B-2	25.40	15.88	17.02	8.28	33.55	35.75	4.0	3.2	21.0	31.88	128 (13,000)	4.20	5.40	198
RS20B-2	20B-2	31.75	19.05	19.56	10.19	38.25	41.45	4.4	3.4	26.0	36.45	197 (20,100)	5.91	7.65	158
RS24B-2	24B-2	38.10	25.40	25.40	14.63	50.8	56.0	6.0	5.6	33.4	48.36	335 (34,100)	11.09	14.65	132
RS28B-2	28B-2	44.45	27.94	30.99	15.90	62.15	67.15	7.5	6.3	36.4	59.56	374 (38,100)	14.81	18.80	114
RS32B-2	32B-2	50.80	29.21	30.99	17.81	61.25	66.85	7.0	6.3	42.2	58.55	485 (49,500)	16.23	20.10	100
RS40B-2	40B-2	63.50	39.37	38.10	22.89	75.4	81.2	8.5	8.0	52.9	72.29	716 (73,000)	25.52	32.00	80
TRIPLE STRAND															
RF06B-3 ★ ▲	06B-3	9.525	6.35	5.72	3.28	16.9	17.5	1.27	1.0	8.2	10.24	24.9 (2,540)	0.84	1.11	526
RS08B-3 ▲	08B-3	12.70	8.51	7.75	4.45	22.25	23.85	1.6	1.6	11.8	13.92	47.5 (4,840)	1.50	2.00	394
RS10B-3	10B-3	15.875	10.16	9.65	5.08	26.15	27.85	1.5	1.5	14.7	16.59	66.8 (6,810)	2.01	2.80	316
RS12B-3	12B-3	19.05	12.07	11.68	5.72	30.6	32.5	1.8	1.8	16.1	19.46	92 (9,400)	2.67	3.80	264
RS16B-3	16B-3	25.40	15.88	17.02	8.28	49.5	51.7	4.0	3.2	21.0	31.88	192 (19,600)	6.30	8.00	198
RS20B-3	20B-3	31.75	19.05	19.56	10.19	56.5	59.7	4.4	3.4	26.0	36.45	295 (30,100)	8.86	11.45	158
RS24B-3	24B-3	38.10	25.40	25.40	14.63	75.1	80.2	6.0	5.6	33.4	48.36	500 (51,000)	16.64	21.75	132
RS28B-3	28B-3	44.45	27.94	30.99	15.90	91.95	96.95	7.5	6.3	36.4	59.56	560 (57,100)	22.21	28.20	114
RS32B-3	32B-3	50.80	29.21	30.99	17.81	90.5	96.10	7.0	6.3	42.2	58.55	729 (74,300)	24.34	29.90	100
RS40B-3	40B-3	63.50	39.37	38.10	22.89	111.5	117.3	8.5	8.0	52.9	72.29	1,080 (110,000)	38.28	47.75	80

Notes: ★ Flat shape link plate

▲ Middle link plate has one solid plate.
Riveted type chain will be supplied unless otherwise specified.

● Center sink riveting is applied (Shown in single strand drawing above).
Double stake riveting is applied to all other sizes including multi-strand chain.

Heavy Duty Roller Chain

■ Wide Array of Products with Outstanding Reliability

Through the expansion of product types TSUBAKI SUPER Roller Chain can easily be used in a much wider range of drive conditions. And since TSUBAKI chain is produced at an ISO 9001 International Standards accredited plant, outstanding reliability is assured.

■ Areas of Use

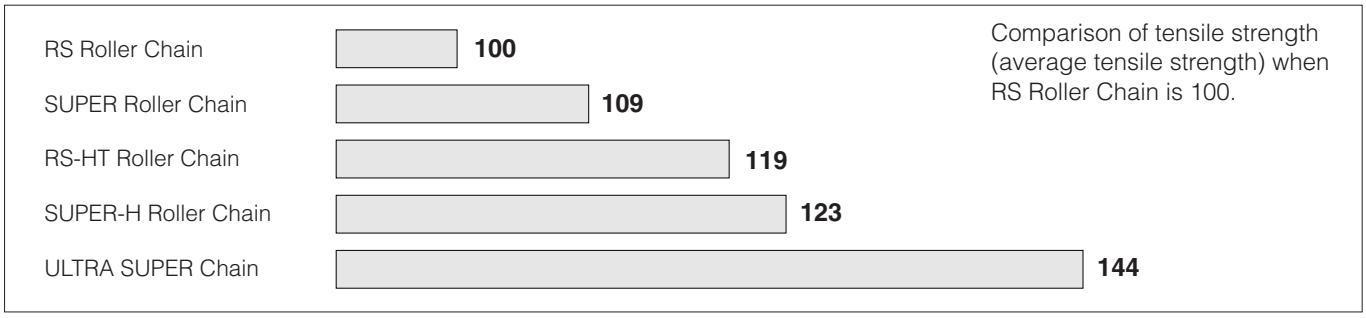
Please use TSUBAKI SUPER Roller Chain in the following applications, which exceed the capability of RS Roller Chain.

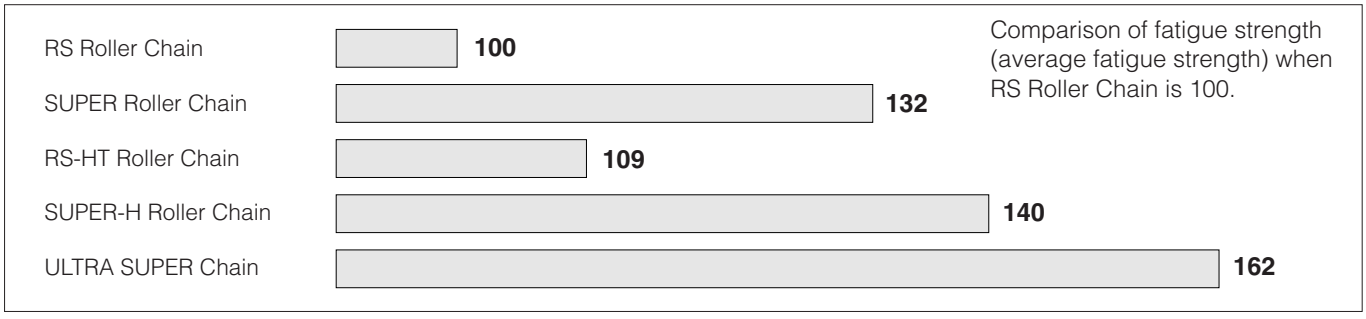
1. Severe conditions accompanied by large shocks.
2. Equipment requiring limited space and compact drive of a machine.
3. Higher kW ratings, allowable load, and tensile strength are required.
4. Applications that require a lower elastic elongation ratio.

■ Applications & Features

Item \ Product Type	SUPER Roller Chain	RS-HT Roller Chain	SUPER-H Roller Chain	ULTRA SUPER Chain (US)
	Heavy Duty Transmissions	Mainly Lifting	Heavy Duty Transmissions	
Application	• For low / medium speed heavy duty transmissions Ex. · Construction machinery transmissions · Truck transmissions · Agricultural machinery transmissions · Elevator drives	• Lifting with low frequency of use • Can be used in low speed drives up to 50 m/min Ex. · Vertical parking facilities · Heavy machinery transmissions · Small agricultural machinery transmissions	• Low speed drives up to 50 m/min • Transmissions with shock loads and torque	• Low speed drives up to 50 m/min • Transmissions requiring a compact design
Features	• High kW ratings (30% higher than RS Roller Chain) • High shock absorbency • Can go down a size when used in place of RS Roller Chain	• High tensile strength (19% higher than RS Roller Chain)	• High fatigue strength (6% higher than SUPER Roller Chain) • High tensile strength (13% higher than SUPER Roller Chain) • High shock absorbency	• Highest fatigue strength (16% higher than SUPER-H Roller Chain) • Highest tensile strength (17% higher than SUPER-H Roller Chain) • High shock absorbency Can go down two sizes when used in place of RS Roller Chain
Dimensions Page	Pg. 17	Pg. 18	Pg. 19	Pg. 20

■ Comparison of Tensile Strength / Fatigue Strength





■ Essential Points

<table>
<tr><th>Item \ Product Type</th><th>SUPER Roller Chain</th><th>RS-HT Roller Chain</th><th>SUPER-H Roller Chain</th><th>ULTRA SUPER Chain</th></tr>
<tr><td>Selection Method</td><td>All the selection methods outlined in this catalog, including the general selection method, are applicable.</td><td colspan="3">All selection methods outlined in this catalog are applicable except for general selection.</td></tr>
<tr><td>Offset Links</td><td>4POL</td><td colspan="3">There are no offset links. Please use an even number of links.</td></tr>
<tr><td rowspan="2">Sprockets</td><td rowspan="2">Standard sprockets for RS Roller Chain can be used for single and multi-strand chain.</td><td colspan="2">Standard sprockets for RS Roller Chain can be used for single strand chain. Sprockets for multi-strand chain are made-to-order.</td><td>Standard sprockets for RS Roller Chain can be used. (Multi-strand chain is not available.)</td></tr>
<tr><td colspan="3">Please use sprockets made of carbon steel, such as S35C, and a sprocket with a low number of hardened teeth. Sprockets made of cast iron cannot be used.</td></tr>
</table>

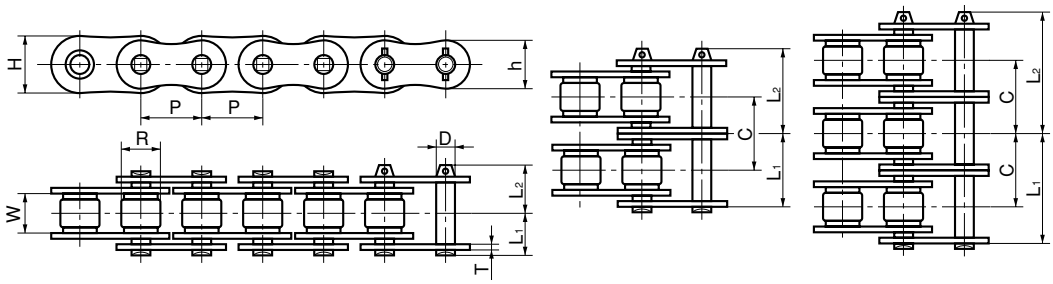
SUPER Roller Chain

SUPER-H Roller Chain

RS-HT Roller Chain

ULTRA SUPER Chain (US)

SUPER SERIES



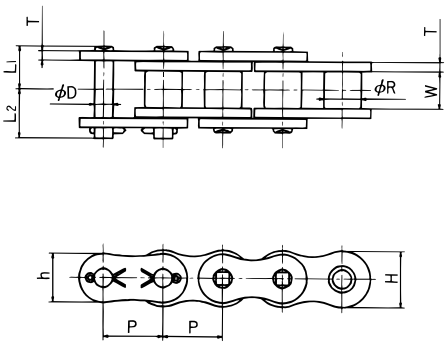
(Dimensions in mm)

TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link T	Link H	Link h	Pin D	Pin L_1	Pin L_2	Transverse Pitch C	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m
SINGLE STRAND													
SUPER 80	25.40	15.88	15.88	3.2	24.1	20.8	7.94	16.25	19.25	—	85.3 (8,700)	18.6 (1,900)	2.81
SUPER100	31.75	19.05	19.05	4.0	30.1	26.0	9.54	19.75	22.85	—	127 (13,000)	30.4 (3,100)	4.25
SUPER120	38.10	22.23	25.40	4.8	36.2	31.2	11.11	24.9	28.9	—	186 (19,000)	39.2 (4,000)	6.30
SUPER140	44.45	25.40	25.40	5.6	42.2	36.4	12.71	26.9	31.7	—	245 (25,000)	53.9 (5,500)	8.04
SUPER160	50.80	28.58	31.75	6.4	48.2	41.6	14.29	31.85	36.85	—	314 (32,000)	70.6 (7,200)	10.79
SUPER200	63.50	39.68	38.10	8.0	60.3	52.0	19.85	39.0	44.8	—	505 (51,500)	94.1 (9,600)	17.63
SUPER240	76.20	47.63	47.63	9.5	72.4	62.4	23.81	47.9	55.5	—	735 (75,000)	132 (13,500)	25.63
DOUBLE STRAND													
SUPER 80-2	25.40	15.88	15.88	3.2	24.1	20.8	7.94	30.9	33.9	29.3	171 (17,400)	31.7 (3,230)	5.62
SUPER100-2	31.75	19.05	19.05	4.0	30.1	26.0	9.54	37.7	40.8	35.8	255 (26,000)	51.7 (5,270)	8.38
SUPER120-2	38.10	22.23	25.40	4.8	36.2	31.2	11.11	47.6	51.6	45.4	373 (38,000)	66.7 (6,800)	12.44
SUPER140-2	44.45	25.40	25.40	5.6	42.2	36.4	12.71	51.35	56.15	48.9	490 (50,000)	91.7 (9,350)	15.92
SUPER160-2	50.80	28.58	31.75	6.4	48.2	41.6	14.29	61.15	66.15	58.5	628 (64,000)	120 (12,240)	21.43
SUPER200-2	63.50	39.68	38.10	8.0	60.3	52.0	19.85	74.85	80.65	71.6	1,010 (103,000)	160 (16,320)	34.91
SUPER240-2	76.20	47.63	47.63	9.5	72.4	62.4	23.81	91.9	99.4	87.8	1,470 (150,000)	225 (22,950)	50.88
TRIPLE STRAND													
SUPER 80-3	25.40	15.88	15.88	3.2	24.1	20.8	7.94	45.6	48.5	29.3	253 (26,100)	46.6 (4,750)	8.40
SUPER100-3	31.75	19.05	19.05	4.0	30.1	26.0	9.54	55.65	58.75	35.8	382 (39,000)	76.0 (7,750)	12.57
SUPER120-3	38.10	22.23	25.40	4.8	36.2	31.2	11.11	70.4	74.4	45.4	559 (57,000)	98.1 (10,000)	18.64
SUPER140-3	44.45	25.40	25.40	5.6	42.2	36.4	12.71	75.85	80.75	48.9	735 (75,000)	135 (13,750)	23.84
SUPER160-3	50.80	28.58	31.75	6.4	48.2	41.6	14.29	90.45	95.45	58.5	941 (96,000)	177 (18,000)	32.10
SUPER200-3	63.50	39.68	38.10	8.0	60.3	52.0	19.85	110.75	116.45	71.6	1,520 (154,500)	235 (24,000)	52.44
SUPER240-3	76.20	47.63	47.63	9.5	72.4	62.4	23.81	135.85	143.15	87.8	2,210 (225,000)	331 (33,750)	76.11

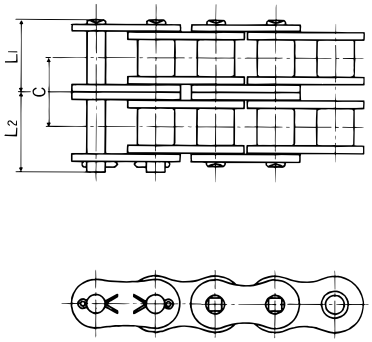
Notes: 1. 4POL is available for single strand.
2. Riveted type chain will be provided unless otherwise specified. Roll pin type chain will be provided upon request.
3. Semi press-fit type connecting links are supplied.

RS-HT SERIES

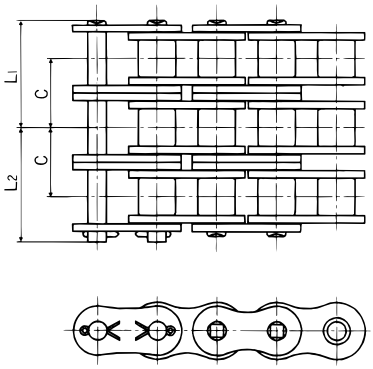
Single-Strand



Double-Strand



Triple-Strand



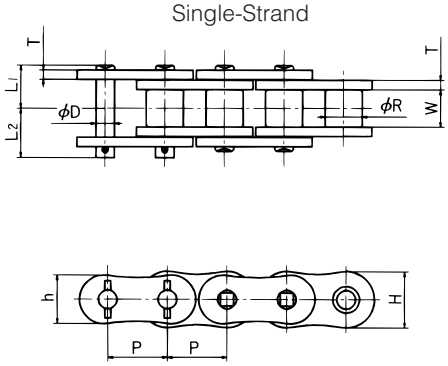
(Dimensions in mm)

TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link T	Link H	Link h	Pin D	Pin L_1	Pin L_2	Transverse Pitch C	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m
SINGLE STRAND													
RS 60HT	19.05	11.91	12.70	3.2	18.1	15.6	5.96	14.8	17.0	—	55.9 (5,700)	9.81 (1,000)	1.80
RS 80HT	25.40	15.88	15.88	4.0	24.1	20.8	7.94	18.3	20.9	—	93.2 (9,500)	16.2 (1,650)	3.11
RS100HT	31.75	19.05	19.05	4.8	30.1	26.0	9.54	21.8	24.5	—	142 (14,500)	24.5 (2,500)	4.58
RS120HT	38.10	22.23	25.40	5.6	36.2	31.2	11.11	26.95	30.55	—	191 (19,500)	32.4 (3,300)	6.53
RS140HT	44.45	25.40	25.40	6.4	42.2	36.4	12.71	28.9	33.1	—	250 (25,500)	42.7 (4,350)	8.27
RS160HT	50.80	28.58	31.75	7.15	48.2	41.6	14.29	33.95	38.45	—	319 (32,500)	55.9 (5,700)	10.97
RS200HT	63.50	39.68	38.10	9.5	60.3	52.0	19.85	42.9	48.1	—	559 (57,000)	78.5 (8,000)	18.41
RS240HT	76.20	47.63	47.63	12.7	72.4	62.4	23.81	54.8	62.3	—	883 (90,000)	113 (11,500)	29.13
DOUBLE STRAND													
RS 60HT-2	19.05	11.91	12.70	3.2	18.1	15.6	5.96	27.8	29.9	26.1	112 (11,400)	16.7 (1,700)	3.59
RS 80HT-2	25.40	15.88	15.88	4.0	24.1	20.8	7.94	34.6	37.2	32.6	186 (19,000)	27.6 (2,810)	6.18
RS100HT-2	31.75	19.05	19.05	4.8	30.1	26.0	9.54	41.4	44.1	39.1	284 (29,000)	41.7 (4,250)	9.03
RS120HT-2	38.10	22.23	25.40	5.6	36.2	31.2	11.11	51.4	55.0	48.9	382 (39,000)	55.0 (5,610)	12.90
RS140HT-2	44.45	25.40	25.40	6.4	42.2	36.4	12.71	54.95	59.5	52.2	500 (51,000)	72.6 (7,400)	16.38
RS160HT-2	50.80	28.58	31.75	7.15	48.2	41.6	14.29	64.9	69.6	61.9	638 (65,000)	95.0 (9,690)	21.78
RS200HT-2	63.50	39.68	38.10	9.5	60.3	52.0	19.85	82.05	87.3	78.3	1,120 (114,000)	133 (13,600)	36.47
RS240HT-2	76.20	47.63	47.63	12.7	72.4	62.4	23.81	105.3	112.9	101.2	1,770 (180,000)	192 (19,550)	57.35
TRIPLE STRAND													
RS 60HT-3	19.05	11.91	12.70	3.2	18.1	15.6	5.96	40.85	42.95	26.1	168 (17,100)	24.5 (2,500)	5.36
RS 80HT-3	25.40	15.88	15.88	4.0	24.1	20.8	7.94	50.95	53.55	32.6	279 (28,500)	40.5 (4,130)	9.24
RS100HT-3	31.75	19.05	19.05	4.8	30.1	26.0	9.54	61.0	63.6	39.1	427 (43,500)	61.3 (6,250)	13.54
RS120HT-3	38.10	22.23	25.40	5.6	36.2	31.2	11.11	75.85	79.55	48.9	574 (58,500)	80.9 (8,250)	19.33
RS140HT-3	44.45	25.40	25.40	6.4	42.2	36.4	12.71	81.15	85.25	52.2	750 (76,500)	107 (10,880)	24.54
RS160HT-3	50.80	28.58	31.75	7.15	48.2	41.6	14.29	95.95	100.45	61.9	956 (97,500)	140 (14,250)	32.63
RS200HT-3	63.50	39.68	38.10	9.5	60.3	52.0	19.85	121.25	126.55	78.3	1,680 (171,000)	196 (20,000)	54.77
RS240HT-3	76.20	47.63	47.63	12.7	72.4	62.4	23.81	156.05	163.55	101.2	2,650 (270,000)	282 (28,750)	85.47

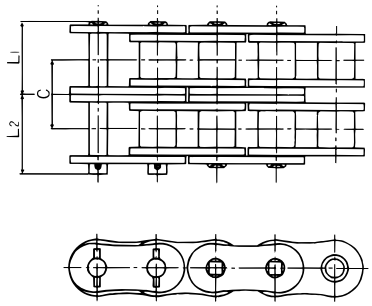
Notes: 1. Riveted type chain will be provided unless otherwise specified.
2. Cottered type chain will be provided upon request.
3. Semi press-fit type connecting links are supplied.

SUPER-H SERIES

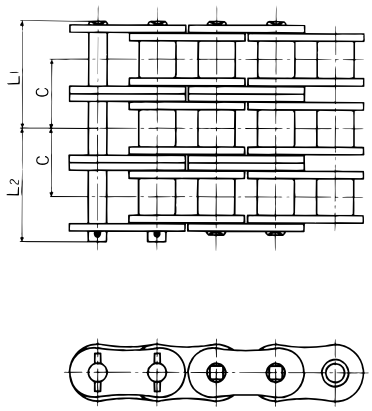
Single-Strand



Double-Strand



Triple-Strand

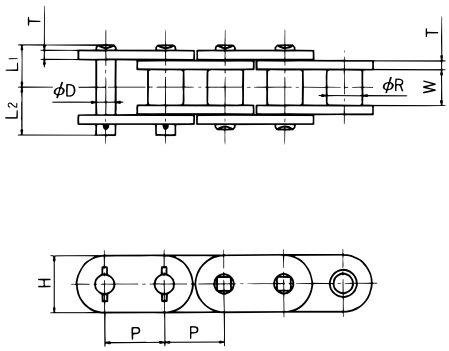


(Dimensions in mm)

TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link T	Link H	Link h	Pin D	Pin L_1	Pin L_2	Transverse Pitch C	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m
SINGLE STRAND													
SUPER 80H	25.40	15.88	15.88	4.0	24.1	20.8	7.94	18.3	20.9	—	98.1 (10,000)	20.6 (2,100)	3.29
SUPER100H	31.75	19.05	19.05	4.8	30.1	26.0	9.54	21.8	24.5	—	145 (14,800)	32.4 (3,300)	4.88
SUPER120H	38.10	22.23	25.40	5.6	36.2	31.2	11.11	26.95	30.55	—	196 (20,000)	42.2 (4,300)	6.94
SUPER140H	44.45	25.40	25.40	6.4	42.2	36.4	12.71	28.9	33.1	—	255 (26,000)	56.9 (5,800)	8.88
SUPER160H	50.80	28.58	31.75	7.15	48.2	41.6	14.29	33.95	38.45	—	324 (33,000)	73.5 (7,500)	11.72
SUPER200H	63.50	39.68	38.10	9.5	60.3	52.0	19.85	42.9	48.1	—	598 (61,000)	100 (10,200)	19.68
SUPER240H	76.20	47.63	47.63	12.7	72.4	62.4	23.81	54.8	62.3	—	922 (94,000)	139 (14,200)	30.47
DOUBLE STRAND													
SUPER 80H-2	25.40	15.88	15.88	4.0	24.1	20.8	7.94	34.60	37.20	32.6	196 (20,000)	35.0 (3,570)	6.52
SUPER100H-2	31.75	19.05	19.05	4.8	30.1	26.0	9.54	41.40	44.10	39.1	290 (29,600)	55.0 (5,610)	9.51
SUPER120H-2	38.10	22.23	25.40	5.6	36.2	31.2	11.11	51.40	55.00	48.9	392 (40,000)	71.7 (7,310)	13.51
SUPER140H-2	44.45	25.40	25.40	6.4	42.2	36.4	12.71	54.95	59.50	52.2	510 (52,000)	96.7 (9,860)	17.38
SUPER160H-2	50.80	28.58	31.75	7.15	48.2	41.6	14.29	64.90	69.60	61.9	647 (66,000)	125 (12,750)	22.97
SUPER200H-2	63.50	39.68	38.10	9.5	60.3	52.0	19.85	82.05	87.30	78.3	1,200 (122,000)	170 (17,340)	38.48
SUPER240H-2	76.20	47.63	47.63	12.7	72.4	62.4	23.81	105.30	112.90	101.2	1,840 (188,000)	237 (24,140)	59.77
TRIPLE STRAND													
SUPER 80H-3	25.40	15.88	15.88	4.0	24.1	20.8	7.94	50.95	53.55	32.6	294 (30,000)	51.5 (5,250)	9.75
SUPER100H-3	31.75	19.05	19.05	4.8	30.1	26.0	9.54	61.00	63.60	39.1	435 (44,400)	80.9 (8,250)	14.14
SUPER120H-3	38.10	22.23	25.40	5.6	36.2	31.2	11.11	75.85	79.55	48.9	588 (60,000)	105 (10,750)	20.09
SUPER140H-3	44.45	25.40	25.40	6.4	42.2	36.4	12.71	81.15	85.25	52.2	765 (78,000)	142 (14,500)	25.88
SUPER160H-3	50.80	28.58	31.75	7.15	48.2	41.6	14.29	95.95	100.45	61.9	971 (99,000)	184 (18,750)	34.22
SUPER200H-3	63.50	39.68	38.10	9.5	60.3	52.0	19.85	121.25	126.55	78.3	1,790 (183,000)	250 (25,500)	57.29
SUPER240H-3	76.20	47.63	47.63	12.7	72.4	62.4	23.81	156.05	163.55	101.2	2,770 (282,000)	348 (35,500)	89.09

Notes: 1. Offset links are not available.
2. Riveted type chain will be provided unless otherwise specified. Roll pin type chain will be provided upon request.
3. Semi press-fit type connecting links are supplied.

ULTRA SUPER SERIES



(Dimensions in mm)

TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Side Plates T	Side Plates H	Pins D	Pins L_1	Pins L_2	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m
US100	31.75	19.05	19.05	4.8	30.1	10.32	22.35	25.35	172 (17,500)	39.2 (4,000)	5.07
US120	38.10	22.23	25.40	5.6	36.2	12.28	27.55	31.55	245 (25,000)	53.9 (5,500)	7.22
US140	44.45	25.40	25.40	6.4	42.2	13.97	29.50	34.20	314 (32,000)	63.7 (6,500)	9.24
US160	50.80	28.58	31.75	7.1	48.2	15.62	34.50	40.20	392 (40,000)	85.3 (8,700)	12.19
US200	63.50	39.68	38.10	9.5	60.3	20.41	42.95	50.95	667 (68,000)	108 (11,000)	20.47
US240	76.20	47.63	47.63	12.7	72.4	24.73	54.80	64.90	981 (100,000)	151 (15,400)	31.69

Notes: 1. RS Standard Sprockets can be used if the sprocket teeth have been hardened and the sprocket is not a cast iron type.
2. Chain should be lubricated using: a) drip method b) oil bath c) lubrication pump
3. Offset links are not available.
4. Riveted type chain supplied unless otherwise specified.
5. Chain must be used under 50 m/min speed.
6. Multi-strand chains are not available.

Corrosion-Resistant Roller Chain

■ NP Nickel-Plated Roller Chain *1

RS Roller Chain that has been plated with Nickel. NP chain has an attractive appearance and light corrosion resistance, so it is suitable for outdoor conditions exposed to water. There is a 15% reduction in Max. Allowable Load compared to RS Roller Chain, so please take care when making your chain selection.
Working temperature range: –10°C to +60°C (+14°F to +140°F).


NP

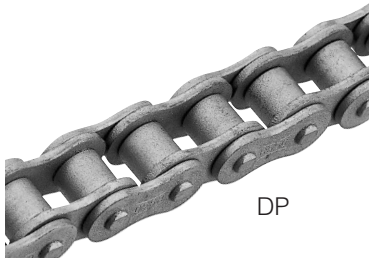
■ WP Roller Chain *1

RS Roller Chain that has undergone a special surface treatment. (Clips are SUS301) This chain is more corrosion-resistant in wet environments than NP chain, and is also suitable for use in environments exposed to sea-water. The kilowatt ratings are the same as RS Roller chain, however, it cannot be used in temperatures below –30°C (–22°F) and above +150°C (+302°F).


WP

■ DP Roller Chain (Patent Pending) *1

RS Roller Chain that has been galvanized and specially treated providing a double plated effect. It has superior salt-water resistance, weather resistance and other synthetic corrosion resistance and is extremely durable. Furthermore, this chain uses groundbreaking surface treatment technology and the non-use of harmful chromium makes this chain environmentally friendly.
Working temperature range: –10°C to +60°C (+14°F to +140°F).


DP

⚠ Safety Precautions

***1** Do not use Nickel-Plated Roller Chain (NP), WP Roller Chain, or DP Roller Chain under any circumstances where the chain comes into direct contact with food products and/or where coating flakes or wear dust may mix with and contaminate such products. Even in non-food applications, if the chain is used in an environment where coating flakes or wear dust may pose a problem, please install a suitable cover or consult with Tsubaki for chain selection advice.

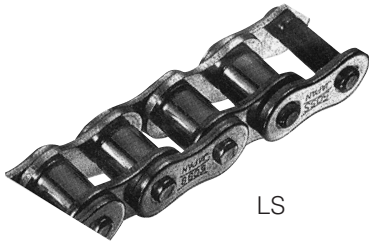
■ SUS Stainless Steel Roller Chain

Roller Chain composed of SUS304 (Clips are SUS301). This chain is more corrosion-resistant than RS Roller Chain, NP Roller Chain, and WP Roller Chain. It can be used in special environments such as corrosive conditions underwater and in acids/alkalis. It can also be used in high and low temperatures (–20°C to +400°C/–4°F to +752°F). Please refer to the chain selection pages for more details on corrosion resistance.
There is almost no magnetism regarding SUS304 stainless steel itself. However, there may be slight magnetism under cold working processes.


SS

■ LS Stainless Steel Roller Chain PAT#2783750

LS Chain is a roller chain in which an engineered plastic sleeve (black) has been inserted between the pin and bushing of Stainless Steel Roller Chain (SS) (SUS304). There are two types of roller materials, SUS304 and engineering plastic (white). Corrosion resistance is almost identical to that of Stainless Steel Roller Chain (SS), however, care needs to be taken with some inorganic acids and alkalis. Please refer to the chain selection pages for more details on corrosion resistance.
Working temperature range: –20°C to +100°C (–4°F to +212°F) (SUS304 rollers)
–20°C to +80°C (–4°F to +176°F) (plastic rollers)

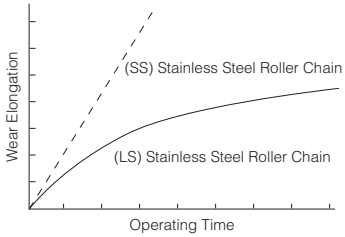

LS

Long Life

Life comparison with SS specification

Completely Dry (No Lube)
- Stainless steel roller ……chain wear life improved by more than 4 times (–20°C to +100°C/–4°F to +212°F)
- Engineering plastic roller ……increase in roller wear resistance, and chain wear life improved by more than 10 times (–20°C to + 80°C/–4°F to +176°F)

Exposure to water / Underwater
- Stainless steel roller ……chain wear life improved by more than 4 times (–10°C to +100°C/+14°F to +212°F)



■ Engineering Plastic Roller

Low Noise Realization of quiet drive and conveyance due to absence of metal on metal contact
- 7 to 10 dB reduction in noise compared to stainless steel rollers
- Reduction in screeching noise from direct metal contact

Lightweight Reduction in mass compared to stainless steel rollers (Approx. 15%)

⚠ Important notes on disassembling/connecting LS Roller Chain.

There is an engineering plastic sleeve (black pipe) between the pin and bushing, so be careful not to lose it when disassembling the chain. Also make sure to replace the engineering plastic sleeve between the pin and bushing before connecting the chain.

■ NS Stainless Steel Roller Chain

This is a roller chain composed of SUS316 stainless steel (only RS25NS clips are SUS301). This chain is suitable when corrosion resistance greater than Stainless Steel Roller Chain (SS) is required. There are no magnetic parts besides the clip. Please refer to the chain selection pages for more details on corrosion resistance.

NS

■ AS Powerful Stainless Steel Roller Chain

This is a roller chain which uses heat-treated precipitation hardened stainless steel (SUS600) for the pins and rollers and SUS304 stainless steel for the link plates and bushings (Clips are SUS301). Max. Allowable Load is 1.5 times that of Stainless Steel Chain (SS) and corrosion resistance is slightly lower. This chain is suitable where corrosion and heat resistance (–20°C to +400°C/–4°F to +752°F) is required, and for powerful drives where chain smaller than RS Stainless Steel Roller Chain (SS) is preferred. Please refer to the chain selection pages for more details on corrosion resistance. Magnetism exists due to the use of SUS600.

■ PC, PC-SY Poly Steel Chain®

PC: SUS304 is used for the pins and outer link plates (Clips are SUS301), and engineering plastic (white) is used for the inner link. It is a lube-free, low noise (5 dB lower than RS Roller Chain), and lightweight (50% lighter than RS Roller Chain) chain. Working temperature range: –20°C to +80°C (–4°F to +176°F). Please refer to the chain selection pages for more details on corrosion resistance.

PC-SY (Super Chemical-Resistant): This chain uses titanium for the pins and outer link plates and engineering plastic (off-white) for the inner link. It is suitable when the corrosion resistance of Poly Steel Chain (PC) is lacking. Working temperature range: –20°C to +80°C (–4°F to +176°F). Please refer to the chain selection pages for more details on corrosion resistance.

In addition, Max. Allowable Load is 60% that of Poly Steel Chain (PC).

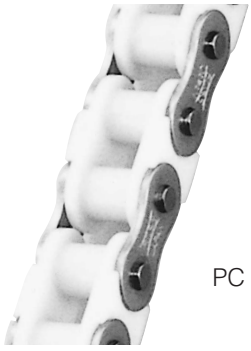
AS

■ TI Roller Chain

This chain is composed of titanium, making it non-magnetic and highly corrosion resistant.

■ KT Roller Chain (Cold-Resistant)

This chain can be used in colder temperatures than RS Roller Chain. Working temperature range: –40°C to +60°C (–40°F to +14°F). This chain is suitable when the same kilowatt ratings as RS Roller Chain are required.



PC

DRIVE CHAINS FOR SPECIAL ENVIRONMENTS

NS

AS

PC

NP / WP / DP Dimensions

TSUBAKI Chain No.			Pitch	Roller Diam.	Width b/w Roller Link Plates	Link Plate			Pin					Max. Allowable Load kN(kgf)	
						Thickness	Height	Height	Diam.				Offset Pin Length		
			P	R	W	T · T_1	H	h	D	$L_1 + L_2$	L_1	L_2	L	P	WP/DP
RS 25NP ▲	—	—	6.35	*3.30	3.18	0.75	5.84	5.05	2.31	8.6	3.8	4.8	7.6	0.64 (65)	—
RS 35NP ▲	—	RS 35DP	9.525	*5.08	4.78	1.25	9.0	7.8	3.59	12.7	5.85	6.85	13.5	1.86 (190)	2.16 (220)
RS 40NP	RS 40WP	RS 40DP	12.70	7.92	7.95	1.5	12.0	10.4	3.97	18.2	8.25	9.95	18.0	3.04 (310)	3.63 (370)
RS 50NP	RS 50WP	RS 50DP	15.875	10.16	9.53	2.0	15.0	13.0	5.09	22.3	10.3	12.0	22.5	5.39 (550)	6.37 (650)
RS 60NP	RS 60WP	RS 60DP	19.05	11.91	12.70	2.4	18.1	15.6	5.96	27.6	12.85	14.75	28.2	7.26 (740)	8.83 (900)
RS 80NP	RS 80WP	RS 80DP	25.40	15.88	15.88	3.2	24.1	20.8	7.94	35.5	16.25	19.25	36.0	12.7 (1,300)	14.7 (1,500)
RS100NP	RS100WP	RS100DP	31.75	19.05	19.05	4.0	30.1	26.0	9.54	42.6	19.75	22.85	44.4	19.1 (1,950)	22.6 (2,300)
RS120NP	—	—	38.10	22.23	25.40	4.8	36.2	31.2	11.11	53.8	24.9	28.9	45.4	25.5 (2,600)	—

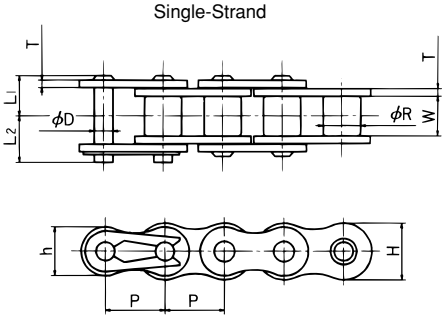
▲ Rollerless
Those marked with * are rollerless. The figure shown is the bushing diameter.

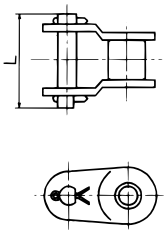
PC / PC-SY Dimensions

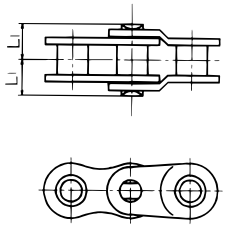
TSUBAKI Chain No.		Pitch	Bushing Diam.	Width b/w Roller Link Plates	Link Plate				Pin					
					Thickness	Thickness	Height	Height	Diam.		PC		PC-SY	
		P	R	W	T · T_1	PC · T_2	H	h	D	$L_1 + L_2$	L_1	L_2	L_1	L_2
RF25PC	—	6.35	3.30	3.18	0.75	1.3	6.0	5.05	2.31	10.0	4.5	5.5	—	—
RF35PC	—	9.525	5.08	4.78	1.25	2.2	9.0	7.8	3.59	14.7	6.85	7.85	—	—
RF40PC	RF40PC-SY	12.70	7.92	7.95	1.5	1.5	12.0	10.4	3.97	18.2	8.25	9.95	8.25	10.1
RF50PC	RF50PC-SY	15.875	10.16	9.53	2.0	2.0	15.0	13.0	5.09	22.3	10.3	12.0	10.3	12.0
RF60PC	RF60PC-SY	19.05	11.91	12.70	2.4	2.4	18.1	15.6	5.96	27.6	12.85	14.75	12.85	15.25

TSUBAKI Chain No.		Approx. Mass kg/m		Max. Allowable Load kN(kgf)	
		PC	PC-SY	PC	PC-SY
RF25PC	—	0.095	—	0.08 (8)	—
RF35PC	—	0.22	—	0.18(18)	—
RF40PC	RF40PC-SY	0.39	0.39	0.44(45)	0.25(25)
RF50PC	RF50PC-SY	0.58	0.58	0.69(70)	0.39(40)
RF60PC	RF60PC-SY	0.82	0.82	0.88(90)	0.49(50)

Single-Strand

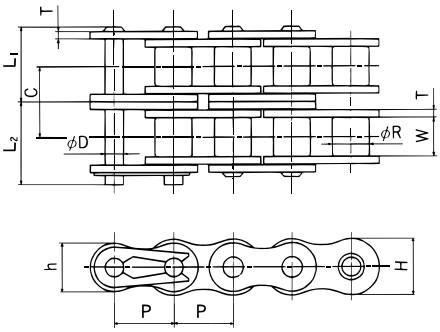






RS25SS
The OL of RS25SS is 2-pitch type.

Double-Strand



Connecting Link
RS11SS to RS60SS: Clip-type
RS80SS to RS240SS: Cotter Pin-type

SS / NS / AS Dimensions

TSUBAKI Chain No.			Pitch	Roller Diam.	Width b/w Roller Link Plates	Link Plate			Pin					Transverse Pitch	Max. Allowable Load kN(kgf)		Approx. Mass	No. of Links/ Unit	Delivery
						Thickness	Height	Height	Diam.				Offset Pin Length						
SS	NS	AS	P	R	W	T	H	h	D	$L_1 + L_2$	L_1	L_2	L	C	SS-NS	AS	kg/m		
RS 11SS	—	—	3.7465	*2.285	1.83	0.38	3.5	3.5	1.57	5.44	2.275	3.165	—	—	0.05 (5)	—	0.052	134	Fine Print types: Please consult Tsubaki **Bold Print types:** Stock items
RS 25SS	**RS25NS**	—	6.35	*3.30	3.18	0.75	5.84	5.05	2.31	8.6	3.8	4.8	—	—	0.12 (12)	—	0.14	160	
RS 35SS	**RS35NS**	—	9.525	*5.08	4.78	1.25	9.0	7.8	3.59	12.7	5.85	6.85	14.7	—	0.26 (27)	—	0.33	320	
RS 40SS	**RS40NS**	**RS40AS**	12.70	7.92	7.95	1.5	12.0	10.4	3.97	18.2	8.25	9.95	18.6	—	0.44 (45)	0.69 (70)	0.64	240	
RS 40SS-2										32.6	15.45	17.15	33.5	14.4	0.88 (90)		1.27		
RS 50SS	**RS50NS**	**RS50AS**	15.875	10.16	9.53	2.0	15.0	13.0	5.09	22.3	10.3	12.0	23.9	—	0.69 (70)	1.03 (105)	1.04	192	
RS 50SS-2										40.5	19.35	21.15	41.8	18.1	1.37 (140)		2.07		
RS 60SS	**RS60NS**	**RS60AS**	19.05	11.91	12.70	2.4	18.1	15.6	5.96	27.6	12.85	14.75	29.4	—	1.03 (105)	1.57 (160)	1.53	160	
RS 60SS-2										50.0	24.25	26.25	52.6	22.8	2.06 (210)		3.04		
RS 80SS	**RS80NS**	**RS80AS**	25.40	15.88	15.88	3.2	24.1	20.8	7.94	35.5	16.25	19.25	39.0	—	1.77 (180)	2.65 (270)	2.66	120	
RS 80SS-2										64.8	30.90	33.90	68.05	29.3	3.53 (360)		5.30		
RS100SS	—	—	31.75	19.05	19.05	4.0	30.1	26.0	9.54	42.6	19.75	22.85	46.5	—	2.55 (260)	—	4.01	96	
RS100SS-2	—	—								78.5	37.70	40.80	81.6	35.8	5.10 (520)	—	7.99		
RS120SS	—	—	38.10	22.23	25.40	5.0	36.2	31.2	11.11	55.55	25.75	29.80	59.7	—	3.82 (390)	—	6.13	80	
RS120SS-2	—	—								100.6	48.35	52.25	104.9	45.4	7.65 (780)	—	12.22		
RS140SS	—	—	44.45	25.40	25.40	6.0	42.2	36.4	12.71	61.1	28.15	32.95	66.2	—	4.61 (470)	—	7.91	68	
RS140SS-2	—	—								110.0	52.70	57.30	114.6	48.9	9.22 (940)	—	15.77		
RS160SS	—	—	50.80	28.58	31.75	7.0	48.2	41.6	14.29	72.1	33.55	38.55	77.3	—	6.37 (650)	—	10.86	60	
RS160SS-2	—	—								130.1	62.75	63.35	134.7	58.5	12.7 (1300)	—	21.66		
RS180SS	—	—	57.15	35.71	35.72	7.15	52.3	43.4	17.46	78.5	36.05	42.45	84.9	—	8.55 (872)	—	13.45	54	
RS200SS	—	—	63.50	39.68	38.10	8.0	60.3	52.0	19.85	84.8	39.5	45.3	90.8	—	10.8 (1100)	—	16.54	48	
RS240SS	—	—	76.20	47.63	47.63	9.5	72.4	62.4	23.81	105.2	47.5	57.7	112.6	—	15.7 (1600)	—	24.50	40	

Note: 1. Those marked with * are rollerless. The figure shown is the bushing diameter.
2. Multi-strand stainless steel chain and sprockets are made-to-order items.
Caution: The link plate thickness of large size chain greater than RS120SS differs to that of RS Roller Chain.

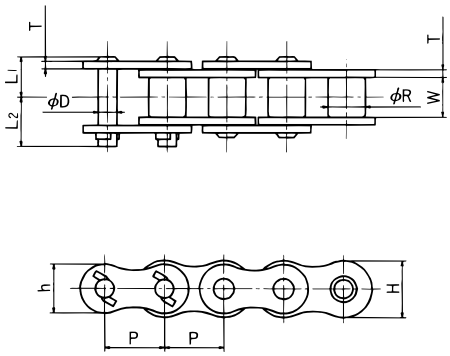
■ Model Identification

RS40 NP

Chain size — **Chain specification** **WP, SS, AS, NS, TI**

for Poly-steel chain
ie: RS40PC **ie: RS40PC-SY**

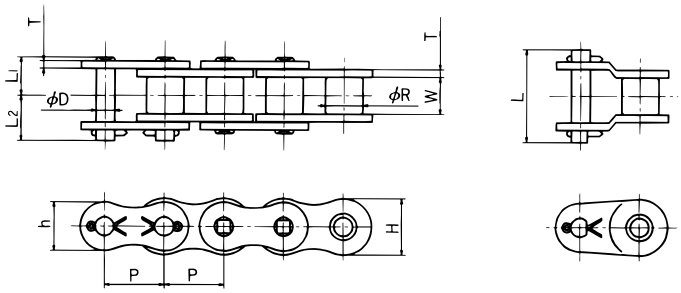
TSUBAKI DRIVE CHAINS TI Titanium Roller Chain



Chain No.	Pitch P	Roller Diam. R	Width b/w Inner Link Plates W	Link Plate			Pin				Max. Allowable Load kN(kgf)	Approx. Mass kg/m	No. of Links/ Unit	Delivery
				Thickness T	Height H	Height h	Diam. D	$L_1 + L_2$	L_1	L_2				
RS35TI	9.525	*5.08	4.78	1.25	9.0	7.8	3.59	13.2	6.05	7.15	0.26(27)	0.19	320	Please consult Tsubaki
RS40TI	12.70	7.92	7.95	1.5	12.0	10.4	3.97	18.35	8.25	10.1	0.44(45)	0.37	240	

Note: Those marked with * show the bushing diameter.

TSUBAKI DRIVE CHAINS KT Cold-Resistant Roller Chain

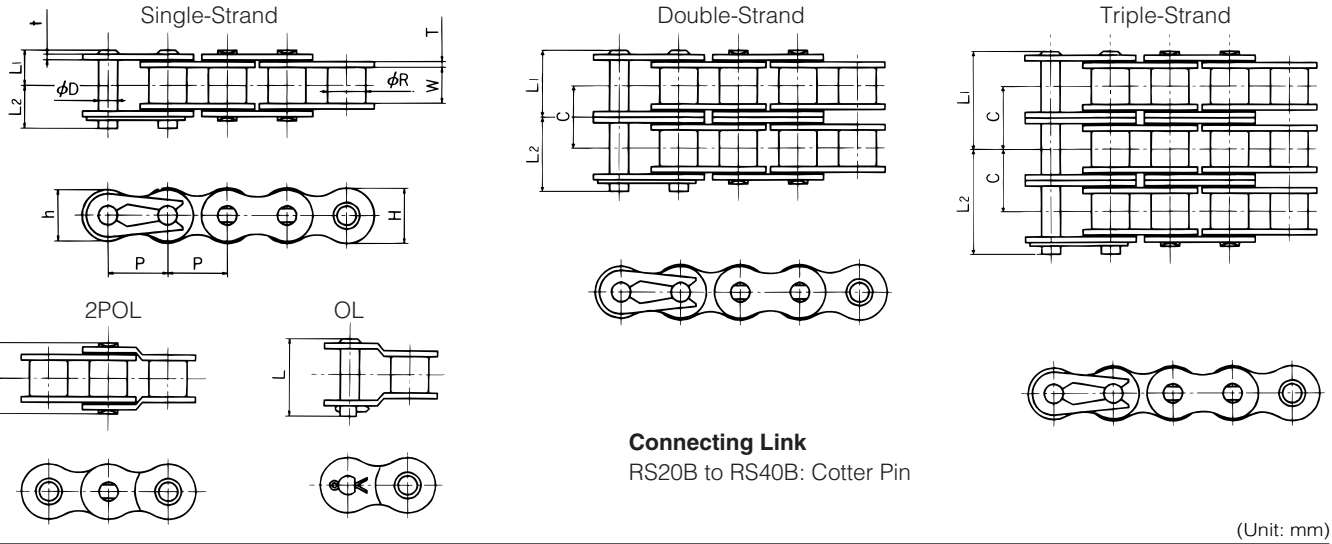


Chain No.	Pitch P	Roller Diam. R	Width b/w Inner Link Plates W	Link Plate			Pin				
				Thickness T	Height H	Height h	Diam. D	$L_1 + L_2$	L_1	L_2	Offset Pin Length L
RS 35KT	9.525	*5.08	4.78	1.25	9.0	7.8	3.59	12.9	5.85	7.05	13.5
RS 40KT	12.70	7.92	7.95	1.5	12.0	10.4	3.97	17.9	8.25	9.65	18.0
RS 50KT	15.875	10.16	9.53	2.0	15.0	13.0	5.09	22.2	10.3	11.9	23.7
RS 60KT	19.05	11.91	12.70	2.4	18.1	15.6	5.96	28.1	12.85	15.25	28.2
RS 80KT	25.40	15.88	15.88	3.2	24.1	20.8	7.94	35.5	16.25	19.25	38.8
RS100KT	31.75	19.05	19.05	4.0	30.1	26.0	9.54	42.6	19.75	22.85	45.6
RS120KT	38.10	22.23	25.40	4.8	36.2	31.2	11.11	53.8	24.9	28.9	55.8
RS160KT	50.80	28.58	31.75	6.4	48.2	41.6	14.29	68.7	31.85	36.85	71.0

Chain No.	Min. Tensile Strength kN(kgf)	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m	No. of Links/Unit	Delivery
RS 35KT	9.81(1000)	11.3(1150)	2.16(220)	0.33	320	Please consult Tsubaki
RS 40KT	17.7 (1800)	19.1(1950)	3.63(370)	0.64	240	
RS 50KT	28.4 (2900)	31.4(3200)	6.37(650)	1.04	192	
RS 60KT	40.2 (4100)	44.1(4500)	8.83(900)	1.53	160	
RS 80KT	71.6 (7300)	78.5(8000)	14.7(1500)	2.66	120	
RS100KT	107 (10900)	118 (12000)	22.6(2300)	3.99	96	
RS120KT	148 (15100)	167 (17000)	30.4(3100)	5.93	80	
RS160KT	255 (26000)	279 (28500)	53.0(5400)	10.10	60	

Note: 1. Those marked with * are rollerless. The figure shown is the bushing diameter.
2. The shape of offset pins differs depending on size.
3. When one-pitch offset links (OL) are used, the kW ratings become 65% of the values shown above.

BS/DIN ROLLER CHAINS ANTI-CORROSIVE SERIES



(Unit: mm)

TSUBAKI Chain No.	BS No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Plate Thickness T	Plate Thickness t	Plate Height H	Plate Height h	Pin Diam. D
RF 06B-SS	06B	9.525	6.35	5.72	1.27	1.0	8.2	8.2	3.28
RS 08B-SS	08B	12.7	8.51	7.75	1.6	1.6	11.8	10.4	4.45
RS 10B-SS	10B	15.875	10.16	9.65	1.5	1.5	14.7	13.7	5.08
RS 12B-SS	12B	19.05	12.07	11.68	1.8	1.8	16.1	16.1	5.72
RS 16B-SS	16B	25.4	15.88	17.02	4.0	3.2	21.0	21.0	8.28
RS 20B-SS	20B	31.75	19.05	19.56	4.4	3.4	26.0	26.0	10.19
RS 24B-SS	24B	38.1	25.40	25.40	6.0	5.6	33.4	31.2	14.63
RS 28B-SS	28B	44.45	27.94	30.99	7.5	6.3	36.4	36.4	15.90
RS 32B-SS	32B	50.8	29.21	30.99	7.0	6.3	42.2	41.6	17.81
RS 40B-SS	40B	63.5	39.37	38.10	8.5	8.0	52.9	52.0	22.89

Note: 1. Pin link plate thickness is for simplex chain. Multi-strand chains may differ due to horizontal pitch dimension.
2. Center sink pins are not available. Double stake riveting is applied.

(Unit: mm)

TSUBAKI Chain No.	No. of Strands	Pin Length $L_1 + L_2$	L_1	L_2	Offset Pin Length L	Transverse Pitch C	Min. Tensile Strength kN(kgf)	ISO "B" Tensile Strength kN(kgf)	Approx. Mass kg/m	No. of Links/Unit	Delivery
RF 06B-NP	1	14.0	6.35	7.65	14.2		9.0 (920)	8.90(910)	0.39		Stock Items
RF 06B-2-NP	2	24.0	11.43	12.57	—	10.24	17.0 (1730)	16.9(1720)	0.75	320	
RF 06B-3-NP	3	34.4	16.9	17.5	—		24.9 (2540)	24.9(2540)	1.11		
RS 08B-NP	1	18.1	8.4	10.0	18.4		19.0 (1930)	17.8(1820)	0.70		
RS 08B-2-NP	2	32.3	15.3	16.9	33.6	13.92	32.0 (3260)	31.1(3170)	1.35	240	
RS 08B-3-NP	3	46.2	22.25	23.85	47.6		47.5 (4840)	44.5(4540)	2.00		
RS 10B-NP	1	20.8	9.55	11.25	21.1		23 (2340)	22.2(2260)	0.95		
RS 10B-2-NP	2	37.4	17.85	19.55	39.4	16.59	44.5 (4540)	44.5(4540)	1.85	192	
RS 10B-3-NP	3	54.0	26.15	27.85	56.1		66.8 (6810)	66.7(6800)	2.80		
RS 12B-NP	1	24.1	11.2	13.1	24.8		31 (3160)	28.9(2950)	1.25		
RS 12B-2-NP	2	43.6	20.85	22.75	46.3	19.46	61 (6220)	57.8(5890)	2.50	160	
RS 12B-3-NP	3	63.1	30.6	32.5	66.0		92 (9400)	86.7(8840)	3.80		
RS 16B-NP	1	37.8	17.9	19.95	38.9		70 (7100)	60 (6120)	2.70		
RS 16B-2-NP	2	69.8	33.55	35.75	73.8	31.88	128 (13000)	106 (10800)	5.40	120	
RS 16B-3-NP	3	101.7	49.5	51.7	105.9		192 (19600)	160 (16300)	8.00		
RS 20B-NP	1	43.05	19.9	23.1	46.95		98.1(10000)	95 (9690)	3.85		Please consult TSUBAKI.
RS 20B-2-NP	2	79.35	38.25	41.45	84.85	36.45	197 (20100)	170 (17300)	7.65	96	
RS 20B-3-NP	3	115.6	56.5	59.7	121.35		295 (30100)	250 (25500)	11.45		
RS 24B-NP	1	57.9	26.65	31.85	62.0		167 (17000)	160 (16300)	7.45		
RS 24B-2-NP	2	106.5	50.8	56.0	112.95	48.36	335 (34100)	280 (28600)	14.65	80	
RS 24B-3-NP	3	155.2	75.1	80.2	161.35		500 (51000)	425 (43300)	21.75		
RS 28B-NP	1	69.9	32.45	37.45	74.5		200 (20400)	200 (20400)	9.45		
RS 28B-2-NP	2	129.45	62.15	67.15	136.85	59.56	374 (38100)	360 (36700)	18.80	68	
RS 28B-3-NP	3	189.05	91.95	96.95	196.45		560 (57100)	530 (54000)	28.20		
RS 32B-NP	1	69.8	32.1	37.7	73.5		255 (26000)	250 (25500)	10.25		
RS 32B-2-NP	2	128.35	61.25	66.85	135.25	58.55	485 (49500)	450 (45900)	20.10	60	
RS 32B-3-NP	3	186.9	90.5	96.1	193.8		729 (74300)	670 (68300)	29.90		
RS 40B-NP	1	84.3	39.25	45.05	88.85		373 (38000)	355 (36200)	16.35		
RS 40B-2-NP	2	156.65	75.4	81.2	163.55	72.29	716 (73000)	630 (64200)	32.00	48	
RS 40B-3-NP	3	228.95	111.5	117.3	235.85		1080 (110000)	950 (96900)	47.75		

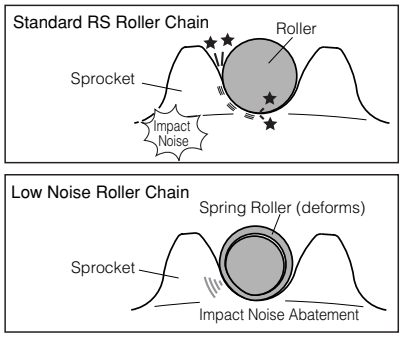
Note: 1. RF06B link plate is the flat-type ⊖.
2. There is one middle plate for RF06B, RS08B multi-strand chain.
3. Center sink pins are not available. Double stake riveting is applied.

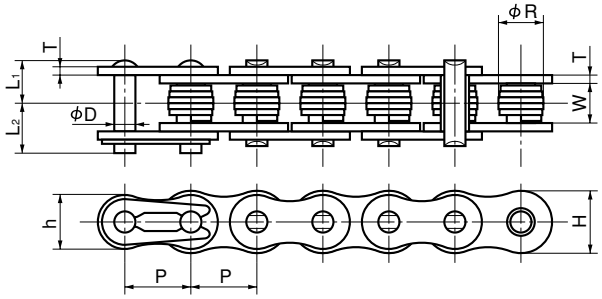
SN Roller Chain

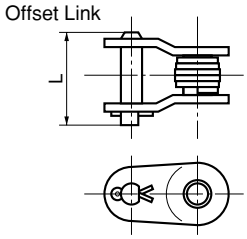
Tsubaki's uniquely structured spring rollers are used for the chain rollers. When Tsubaki's SN Roller Chain engages with the sprocket, the spring roller deforms and absorbs the force of the impact. The lower impact force reduces impact noise between chain and sprocket resulting in lower noise levels. Compared with Tsubaki's standard RS Roller Chain (pre-lubricated), noise levels of SN Roller Chain are 6 to 8 dB lower. (In-house comparison testing)

■ Low Noise Benefits

- Reduction of noise generated by the machines and equipment in the workplace helps improve the overall work environment.
- The low noise function is added to the machinery and equipment used for manufacturing, and contributes to upgrading and improving the overall image.
- Belts were considered as a countermeasure for noise, however, there are many limitations in terms of application, strength and overall cost. Taking these factors into consideration, Low Noise Chain is the perfect countermeasure.
- Recommended for applications where silence is a major concern, such as stage lifts used in theaters.







Connecting links for RS80SN are cotter pin-type.

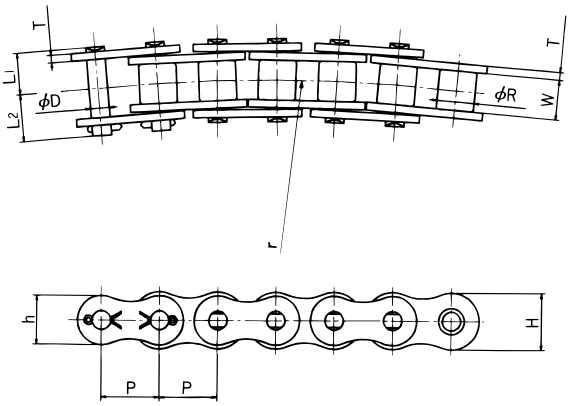
(Unit: mm)

TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate			Pin				
				Thickness T	Height H	Height h	Diam. D	$L_1 + L_2$	L_1	L_2	L
RS40SN	12.70	8.5	7.95	1.5	12.0	10.4	3.97	18.2	8.25	9.95	18.0
RS50SN	15.875	10.8	9.53	2.0	15.0	13.0	5.09	22.3	10.3	12.0	22.5
RS60SN	19.05	12.6	12.70	2.4	18.1	15.6	5.96	27.6	12.85	14.75	28.2
RS80SN	25.40	16.8	15.88	3.2	24.1	20.8	7.94	35.5	16.25	19.25	36.0

TSUBAKI Chain No.	Min. Tensile Strength kN(kgf)	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kg/m	Approx. Mass kg/m	No. of Links/Unit	Delivery
RS40SN	17.7(1800)	19.1(1950)	3.63(370)	0.64	240	Stock Items
RS50SN	28.4(2900)	31.4(3200)	6.37(650)	1.04	192	
RS60SN	40.2(4100)	44.1(4500)	8.83(900)	1.53	160	
RS80SN	71.6(7300)	78.5(8000)	14.7(1500)	2.66	120	

Note: When one-pitch offset links (OL) are used, the Max. Allowable Load becomes 65% of the values shown above.

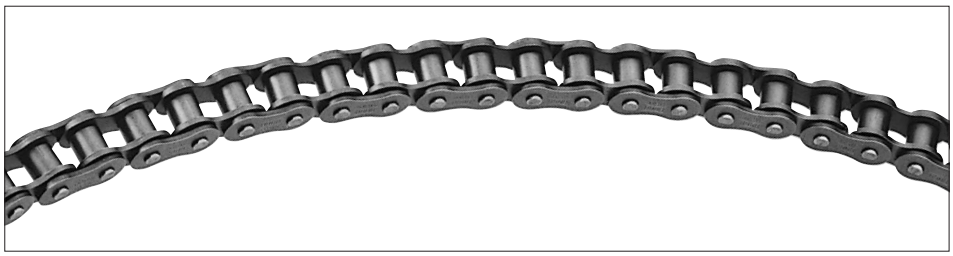
CU Curved Chain



TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate			Pin				Min. Radius R	Ave. Tensile Strength kN(kgf)	Max. Allowable Load kN(kgf)	Approx. Mass kg/m	No. of Links/ Unit	Delivery
				Thickness T	Height H	Height h	Diam. D	$L_1 + L_2$	L_1	L_2						
RS40CU	12.70	7.92	7.95	1.5	12.0	10.4	3.97	18.2	8.45	9.75	350	15.5(1580)	1.86(190)	0.61	240	Stock items
RS50CU	15.875	10.16	9.53	2.0	15.0	13.0	5.09	23.0	10.60	12.40	400	24.1(2460)	2.84(290)	1.01	192	
RS60CU	19.05	11.91	12.70	2.4	18.1	15.6	5.96	28.3	13.25	15.05	500	34.9(3560)	4.02(410)	1.40	160	
RS80CU	25.40	15.88	15.88	3.2	24.1	20.8	7.94	36.8	16.75	20.05	600	61.6(6280)	6.96(710)	2.47	120	

■ Stainless Steel (SUS304)

TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate			Pin				Min. Radius R	Max. Allowable Load kN(kgf)	Approx. Mass kg/m	No. of Links/ Unit	Delivery
				Thickness T	Height H	Height h	Diam. D	$L_1 + L_2$	L_1	L_2					
RS40SS-CU	12.70	7.92	7.95	1.5	12.0	10.4	3.59	18.1	8.35	9.75	400	0.26 (27)	0.61	240	Please consult Tsubaki
RS50SS-CU	15.875	10.16	9.53	2.0	15.0	13.0	3.97	22.2	10.15	12.05	500	0.44 (45)	1.01	192	
RS60SS-CU	19.05	11.91	12.70	2.4	18.1	15.6	5.09	28.3	13.25	15.05	600	0.69 (70)	1.40	160	
RS80SS-CU	25.40	15.88	15.88	3.2	24.1	20.8	5.96	35.0	16.50	18.50	800	1.03(105)	2.47	120	



Bearing Roller Conveyor Chain

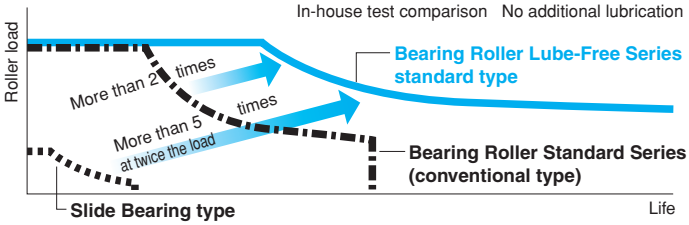
Lube-Free Series

The Bearing Roller Conveyor Chain Lube-Free Series is an "economical" and "environmentally friendly" conveyor chain which excels in a variety of environmental applications.

Lubrication Unnecessary · Long Life

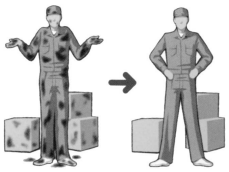
Due to the adoption of a unique cylindrical roller bearing having a self-lubricating function between the bushing and roller, this chain can be used without lubrication and boasts a long life second to none.

When using the chain without lubricant, the wear life between the bushing and the roller is more than 2 times that of the current Bearing Roller Conveyor Chain standard series, and has more than 5 times the wear life of the general slide bearing type at twice the load.



- **Large scale reduction in maintenance frequency and related expenses**
- **Maintains a clean environment**
- **Sharp reduction in replacement frequency**

Large-scale reductions in maintenance frequency and attributable expenses are realized. Conveyed items, equipment, and machinery are all kept clean maintaining a clean environment. Moreover, its long life also contributes to the reduction of replacement costs.



Compactness (low energy, minimal space)

Chain running resistance is small compared to the standard slide bearing type.

- **Reduction of required power**
- **Chain/Conveyor size reduced**

It is possible to reduce the required power by downsizing the chain and conveyor. This allows for a reduction in the overall cost of the equipment.

Running Stability

As the chain's running resistance variation is low, the stick-slipping phenomenon is reduced.

- **Improves Productivity**
- **Reduction in sea-sickness phenomenon**

Running stability assists in the prevention of toppling products and product deformation. Moreover, the sea-sickness phenomenon, typical when working on a conveyor, can be avoided.

Copes in Various Environmental Applications

The lube-free series has been prepared to satisfy 3 specifications according to environmental use and can be used in a wide variety of applications. The roller can be used without a lubricant in all 3 specifications thanks to the adoption of a unique cylindrical roller bearing, which has a self-lubricating function between the bushing and roller.

General Environment

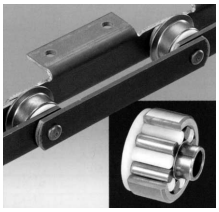
Lube-Free Series
Standard Type
This is a lube-free Bearing Roller Conveyor Chain for general conveyance.

Examples of use:
- Automobile assembly conveyor
- Paper roll conveyor
- Building materials conveyor
- Other general conveyors

Wet Environment

Lube-Free Series
Water Resistant Type
The anti-corrosive performance and wear resistance of the roller has been raised remarkably through the chain's design giving it longer life.

Examples of use:
- Car wash
- Outdoors
- Automobile shower lines
- Other lines exposed to water



High Temperature Environments up to 300°C

Lube-Free Series
Heat Resistant Type
Designed to increase wear resistance significantly in high temperature environments (max 300°C) resulting in longer life.

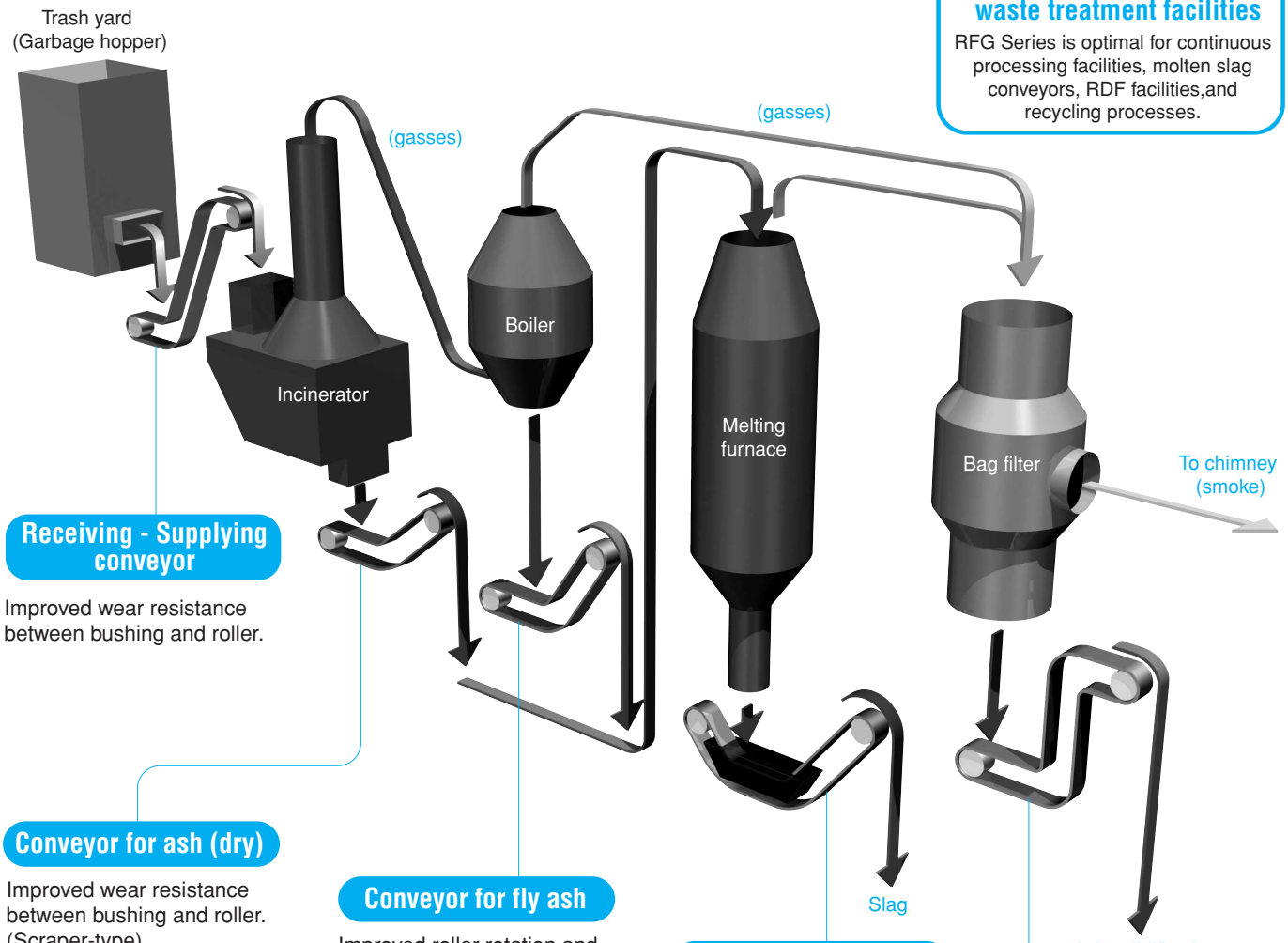
Examples of use:
- Bread baking ovens
- Other high temperature environments where the temperature reaches 300°C
- All types of dryers

Tsubaki RFG Series Conveyor Chains play an active role in tough environments

Whether in the fly ash environment of waste processing or underwater, RFG Series has the toughness required for operation in harsh conditions. As well as superior resistance to corrosion and wear, our new chains for slag conveyors offer excellent roller rotation and chain articulation performance.

First in the industry! Chains designed for waste treatment facilities

RFG Series is optimal for continuous processing facilities, molten slag conveyors, RDF facilities,and recycling processes.



Receiving - Supplying conveyor

Improved wear resistance between bushing and roller.

Conveyor for ash (dry)

Improved wear resistance between bushing and roller.
(Scraper-type)
Chain used:
RFG12200R(AG)

Conveyor for wet ash

Improved roller rotation and chain articulation despite a build up of ash, ash sludge, and other matter.

Conveyor for fly ash

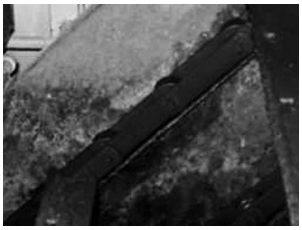
Improved roller rotation and chain articulation despite a build up of fly ash.
(Scraper-type)
Chain used:
RFG03075R(FG)

Conveyor for fly ash (corrosive content)

Made to counteract corrosion and poor chain articulation caused by a build up of ash.

Conveyor for molten slag

To allow use in harsh conditions, corrosion resistance and wear resistance have been improved.
(Scraper-type)
Chain used:
RFG17200R(YP)



Conveyor for fly ash

Improved roller rotation and chain articulation despite a build up of fly ash.

Chains for molten slag conveyors

Recommended with confidence.

At Tsubaki we are proud of our hard-won expertise and proven track record. Try our YP-type chains, designed to resist wear and corrosion, and see for yourself how effective they really are.

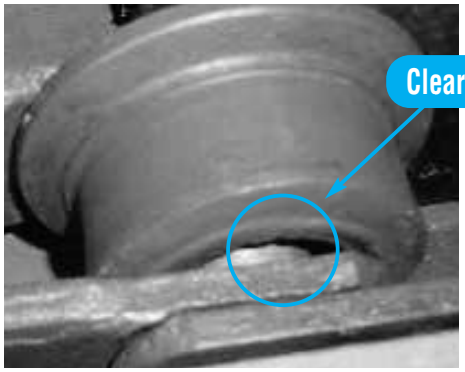
Typical applications

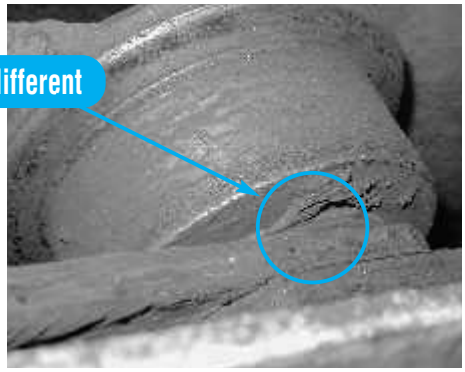
Comparative durability

After one year's service in a molten slag conveyor

Wear life between bushing and roller of Tsubaki AT-specification strengthened chain

Minimum wear between bushing and roller of YP-specification molten slag conveyor chain (1/10 the wear of AT-specification).

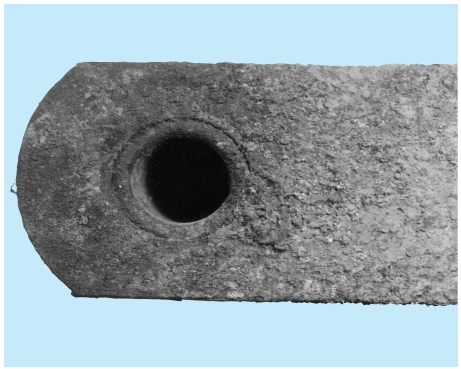




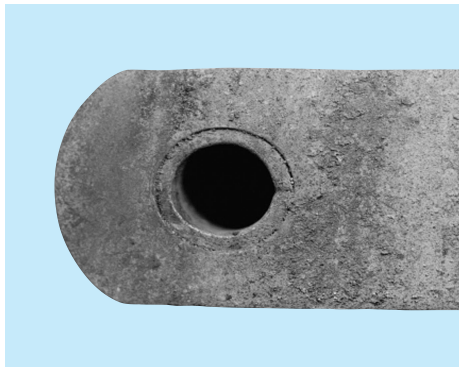
Corrosion trial

Results after a six-week immersion in corrosive liquid at approx. 80°C (176°F).

Tsubaki reinforced AT-type chain shows severe rusting and pitting.



YP-type molten slag conveyor chain shows no rusting or pitting.



Summary of Specifications and Applications

1. General Use RF Double-Pitch Chain, RS Attachment Chain

Standard	Steel (All parts hardened through heat treatment)

1. The most versatile chain of the attachment chain range.
2. Ambient Temperature: -10ºC to +60ºC (+14˚F to +140˚F)

2. Lube-Free Lambda (Λ) Chain

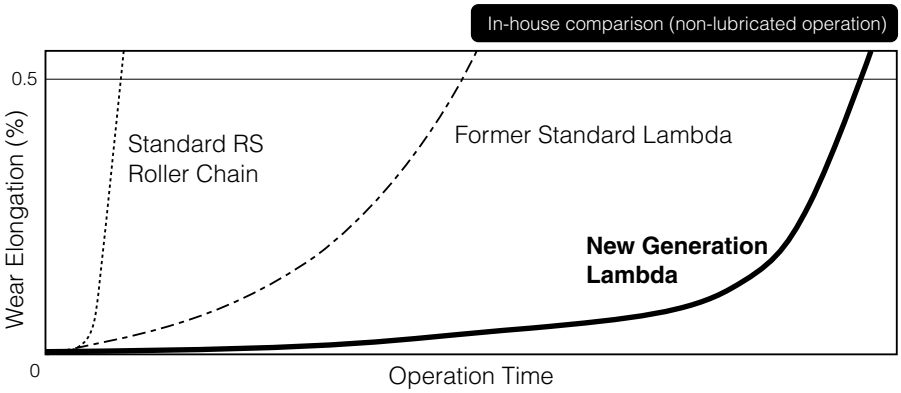
Standard	Special oil-impregnated sintered bushing + steel chain (All parts hardened through heat treatment)

1. Inner / Outer plates are blackened to improve corrosion resistance and appearance.
2. Ambient Temperature: -10ºC to +150ºC (+14ºF to +302ºF)

Λ–NP	Specially nickel-plated except sintered bushing in Standard type above. ※1

1. Standard type with added corrosion resistance.
2. Ambient Temperature: -10ºC to +150ºC (+14ºF to +302ºF)

Ambient Temperature: –10°C to +60°C (+14°F to +140°F)

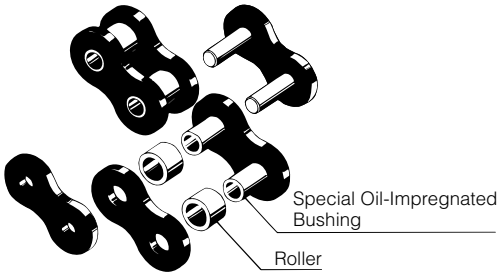


- Twice the wear elongation life of former Standard Lambda (–10°C to +60°C / +14°F to +140°F)
- More than 14 times the wear elongation life of Standard RS Roller Chain (N.B. #120 and #140 have 5 times the life of Standard RS Roller Chain)

■ Interchangeability

Lambda Chain is interchangeable with Standard RS Roller Chain. However, as the pins are longer than that of Standard RS Roller Chain, please make sure that there is no interference with the machine.

■ Basic Construction



Lambda Chain (Std.): Inner/Outer plates are blackened
Lambda Chain (Nickel Plated): All nickel-plated (except bushings)

⚠ ΛChain Safety Use

※) Avoid using Lambda (Λ) Chain where it may be subjected to chemicals, submerged in water, or come in contact with detergents/degreasing agents.

3. Lube-Free Plastic Sleeve Chain

Standard	Engineering plastic sleeve + engineering plastic roller (polyacetal) + steel chain (heat treat hardened)

1. Engineering plastic sleeves are inserted between the pins and bushings, and engineering plastic rollers are also used.
2. ※Steel rollers are also available.

SS	Engineering plastic sleeve + engineering plastic roller (polyacetal) + SUS304 chain

1. Sleeve chain with corrosion resistance.
2. ※Stainless steel rollers are also available.

■Outstanding wear resistance and greatly improved operating life

Refer graph on right.

■Sanitary

As contact is made between engineering plastic and steel, there is no generation of metal wear dust . This creates a sanitary environment and keeps the equipment clean.

■Lightweight

Rollers are made from engineering plastic making them lightweight. Compared to steel rollers, weight is significantly reduced: S-roller: approx. 15% less, R-roller: approx. 40% less.

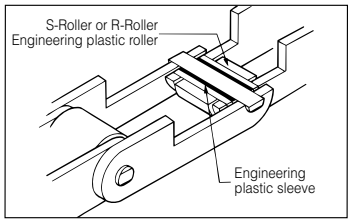
■Low Noise

Quiet conveyance is made possible thanks to the use of engineering plastic for the rollers and sleeves (7 to 10 dB reduction compared to steel chain).

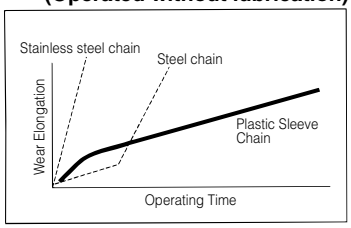
★Rollers can be exchanged between steel and stainless steel. However, lubrication is required between the rollers and bushings in principle.

⚠ Do not use plastic sleeve chain in wet environments / underwater.

Construction



Comparison of Wear Resistance (Operated without lubrication)



4. Lightweight / Low Noise Plastic Roller Chain

Standard-P	Engineering plastic roller (polyacetal) + steel chain (heat treat hardened)

1. Rollers are made from engineering plastic.

P-NP	Standard - P above with specially nickel-plated components (except rollers).

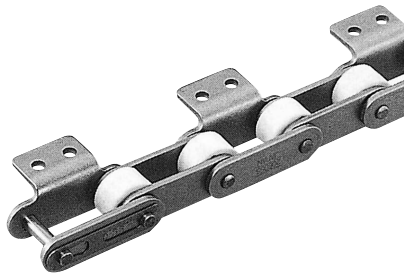
1. Slightly corrosion resistant chain.

P-SS	Engineering plastic roller (polyacetal) + SUS304 chain

1. Corrosion resistant chain.

PN – Low Noise	Low noise PN series of the three types above.

1. Not only are the rollers made from engineering plastic, but a special low-noise engineering plastic is used (-7 dB).
2. Color of special engineering plastic roller: Ultralight Cream



■Plastic Roller Chain Performance

①Lightweight (approx. 30% lighter than steel)

②Low Noise (approx. 5 to 7 dB less than steel)

③Running Resistance (approx. 30% less than steel)

④Ambient Temperature: -10ºC to +80ºC (+14ºF to +176ºF)

⑤Engineering plastic roller color: White

5. High Precision / Indexing Conveyance Needle Bush Chain

Standard – RFN Inserted needles (steel) between pins and bushings + steel chain (Only plates have been nickel plated)

1. Chain wear elongation is almost non-existent. (Refer graph below)
   Ambient Temperature: -10ºC to +60ºC (+14ºF to +140ºF)
2. General type for indexing conveyance.

RFN-HG RFN High Precision Type

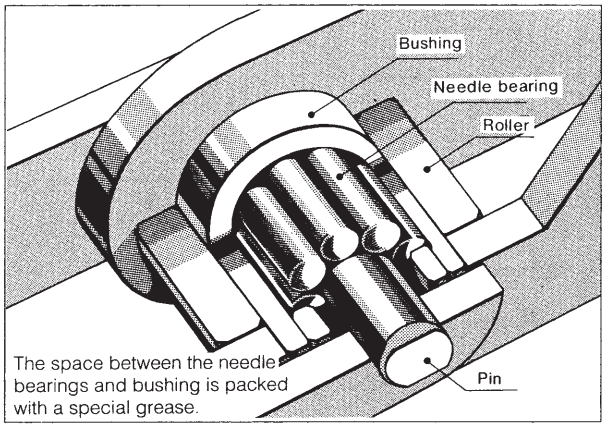
1. Upper surface of attachments is ground.
2. Plates have been nickel plated except for upper surface of attachments.
3. Clearance between bushing and roller has been reduced.

RFN-S S All components are SUS304 except for needles.

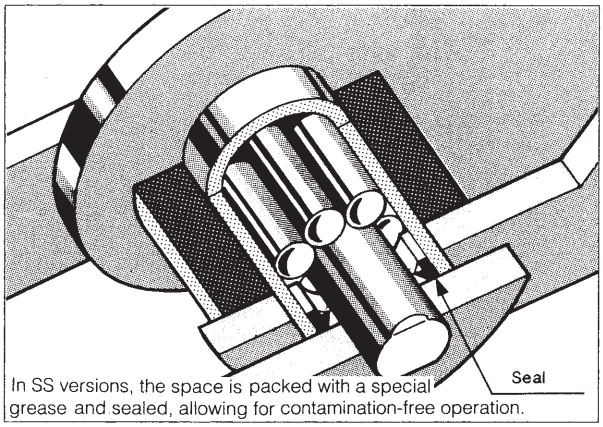
1. Sealed bearing area allows use in wet environments.
2. Wear elongation of the chain is only very slight. (Refer graph below)

Thanks to the abatement of wear elongation, it is now possible to use this chain in conveyor systems that weren't conventionally possible. It also contributes ideally to automation, low energy and high speed for improving productivity.

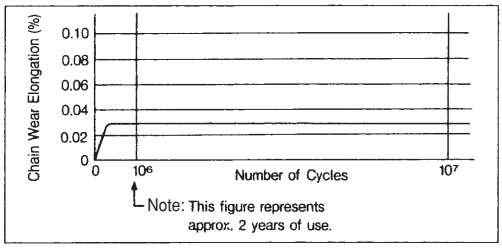
■Standard · Ground (HG) Type



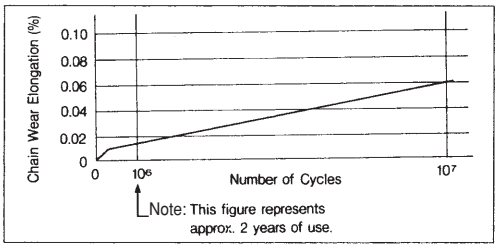
■Stainless Steel Type



After the initial 0.03% elongation
■Standard Type/HG Type



Only 0.06% elongation after 107 bending cycles.
■SS Type (Stainless Steel)



Chain size : RFN 2040R
Chain length : 22 links
Chain tension : Standard type 780N (80 kgf)
SS type 440N (45 kgf)
No. of sprocket teeth : $12^T \times 12^T$
Non-Indexing drive

For all high precision applications where elongation cannot be tolerated.

e.g.) - Automated assembly equipment
- Inspecton equipment
- Packing machinery
- Filling equipment
- Manufacturing machinery
- Indexing machinery

☆STRAIGHT LINE CONVEYING
☆HIGH PRECISION CONVEYING

1. Chain Types/Sizes and Strength

RF Double Pitch Chain [S-Roller R-Roller]		
Standard	Ave. Tensile Strength kN{k gf}	Max. Allowable Load kN{k gf}
RF2040	16.7{ 1700}	2.65{ 270}
RF2050	27.5{ 2800}	4.31{ 440}
RF2060	40.2{ 4100}	6.28{ 640}
RF2080	68.6{ 7000}	10.7 {1090}
RF2100	108 {11000}	17.1 {1740}
RF2120	151 {15400}	23.9 {2440}
RF2160	258 {26300}	40.9 {4170}

Lambda (Λ) Chain [S-Roller R-Roller]			
Standard	Λ-NP	Ave. Tensile Strength kN{k gf}	Max. Allowable Load kN{k gf}
RFC2040-Λ	RFC2040NP-Λ	15.7{ 1600}	2.65{ 270}
RFC2050-Λ	RFC2050NP-Λ	25.5{ 2600}	4.31{ 440}
RFC2060-Λ	RFC2060NP-Λ	37.3{ 3800}	6.28{ 640}
RFC2080-Λ	RFC2080NP-Λ	63.7{ 6500}	10.7 {1090}
RFC2100-Λ	RFC2100NP-Λ	100 {10200}	17.1 {1740}

Plastic Sleeve Chain (Plastic Roller)			
Standard	SS	Max. Allowable Load kN{k gf}	
		S-Roller	R-Roller
RFS2040	RFS2040SS	0.23{23}	0.44{ 45}
RFS2050	RFS2050SS	0.34{35}	0.69{ 70}
RFS2060	RFS2060SS	0.54{55}	1.03{105}

In the case of stainless steel rollers, values for S-Roller and R-Roller are the same as those for R-Roller mentioned above.

Corrosion Resistant Chain LS / Max. Allowable Load kN{k gf}			
TSUBAKI Chain No.	Stainless Steel Roller	Plastic Roller	
	S / R-Roller	S-Roller	R-Roller
RF2040LS	0.44{ 45}	0.23{23}	0.44{ 45}
RF2050LS	0.69{ 70}	0.34{35}	0.69{ 70}
RF2060LS	1.03{105}	0.54{55}	1.03{105}
RF2080LS	1.77{180}	–	–

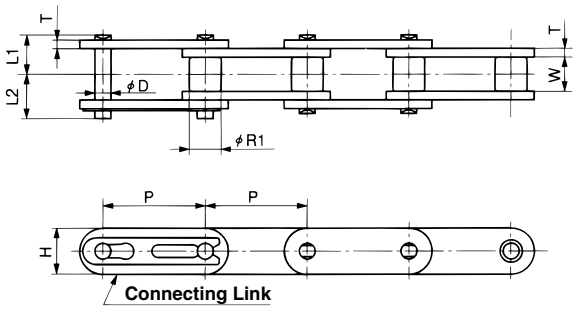
Corrosion Resistant Chain [S-Roller R-Roller]							
NP		WP		SS		AS	
TSUBAKI Chain No.	Max. Allowable Load kN{k gf}	TSUBAKI Chain No.	Max. Allowable Load kN{k gf}	TSUBAKI Chain No.	Max. Allowable Load kN{k gf}	TSUBAKI Chain No.	Max. Allowable Load kN{k gf}
RF2040NP	2.65{ 270}	RF2040WP	2.65{ 270}	RF2040SS	0.44{ 45}	RF2040AS	0.69{ 70}
RF2050NP	4.31{ 440}	RF2050WP	4.31{ 440}	RF2050SS	0.69{ 70}	RF2050AS	1.03{105}
RF2060NP	6.28{ 640}	RF2060WP	6.28{ 640}	RF2060SS	1.03{105}	RF2060AS	1.57{160}
RF2080NP	10.7 {1090}	RF2080WP	10.7 {1090}	RF2080SS	1.77{180}	RF2080AS	2.65{270}
RF2100NP	17.1 {1740}	–	–	RF2100SS	2.55{260}	–	–
RF2120NP	23.9 {2440}	–	–	RF2120SS	3.82{390}	–	–
RF2160NP	40.9 {4170}	–	–	RF2160SS	6.37{650}	–	–

Plastic Roller Chain [P] (R-Roller)			Plastic Roller Low Noise [PN] (R-Roller)			Plastic Roller [P/PN] Max. Allowable Load kN{k gf}
Standard	NP	SS	Standard	NP	SS	
RF2040R-P	RF2040NPR-P	RF2040SSR-P	RF2040R-PN	RF2040NPR-PN	RF2040SSR-PN	0.44{ 45}
RF2050R-P	RF2050NPR-P	RF2050SSR-P	RF2050R-PN	RF2050NPR-PN	RF2050SSR-PN	0.69{ 70}
RF2060R-P	RF2060NPR-P	RF2060SSR-P	RF2060R-PN	RF2060NPR-PN	RF2060SSR-PN	1.03{105}
RF2080R-P	RF2080NPR-P	RF2080SSR-P	RF2080R-PN	RF2080NPR-PN	RF2080SSR-PN	1.77{180}
RF2100R-P	RF2100NPR-P	RF2100SSR-P	–	–	–	2.55{260}

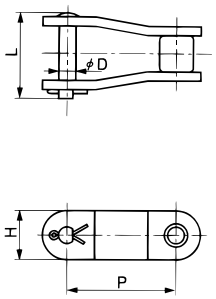
Hollow Pin Chain [S-Roller (Bushed Type) R-Roller]							
Standard	NP	SS	Lambda (Λ) Chain	Ave.Tensile Strength kN{k gf}	Max. Allowable Load kN{k gf}		
				Standard / NP	Standard / NP	SS	Lambda (Λ) Chain
RF2040HP	RF2040HP-NP	RF2040HP-SS	RFC2040HP-Λ	10.8{1100}	1.77{180}	0.44{ 45}	1.47{150}
RF2050HP	RF2050HP-NP	RF2050HP-SS	RFC2050HP-Λ	19.6{2000}	3.14{320}	0.69{ 70}	2.55{260}
RF2060HP	RF2060HP-NP	RF2060HP-SS	RFC2060HP-Λ	26.5{2700}	4.22{430}	1.03{105}	3.43{350}
RF2080HP	RF2080HP-NP	RF2080HP-SS	RFC2080HP-Λ	48.1{4900}	7.65{780}	1.77{180}	6.18{630}

2. Base chain dimensions RF Double Pitch / Lambda / Plastic Sleeve / Plastic Roller / Corrosion Resistant Chain

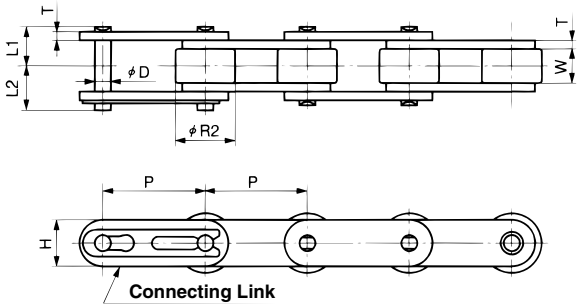
S-Roller



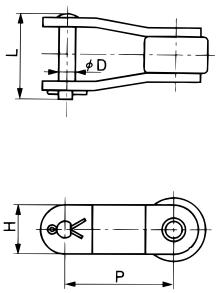
Offset Link



R-Roller



Offset Link



Clip-type pins are used in connecting links for sizes RF2040 to RF2060.
Cotter pins are used for sizes RF2080 and above. Rivet-type pins are used for the base chain.

TSUBAKI Chain No.	Roller Type	Pitch P	Roller Diam.		Width b/w Roller Link Plates W	Pin			Offset Pin Length L	Link Plate	
			S-Roller R1	R-Roller R2		Diam. D	L1	L2		Thickness T	Height H
RF2040	S・R	25.40	7.92	15.88	7.95	3.97	8.25	9.95	18.0	1.5	12.0
RF2050		31.75	10.16	19.05	9.53	5.09	10.30	12.0	22.5	2.0	15.0
RF2060		38.10	11.91	22.23	12.70	5.96	14.55	16.55	31.5	3.2	17.2
RF2080		50.80	15.88	28.58	15.88	7.94	18.30	20.90	39.2	4.0	23.0
RF2100		63.50	19.05	39.69	19.05	9.54	21.80 〈22.30〉	24.50 〈24.90〉	47.5 〈50.0〉	4.8 〈5.0〉	28.6
RF2120		76.20	22.23	44.45	25.40	11.11	26.95 〈28.05〉	30.55 〈31.55〉	59.0 〈63.5〉	5.6 〈6.0〉	34.4
RF2160		101.60	28.58	57.15	31.75	14.29	33.95 〈35.70〉	38.45 〈41.10〉	74.1	7.15 〈8.0〉	48.2

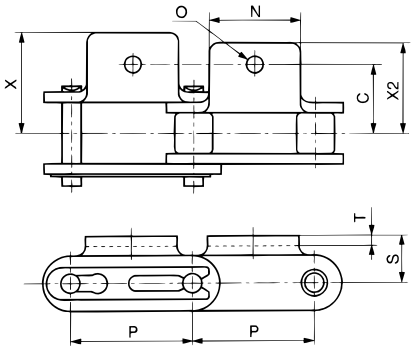
TSUBAKI Chain No.	Approx. Mass kg/m					No. of Links/Unit
	Steel		Plastic Sleeve & LS Plastic Roller Chain		Plastic Roller	
	S-Roller	R-Roller	S-Roller	R-Roller	R-Roller	
RF2040	0.51	0.87	0.44	0.50	0.52	120
RF2050	0.84	1.30	0.76	0.81	0.83	96
RF2060	1.51	2.19	1.36	1.45	1.48	80
RF2080	2.41	3.52	–	–	2.64	60
RF2100	3.54 〈3.66〉	5.80 〈 5.92〉	–	–	3.63 〈3.75〉	48
RF2120	5.08 〈5.37〉	8.13 〈 8.42〉	–	–	–	40
RF2160	8.96 〈9.84〉	13.70 〈14.58〉	–	–	–	30

Values in brackets are for Corrosion Resistant SS type.

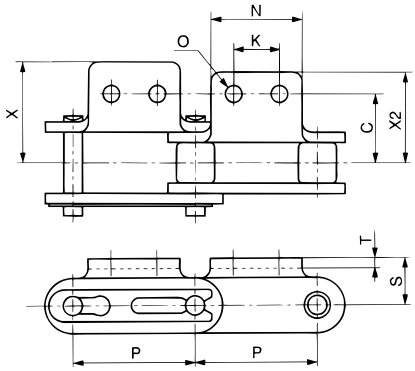
3. Attachment Dimensions RF Double Pitch / Lambda / Plastic Sleeve / Plastic Roller / Corrosion Resistant Chain

Refer to previous page for base chain dimensions.

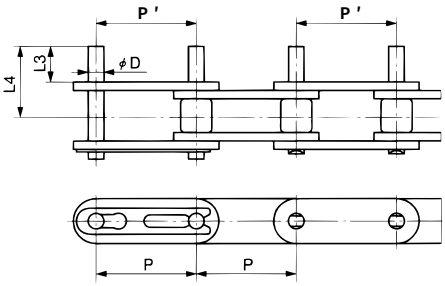
A-1 Attachment



A-2 Attachment

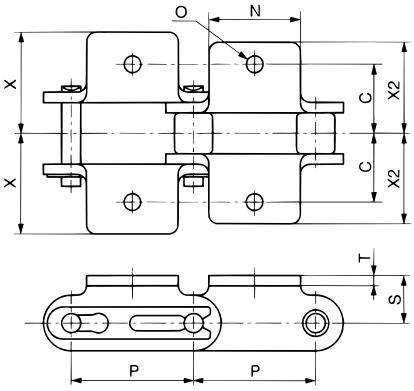


EP Attachment

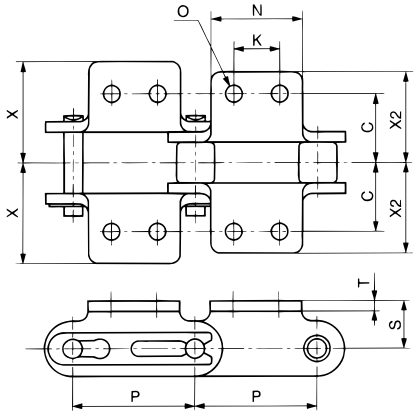


1. The D-dimension for the pin end is slightly wider for NP type.
2. The actual P' dimension differs to that of P. Please consult TSUBAKI.

K-1 Attachment

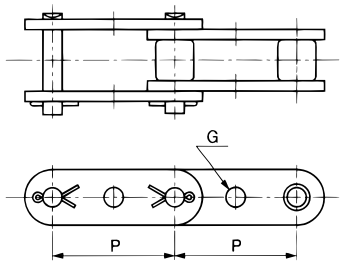


K-2 Attachment

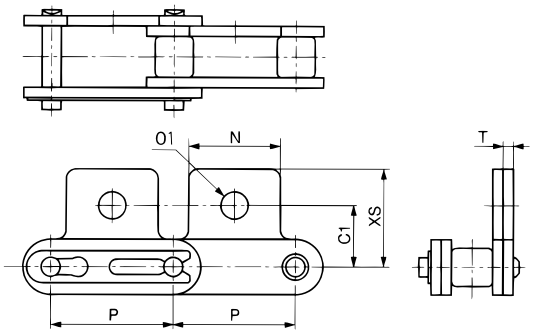


GK-1 Attachment

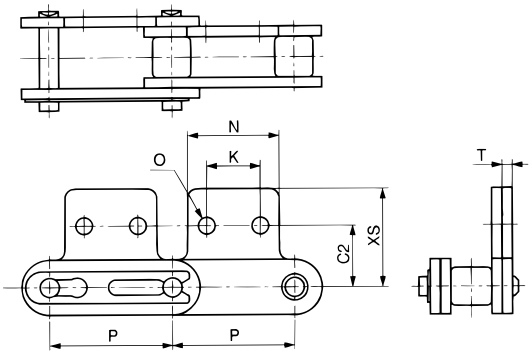
R-Roller not available.



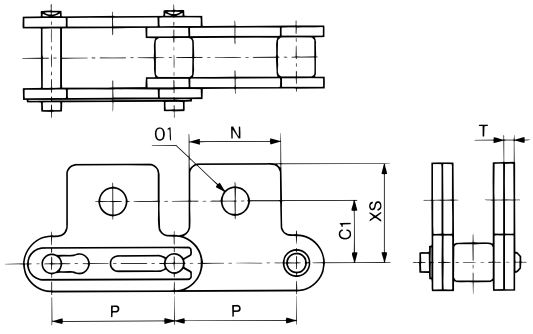
SA-1 Attachment



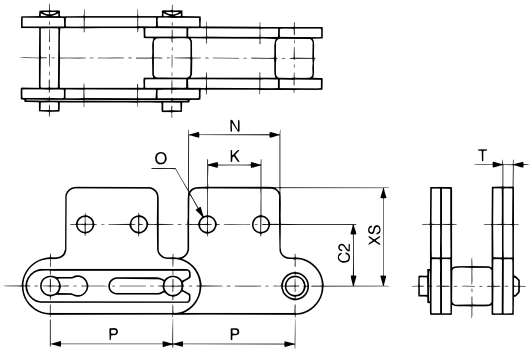
SA-2 Attachment



SK-1 Attachment



SK-2 Attachment



■Except for the connecting links, riveted pins are used regardless of whether there is an attachment or not.
■Attachment dimensions are the same for S-Rollers (in drawings above) and R-Rollers. The drawings above show attachments on every link.
■Connecting Link Pin Type: Clip-type for RF2040 to RF2060, and cotter pin for sizes RF2080 and above.
However, cotter pins are used for connecting links with GK-1 attachments regardless of the size.
■X and X2 represent the attachment width for the pin link and roller link respectively.

Attachment Dimensions Table (A / K / SA / SK / EP / GK)

(Dimensional drawings are shown on the previous page)

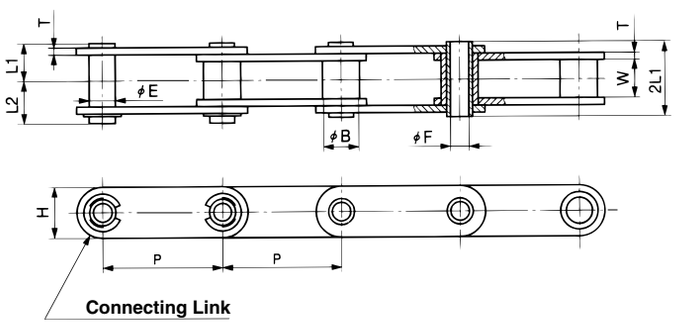
TSUBAKI Chain No.	Roller Type	Pitch P	C	C1	C2	K	N	O	O1	S	T
RF2040	S・R	25.40	12.7	11.1	13.6	9.5	19.1	3.6	5.2	9.1	1.5
RF2050		31.75	15.9	14.3	15.9	11.9	23.8	5.2	6.8	11.1	2.0
RF2060		38.10	21.45	17.5	19.1	14.3	28.6	5.2	8.7	14.7	3.2
RF2080		50.80	27.8	22.2	25.4	19.1	38.1	6.8	10.3	19.1	4.0
RF2100		63.50	33.35	28.6	31.8	23.8	47.6	8.7	14.3	23.4	4.8 〈5.0〉
RF2120		76.20	39.7	33.3	37.3	28.6	57.2	14	16	27.8	5.6 〈6.0〉
RF2160		101.60	52.4	44.5	50.8	38.1	76.2	18	22	36.5	7.15 〈8.0〉

TSUBAKI Chain No.	X	X2	XS	D	L3	L4	G	Additional Mass per Attachment kg/att.		
								A, SA Attachment	K, SK Attachment	EP Attachment
RF2040	19.3	17.6	19.8	3.97	9.5	16.75	4.1	0.003	0.006	0.001
RF2050	24.2	22.0	24.6	5.09	11.9	21.0	5.1	0.006	0.012	0.002
RF2060	31.5	28.2	30.6	5.96	14.3	27.45	6.1	0.017	0.034	0.003
RF2080	40.7	36.6	40.5	7.94	19.1	35.5	8.1	0.032	0.064	0.007
RF2100	49.9	44.9	50.4	9.54	23.8	43.4	10.1	0.060 〈0.063〉	0.120 〈0.126〉	0.012
RF2120	60.7 〈61.6 〉	54.4 〈55.2 〉	59.9	–	–	–	–	0.100 〈0.107〉	0.200 〈0.214〉	–
RF2160	77.8 〈80.35〉	70.0 〈71.65〉	78.6	–	–	–	–	0.203 〈0.227〉	0.400 〈0.454〉	–

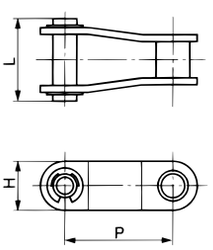
Values in brackets are for Corrosion Resistant SS type.

Hollow Pin Chain

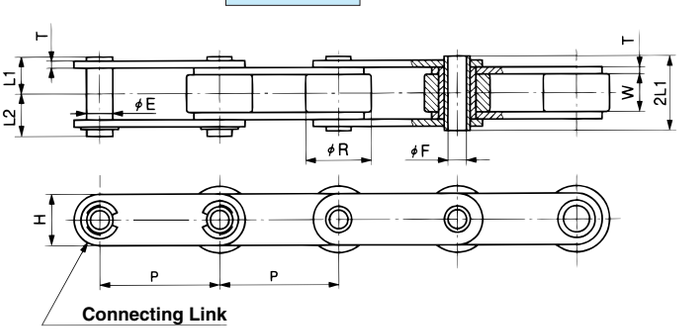
S-Roller (Bushed-type)



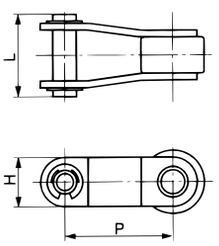
Offset Link



R-Roller

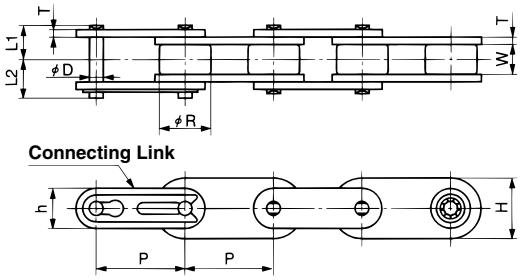


Offset Link

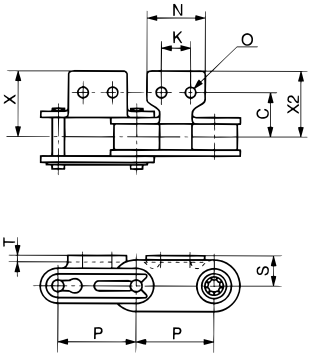


TSUBAKI Chain No.	Roller Type	Pitch P	Bushing Diam. B	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate		Pin					Approx. Mass kg/m		No. of Links/Unit
						Thickness T	Height H	Outer Diam. E	Inner Diam. F(Min.)	L1	L2	L	Bushed-Type	R R-Roller	
RF2040HP	S・R	25.40	7.92	15.88	7.95	1.5	12.0	5.68	4.00	8.00	9.50	19.1	0.46	0.82	120
RF2050HP		31.75	10.16	19.05	9.53	2.0	15.0	7.22	5.12	10.05	11.65	23.4	0.75	1.21	96
RF2060HP		38.10	11.91	22.23	12.70	2.4	17.2	8.38	5.99	12.55	14.25	28.7	1.38	2.06	80
RF2080HP		50.80	15.88	28.58	15.88	3.2	23.0	11.375	8.02	16.25	17.80	35.7	1.80	2.81	60

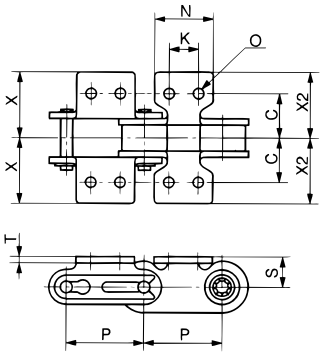
Standard / High Precision <HG> Chain



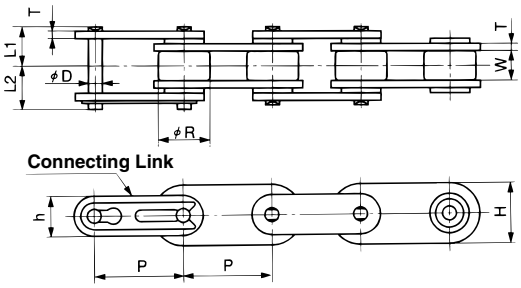
A-2 Attachment



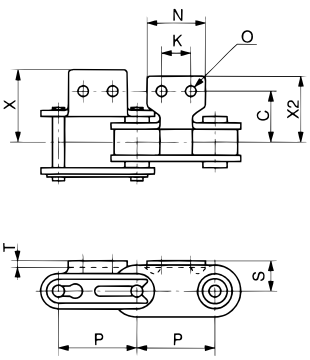
K-2 Attachment



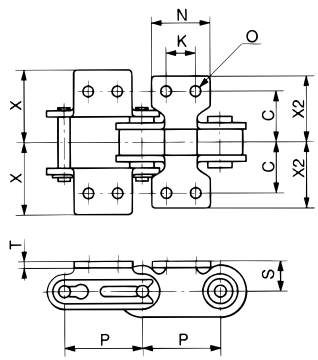
Stainless Steel <SS> Chain



A-2 Attachment



K-2 Attachment



TSUBAKI Chain No.		Max. Allowable Load kN{kgf}	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate			Pin			Approx. Mass kg/m
Standard	High Precision					Thickness T	Height h	Height H	Diam. D	L1	L2	
RFN2040R	RFN2040HGR	0.78{ 80}	25.40	15.88	7.95	1.5	12.0	17.5	3.97	8.25	9.95	0.99
RFN2050R	RFN2050HGR	1.27{130}	31.75	19.05	9.53	2.0	15.0	21.0	4.97	10.30	12.00	1.72
RFN2060R	RFN2060HGR	1.77{180}	38.10	22.23	12.70	3.2	17.2	26.0	5.96	14.55	16.55	2.57
RFN2080R	RFN2080HGR	2.94{300}	50.80	28.58	15.88	4.0	23.0	35.0	7.94	18.30	20.90	3.88

TSUBAKI Chain No.		Pitch P	Attachment							Additional Mass per Attachment kg/att.	
Standard	High Precision		S	C	X / X2	N	K	T	O	A-2	K-2
RFN2040R	RFN2040HGR	25.40	9.1(8.9)	12.7	19.3	19.1	9.5	1.5	3.6	0.003	0.006
RFN2050R	RFN2050HGR	31.75	11.1(10.9)	15.9	24.2	23.8	11.9	2.0	5.2	0.006	0.012
RFN2060R	RFN2060HGR	38.10	14.7(14.4)	21.45	31.5	28.6	14.3	3.2	5.2	0.017	0.034
RFN2080R	RFN2080HGR	50.80	19.1(18.8)	27.8	40.7	38.1	19.1	4.0	6.8	0.032	0.064

Note: 1. Only the S-dimension differs for the High Precision type (shown in brackets). 2. Cotter pins are used for RFN2050 and RFN2080 connecting links. Riveted pins are used in the base chain for all types. 3. These items are made-to-order.

Stainless Steel TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate			Pin			Approx. Mass kg/m
					Thickness T	Height h	Height H	Diam. D	L1	L2	
RFN2040SSR	0.44{ 45}	25.40	15.88	7.95	1.5	12.0	17.5	3.97	10.45	12.15	1.06
RFN2050SSR	0.69{ 70}	31.75	19.05	9.53	2.0	15.0	21.0	4.97	12.60	14.30	1.82
RFN2060SSR	1.03{105}	38.10	22.23	12.70	3.2	17.2	26.0	5.96	16.80	18.70	2.68
RFN2080SSR	1.77{180}	50.80	28.58	15.88	4.0	23.0	35.0	7.94	21.50	24.40	4.07

Stainless Steel TSUBAKI Chain No.	Pitch P	Attachment								Additional Mass per Attachment kg/att.	
		S	C	X	X2	N	K	T	O	A-2	K-2
RFN2040SSR	25.40	9.1	14.9	21.5	19.3	19.1	9.5	1.5	3.6	0.003	0.006
RFN2050SSR	31.75	11.1	18.2	26.5	24.2	23.8	11.9	2.0	5.2	0.006	0.012
RFN2060SSR	38.10	14.7	23.7	33.95	31.5	28.6	14.3	3.2	5.2	0.017	0.034
RFN2080SSR	50.80	19.1	31.0	43.9	40.7	38.1	19.1	4.0	6.8	0.032	0.064

Note: 1. Cotter pins are used for RFN2050 and RFN2080 connecting links. Riveted pins are used in the base chain for all types. 2.These items are made-to-order.

1. Chain Types/Sizes and Strength

RS Attachment Chain		
Standard	Ave. Tensile Strength kN{kgf}	Max. Allowable Load kN{kgf}
RS25	4.12{ 420}	0.64{ 65}
RS35	9.41{ 960}	1.52{ 155}
RS40	16.7 { 1700}	2.65{ 270}
RS50	27.5 { 2800}	4.31{ 440}
RS60	40.2 { 4100}	6.28{ 640}
RS80	68.6 { 7000}	10.7 {1090}
RS100	108 {11000}	17.1 {1740}
RS120	151 {15400}	23.9 {2440}
RS140	204 {20800}	32.4 {3300}
RS160	258 {26300}	40.9 {4170}

Lambda (Λ) Chain			
Standard	Λ-NP	Ave. Tensile Strength kN{kgf}	Max. Allowable Load kN{kgf}
RSC35-Λ	RSC35NP-Λ	9.41{ 960}	1.52{ 155}
RSC40-Λ	RSC40NP-Λ	15.7 { 1600}	2.65{ 270}
RSC50-Λ	RSC50NP-Λ	25.5 { 2600}	4.31{ 440}
RSC60-Λ	RSC60NP-Λ	37.3 { 3800}	6.28{ 640}
RSC80-Λ	RSC80NP-Λ	63.7 { 6500}	10.7 {1090}
RSC100-Λ	RSC100NP-Λ	100 {10200}	17.1 {1740}

Polysteel Chain	
TSUBAKI Chain No.	Max. Allowable Load kN{kgf}
RF25PC	0.08{ 8}
RF35PC	0.18{18}
RF40PC	0.44{45}
RF50PC	0.69{70}
RF60PC	0.88{90}

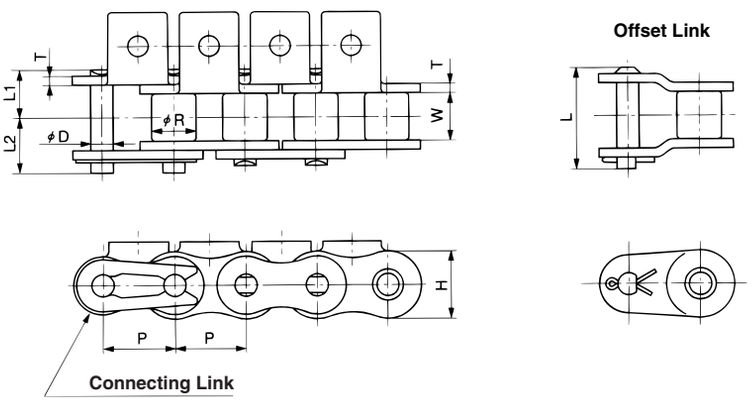
Chain pitches are identical to RS type, but referred to as RF type.

Plastic Sleeve Chain		Max. Allowable Load kN{kgf}	
Standard	SS	Stainless Steel Roller	Plastic Roller
RSS40	RSS40SS	0.44{ 45}	0.23{23}
RSS50	RSS50SS	0.69{ 70}	0.34{35}
RSS60	RSS60SS	1.03{105}	0.54{55}

Corrosion Resistant Chain										
NP		WP		SS		AS		LS		
									Max. Allowable Load kN{kgf}	
TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	TSUBAKI Chain No.	Stainless Steel Roller	Plastic Roller
RS25NP	0.64{ 65}	–	–	RS25SS	0.12{ 12}	–	–	–	–	–
RS35NP	1.52{ 155}	–	–	RS35SS	0.26{ 27}	–	–	–	–	–
RS40NP	2.65{ 270}	RS40WP	2.65{ 270}	RS40SS	0.44{ 45}	RS40AS	0.69{ 70}	RS40LS	0.44{ 45}	0.23{23}
RS50NP	4.31{ 440}	RS50WP	4.31{ 440}	RS50SS	0.69{ 70}	RS50AS	1.03{105}	RS50LS	0.69{ 70}	0.34{35}
RS60NP	6.28{ 640}	RS60WP	6.28{ 640}	RS60SS	1.03{105}	RS60AS	1.57{160}	RS60LS	1.03{105}	0.54{55}
RS80NP	10.7 {1090}	RS80WP	10.7 {1090}	RS80SS	1.77{180}	RS80AS	2.65{270}	RS80LS	1.77{180}	–
RS100NP	17.1 {1740}	–	–	RS100SS	2.55{260}	–	–	–	–	–
RS120NP	23.9 {2440}	–	–	RS120SS	3.82{390}	–	–	–	–	–
RS140NP	32.4 {3300}	–	–	RS140SS	4.61{470}	–	–	–	–	–
RS160NP	40.9 {4170}	–	–	RS160SS	6.37{650}	–	–	–	–	–

Hollow Pin Chain				Ave. Tensile Strength kN{kgf}	Max. Allowable Load kN{kgf}		
Standard	NP	SS	Lambda (Λ) Chain	Standard / NP	Standard / NP	SS	Lambda (Λ) Chain
RS40HP	RS40HP-NP	RS40HP-SS	RSC40HP-Λ	10.8{1100}	1.77{180}	0.44{ 45}	1.47{150}
RS50HP	RS50HP-NP	RS50HP-SS	RSC50HP-Λ	19.6{2000}	3.14{320}	0.69{ 70}	2.55{260}
RS60HP	RS60HP-NP	RS60HP-SS	RSC60HP-Λ	26.5{2700}	4.22{430}	1.03{105}	3.43{350}
RS80HP	RS80HP-NP	RS80HP-SS	RSC80HP-Λ	48.1{4900}	7.65{780}	1.77{180}	6.18{630}

2. Base Chain Dimensions RS Attachment / Lambda / Plastic Sleeve / Corrosion Resistant Chain



TSUBAKI Chain No.	Pitch P	Roller Diam. (Bushed) R	Width b/w Roller Link Plates W	Link Plate		Pin				Approx. Mass kg/m	No. of Links/ Unit
				Thickness T	Height H	Diam. D	L1	L2	L		
RS25	6.35	(3.30)	3.18	0.75	5.84	2.31	3.80	4.8	–	0.14	160
RS35	9.525	(5.08)	4.78	1.25	9.0	3.59 〔3.00〕	5.85	6.85	13.5	0.33	320
RS40	12.70	7.92	7.95	1.5	12.0	3.97	8.25	9.95	18.0	0.64 《0.50》	240
RS50	15.875	10.16	9.53	2.0	15.0	5.09	10.3	12.0	22.5	1.04 《0.88》	192
RS60	19.05	11.91	12.70	2.4	18.1	5.96	12.85	14.75	28.2	1.53 《1.27》	160
RS80	25.40	15.88	15.88	3.2	24.1	7.94	16.25	19.25	36.0	2.66	120
RS100	31.75	19.05	19.05	4.0	30.1	9.54	19.75 〈20.1 〉	22.85 〈23.1 〉	44.4	3.99 〈 4.01〉	96
RS120	38.10	22.23	25.40	4.8 〈5.0〉	36.2	11.11	24.90 〈25.75〉	28.90 〈29.8 〉	55.8	5.93 〈 6.13〉	80
RS140	44.45	25.40	25.40	5.6 〈6.0〉	42.2	12.71	26.90 〈28.15〉	31.70 〈32.95〉	60.5	7.49 〈 7.91〉	68
RS160	50.80	28.58	31.75	6.4 〈7.0〉	48.2	14.29	31.85 〈33.55〉	36.85 〈38.55〉	71.0	10.10 〈10.86〉	60

Note: 1. Values in 〈 〉 are for Corrosion Resistant SS type. Values in 《 》 are for Plastic Sleeve Chain and Corrosion Resistant Chain LS type.
Values in 〔 〕 are for Lambda.

Connecting Link Types

Clip = RS25 to RS60

Cotter Pin = RS80 and above

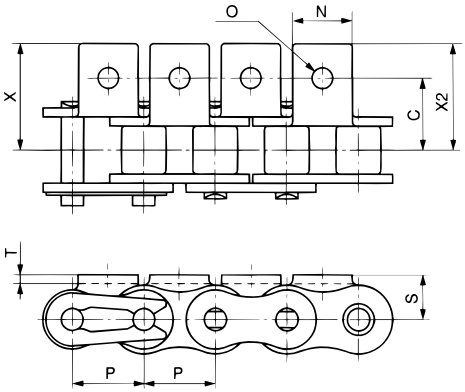
Pin Types

Except for the connecting links, riveted pins are used regardless of whether there is an attachment or not.

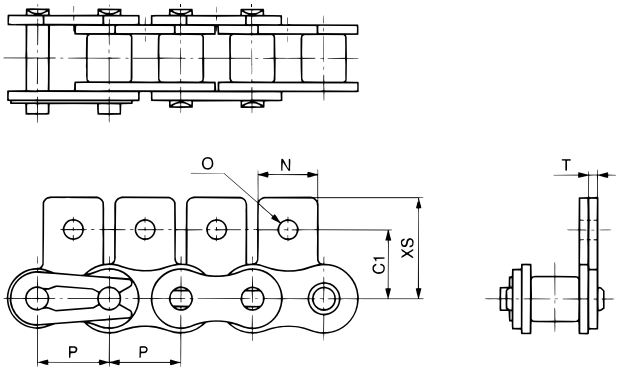
3. Attachment Dimensions RS Attachment / Lambda / Plastic Sleeve / Corrosion Resistant Chain

Refer to previous page for base chain dimensions.

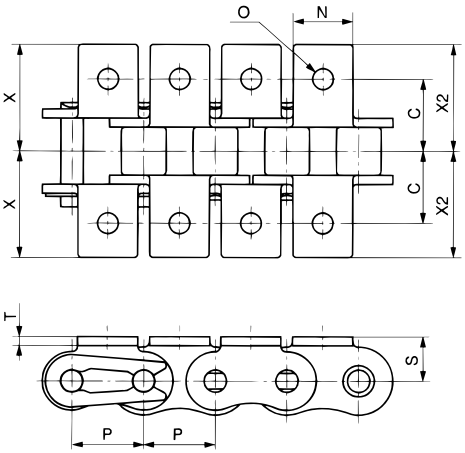
A-1 Attachment



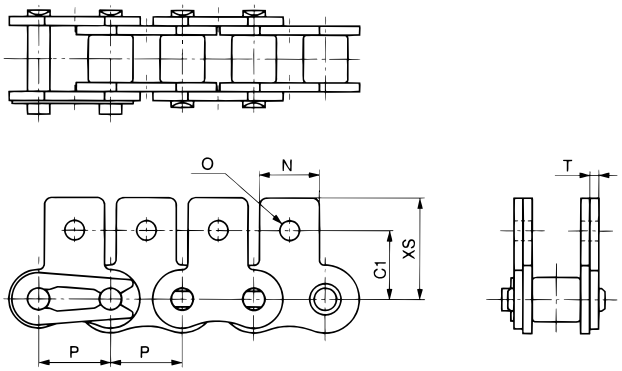
SA-1 Attachment



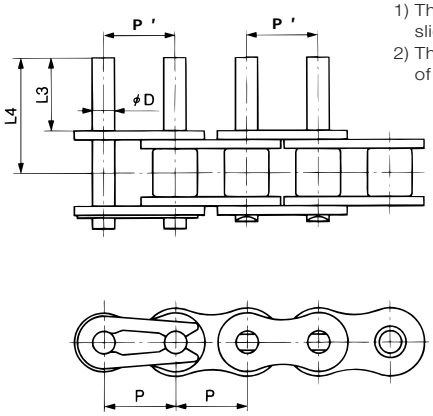
K-1 Attachment



SK-1 Attachment



EP Attachment



1) The D-dimension for the pin end is slightly wider for NP type.
2) The actual P' dimension differs to that of P. Please consult TSUBAKI.

■Except for the connecting links, riveted pins are used regardless of whether there is an attachment or not.
(Excludes Hollow Pin Chain)

■The drawings above show attachments on every link.

■Connecting Link Pin Type: Clip-type for RS25 to RS60, and cotter pin for sizes RS80 and above.

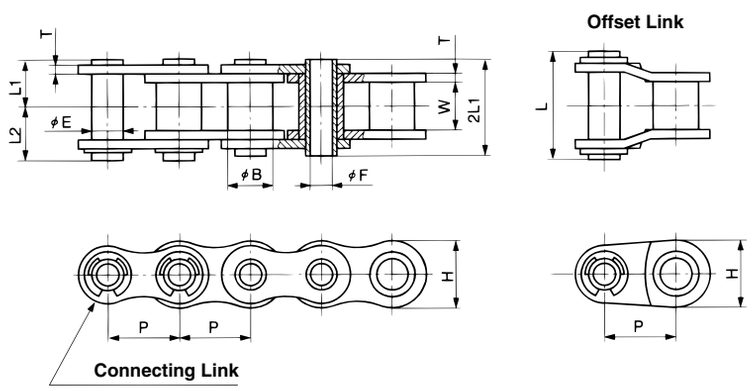
■X and X2 represent the attachment width for the pin link and roller link respectively. X = X2 for sizes RS25 to RS100.

Attachment Dimensions Table (Dimensional drawings are shown on the previous page)

TSUBAKI Chain No.	C	C1	N	O	S	T	X	X2	XS	D	L3	L4	Additional Mass per Attachment kg/att.		
													A/SA Attachment	K/SK Attachment	EP Attachment
RS25	7.15	7.95	5.6	3.4	4.75	0.75	10.7	10.7	11.65	2.31	6.0	9.3	0.0003	0.0006	–
RS35	9.5	9.5	7.9	3.4	6.35	1.25	14.3	14.3	14.55	3.59	9.5	14.7	0.0008	0.0016	0.001
RS40	12.7	12.7	9.5	3.6	8.0	1.5	17.8	17.8	17.40	3.97	9.5	16.8	0.002	0.004	0.001
RS50	15.9	15.9	12.7	5.2	10.3	2.0	23.4	23.4	23.05	5.09	11.9	21.0	0.003	0.006	0.002
RS60	19.05	18.3	15.9	5.2	11.9	2.4	28.2	28.2	26.85	5.96	14.3	25.75	0.007	0.014	0.003
RS80	25.4	24.6	19.1	6.8	15.9	3.2	36.6	36.6	35.45	7.94	19.1	33.9	0.013	0.026	0.007
RS100	31.75	31.8	25.4	8.7	19.8	4.0	44.9	44.9	44.00	9.54	23.8	41.75	0.026	0.052	0.012
RS120	38.1	36.5	28.6	10.3	23.0	4.8 〈5.0〉	55.8 〈56.7〉	50.8 〈51.5〉	52.85	11.11	28.6	51.4	0.044 〈0.046〉	0.088 〈0.092〉	0.020
RS140	44.5	44.5	34.9	11.9	28.6	5.6 〈6.0〉	63.1 〈64.6〉	57.2 〈58.0〉	63.50	12.71	33.3	57.5	0.071 〈0.076〉	0.142 〈0.152〉	0.030
RS160	50.8	50.8	38.1	14.3	31.8	6.4 〈7.0〉	71.8 〈73.7〉	65.1 〈66.0〉	70.10	14.29	38.1	67.4	0.097 〈0.106〉	0.194 〈0.212〉	0.045

※Values in brackets are for Corrosion Resistant SS type.

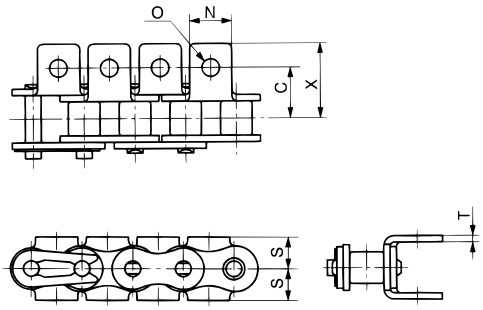
Hollow Pin Chain



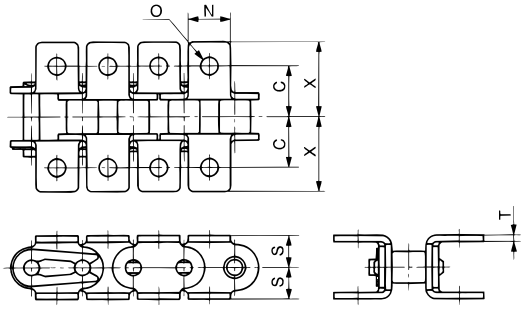
TSUBAKI Chain No.	Pitch P	Bushing Diam. B	Width b/w Roller Link Plates W	Link Plate		Pin					Approx. Mass kg/m	No. of Links/Unit
				Thickness T	Height H	Outer Diam. E	Inner Diam. F (MIN)	L1	L2	L		
RS40HP	12.70	7.92	7.95	1.5	12.0	5.68	4.00	8.00	9.50	19.1	0.53	240
RS50HP	15.875	10.16	9.53	2.0	15.0	7.22	5.12	10.05	11.65	23.4	0.86	192
RS60HP	19.05	11.91	12.70	2.4	18.1	8.38	5.99	12.55	14.25	28.7	1.27	160
RS80HP	25.40	15.88	15.88	3.2	24.1	11.375	8.02	16.25	17.80	35.7	2.15	120

Additional RS Attachment Chain

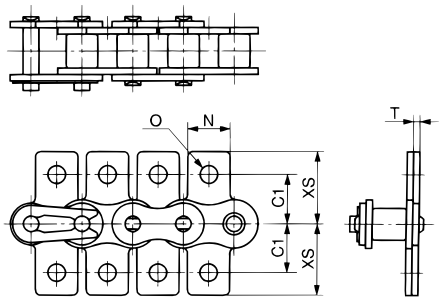
AA-1 Attachment



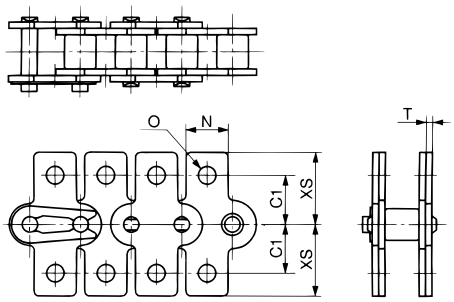
KK-1 Attachment



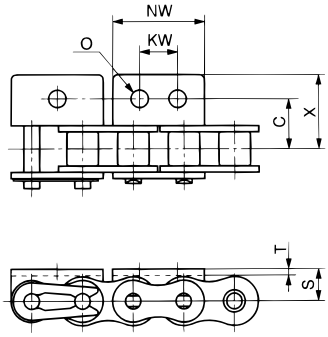
SAA-1 Attachment



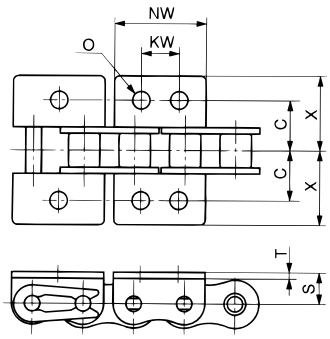
SKK-1 Attachment



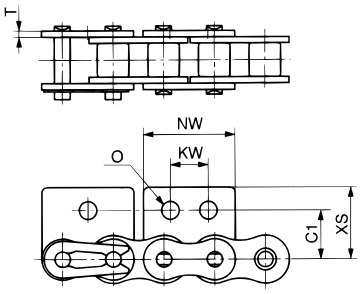
WA-1, WA-2 Attachment



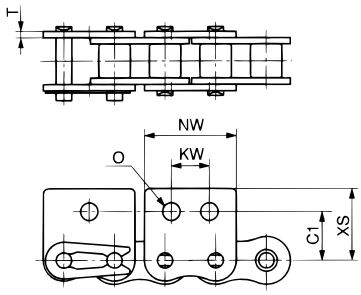
WK-1, WK-2 Attachment



WSA-1, WSA-2 Attachment



WSK-1, WSK-2 Attachment

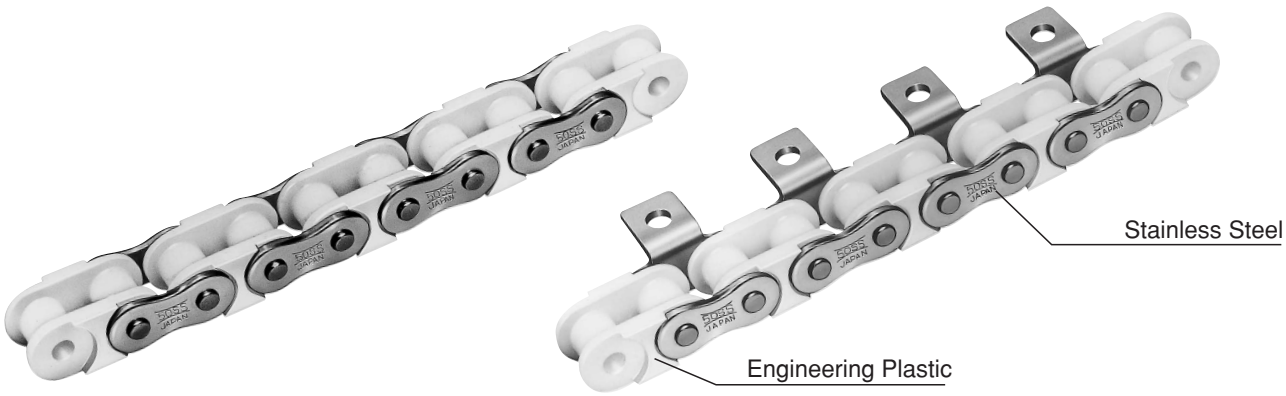


Note:

1. Base chain dimensions are the same as RS Attachment Chain.
2. Clip pins are used for RS40 to RS60 connecting links, and cotter pins are used for RS80 and RS100.
3. For AA, KK, SAA and SKK attachments, check the dimensions of the sprocket boss and make sure no contact is made between the boss and the attachments.
4. For AA and KK attachments, make sure no contact is made between the attachments during articulation.
5. Made-to-order items.
6. The dimensions shown in the NW (Roller Link) column in the table below show the NW dimension when the attachment is on the roller link.

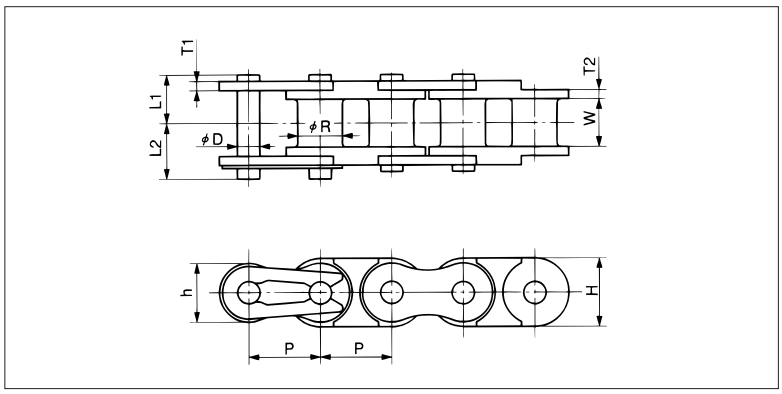
TSUBAKI Chain No.	Pitch	C	C1	N	O	S	T	X	XS	NW	NW (Roller Link) Refer 6. above	KW	Additional Mass per Attachment kg/att.			
													AA,SAA	KK,SKK	WA,WSA	WK,WSK
RS40	12.70	12.7	12.7	9.5	4.5	8.0	1.5	17.8	17.4	23.0	24.7	9.5	0.003	0.006	0.003	0.006
RS50	15.875	15.9	15.9	12.7	5.5	10.3	2.0	23.4	23.05	28.8	30.9	11.9	0.006	0.012	0.007	0.014
RS60	19.05	19.05	18.3	15.9	6.6	11.9	2.4	28.2	26.85	34.6	37.2	14.3	0.011	0.022	0.012	0.024
RS80	25.40	25.4	24.6	19.1	9.0	15.9	3.2	36.6	35.45	46.1	49.5	19.1	0.023	0.046	0.028	0.056
RS100	31.75	31.75	31.8	25.4	11.0	19.8	4.0	44.9	44.0	57.7	61.9	23.8	0.048	0.096	0.055	0.110

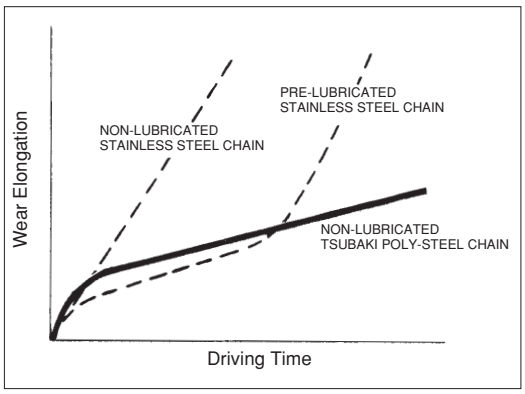
Poly Steel Chains for Special Environments



Excellent wear resistance

The wear resistance of these chains is greater than that of Stainless Steel Chains in non-lubricated drive conditions.





Base Chain Dimensions

Chain Size	Pitch P	Bushing Diam. R	Width b/w Roller Links W	Link Plate				Pin			Max. Allowable Load kN{kgf}	Approx. Mass kg/m	No. of Links/Unit
				Thickness T1	Thickness T2	Height H	Height h	Diam.D	Length L1	Length L2			
RF25PC	6.35	3.30	3.18	0.75	1.3	6.0	5.05	2.31	4.5	5.5	0.08{ 8}	0.095	160
RF35PC	9.525	5.08	4.78	1.25	2.2	9.0	7.8	3.59	6.85	7.85	0.18{18}	0.22	320
RF40PC	12.70	7.92	7.95	1.5	1.5	12.0	10.4	3.97	8.25	9.95	0.44{45}	0.39	240
RF50PC	15.875	10.16	9.53	2.0	2.0	15.0	13.0	5.09	10.3	12.0	0.69{70}	0.58	192
RF60PC	19.05	11.91	12.70	2.4	2.4	18.1	15.6	5.96	12.85	14.75	0.88{90}	0.82	160

Note: 1. Base chain pin heads are not riveted.

1. Please use an even number of links as offset links are not available.
2. RS standard sprockets can be used.
3. Connecting links for RF40PC to RF60PC are the same as those used with stainless steel roller chain. RF25PC and RF35PC, however, utilize special connecting links.
4. When replacing Stainless Steel Chain with Poly Steel Chain, please confirm the actual amount of chain tension exerted in your application and be sure this figure is less than the allowable tension for poly steel chain.
5. The guide rail's point of contact with the chain should be the underside of the link plates (as opposed to the inner link).

Model Identification

RF40PC – 2L A1

- RF40PC: Poly Steel Chain
- 2L: Attachment Spacing
- A1: Attachment Type

Connecting Link (CL)

RF25PC – A1 CL

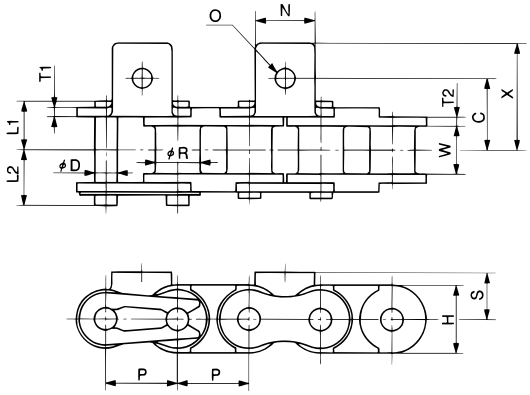
RF35PC – A1 CL

- A1: as above
- CL: Connecting Link (CL)

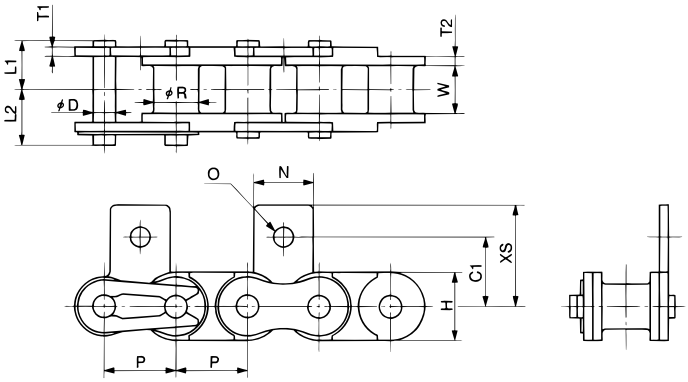
Attachment Dimensions

Refer to previous page for base chain dimensions.

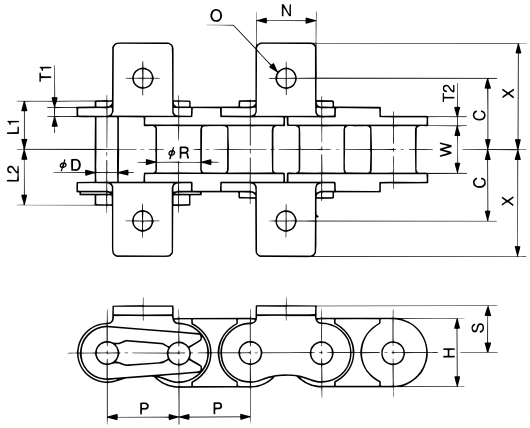
A-1 Attachment



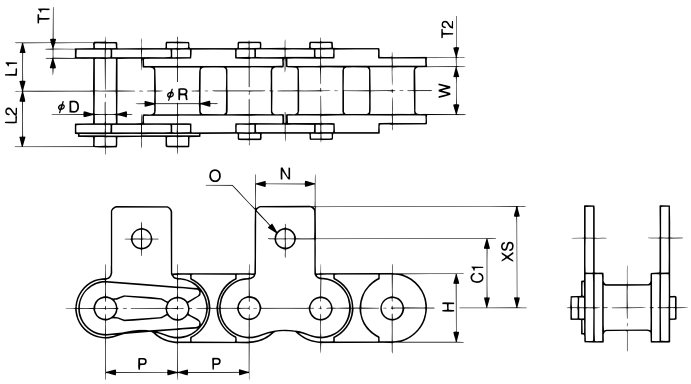
SA-1 Attachment



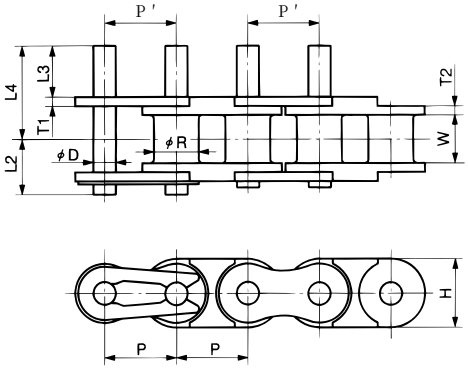
K-1 Attachment



SK-1 Attachment



EP Attachment



EP Attachment

Note: 1. The actual P' dimension differs to that of P. Please consult TSUBAKI.

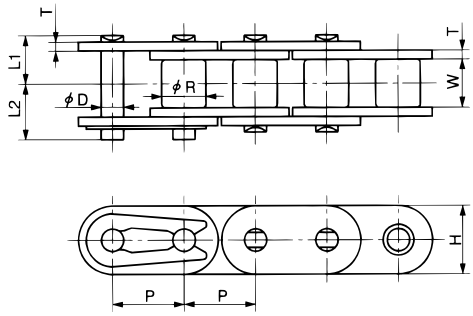
2. The drawings above show attachments on every link.

1. Since attachments cannot be attached to roller links, excluding EP type, they will be attached to every even link.
2. Pin ends are not riveted.

TSUBAKI Chain No.	C	C1	N	O	S	X	XS	L3	L4	Additional Mass per Attachment kg/att.		
										A/SA	K/SK	EP
RF25PC	7.95	7.95	5.6	3.4	4.75	11.45	11.65	–	–	0.0003	0.0006	–
RF35PC	10.5	9.5	7.9	3.4	6.35	15.35	14.55	–	–	0.0008	0.0016	–
RF40PC	12.75	12.7	9.5	3.6	8.0	17.8	17.4	9.4	16.75	0.002	0.004	0.001
RF50PC	16.0	15.9	12.7	5.2	10.3	23.55	23.05	11.9	21.0	0.003	0.006	0.002
RF60PC	19.15	18.3	15.9	5.2	11.9	28.35	26.85	14.2	25.75	0.007	0.014	0.003

RF Roller Chain

This Roller Chain with oval-shaped link plates is ideal for conveying items directly on the chain.



■Clip-type pins are used for RF40 to RF60 connecting links, and cotter pins are used for sizes RF80 and above.

■Offset links are not available.

■Standard

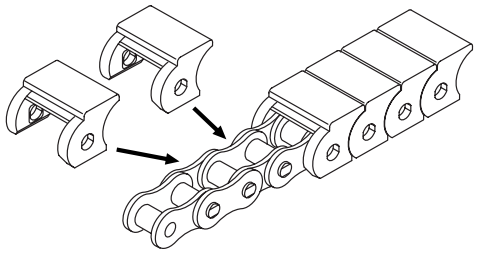
TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate		Pin			Ave. Tensile Strength kN{kgf}	Max. Allowable Load kN{kgf}	Approx. Mass {kg/m}	No. of Links/Unit
				Thickness T	Height H	Diam.D	L1	L2				
RF40	12.70	7.92	7.95	1.5	12.0	3.97	8.25	9.95	16.7{ 1700}	2.65{ 270}	0.74	240
RF50	15.875	10.16	9.53	2.0	15.0	5.09	10.3	12.0	27.5{ 2800}	4.31{ 440}	1.22	192
RF60	19.05	11.91	12.70	2.4	18.1	5.96	12.85	14.75	40.2{ 4100}	6.28{ 640}	1.78	160
RF80	25.40	15.88	15.88	3.2	24.1	7.94	16.25	19.25	68.6{ 7000}	10.7 {1090}	3.09	120
RF100	31.75	19.05	19.05	4.0	28.6	9.54	19.75	22.85	108 {11000}	17.1 {1740}	4.43	96
RF120	38.10	22.23	25.40	4.8	34.4	11.11	24.9	28.9	151 {15400}	23.9 {2440}	6.49	80

■Lambda

TSUBAKI Chain No.	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate		Pin			Ave. Tensile Strength kN{kgf}	Max. Allowable Load kN{kgf}	Approx. Mass {kg/m}	No. of Links/Unit
				Thickness T	Height H	Diam.D	L1	L2				
RF40	12.70	7.92	7.95	1.5	12.0	3.97	8.25	9.95	15.7{ 1600}	2.65{ 270}	0.74	240
RF50	15.875	10.16	9.53	2.0	15.0	5.09	10.3	12.0	25.5{ 2600}	4.31{ 440}	1.22	192
RF60	19.05	11.91	12.70	2.4	18.1	5.96	12.85	14.75	37.3{ 3800}	6.28{ 640}	1.78	160
RF80	25.40	15.88	15.88	3.2	24.1	7.94	16.25	19.25	63.7{ 6500}	10.7 {1090}	3.09	120
RF100	31.75	19.05	19.05	4.0	28.6	9.54	19.75	22.85	100 {10200}	17.1 {1740}	4.43	96

Bold print represents stock items for short delivery in Japan, and fine print represents made-to-order items.

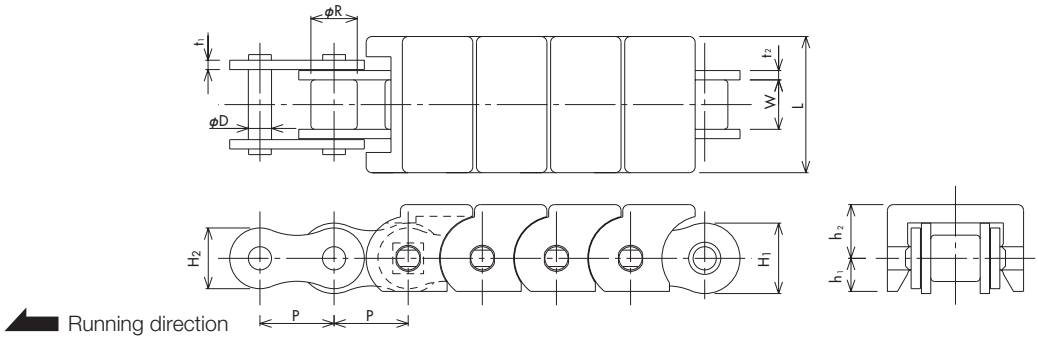
Snap Cover Chain



Snap Cover Chain is standard* roller chain with an engineering plastic cover attached to each link. It has the same allowable tensile strength as steel chain while allowing materials and products to be placed directly onto the chain without concern of damage.
Compared to RS Plastic Chain, allowable tensile strength is higher and heavy load conveying is possible. Moreover, a longer conveying distance (conveyor length) requires only one (1) motor to drive it thereby providing a reduction in conveyor costs.

*Conventional Clip Top Chain used a special base chain with extended pins (EP).

	Material	Color	Use
Engineering Plastic Cover	Polyacetal	White (Connecting link is blue)	General
	Electro-Conductive	Black	Prevention of dust build-up from static, electrical noise and sparks (Volume specific resistance 1 x $10^6\Omega$/cm



※The above drawing is an RS type. The link plate shape of RF06B is flat ( ) .

TSUBAKI Chain No.			Pitch	Roller Diam.	Width b/w Roller Link Plates	Pin Diam.	Link Plate			
Standard	C－Λ	SS	P	R	W	D	Thickness t_1	Thickness t_2	Height H_1	Height H_2
RF06B-SC	—	RF06BSS-SC	9.525	6.35	5.72	3.28	1.00	1.27	8.20	8.20
RS40-SC	RSC40-Λ-SC	RS40SS-SC	12.70	7.92	7.95	3.97	1.50	1.50	12.00	10.40
RS50-SC	RSC50-Λ-SC	RS50SS-SC	15.875	10.16	9.53	5.09	2.00	2.00	15.00	13.00
RS60-SC	RSC60-Λ-SC	RS60SS-SC	19.05	11.91	12.70	5.96	2.40	2.40	18.10	15.60
RS80-SC	RSC80-Λ-SC	RS80SS-SC	25.40	15.88	15.88	7.94	3.20	3.20	24.10	20.80
RS100-SC	RSC100-Λ-SC	RS100SS-SC	31.75	19.05	19.05	9.54	4.00	4.00	30.10	26.00

TSUBAKI Chain No.			Plastic Cover			Max. Allowable Load kN{kgf}		Approx.Mass kg/m	No. of Links/Unit
Standard	C－Λ	SS	Height h_1	Height h_2	Width L	Std./C－Λ	SS		
RF06B-SC	—	RF06BSS-SC	4.40	7.40	17.50	1.47 { 150}	0.26 { 26.5}	0.55	320
RS40-SC	RSC40-Λ-SC	RS40SS-SC	6.00	9.50	23.50	2.65 { 270}	0.44 { 45 }	0.8	240
RS50-SC	RSC50-Λ-SC	RS50SS-SC	7.50	11.60	29.00	4.31 { 440}	0.69 { 70 }	1.3	192
RS60-SC	RSC60-Λ-SC	RS60SS-SC	8.50	13.80	35.00	6.28 { 640}	1.03 {105 }	1.9	160
RS80-SC	RSC80-Λ-SC	RS80SS-SC	11.50	18.00	41.50	10.7 {1090}	1.77 {180 }	2.9	120
RS100-SC	RSC100-Λ-SC	RS100SS-SC	14.70	21.30	48.50	17.1 {1740}	2.55 {260 }	4.4	96

Note: All items are made-to-order.

■Operating Temperature : -10°C to +80°C (+14°F to +176°F)

■Max. Allowable Speed : 60m/min (197 ft/min)

■Model Identification

RS40 SS-SC-A

Chain Size

Standard : No code
Stainless Steel : SS
Lambda : C-Λ

Snap Cover Chain

Plastic Cover Specification

1. Chain with Plastic Cover
- Standard : A
- Electro-Conductive : E

2. Connecting Links* Only
- Standard : CLA
- Electro-Conductive : CLE

3. Plastic Cover Only
- Standard : PA
- Electro-Conductive : PE

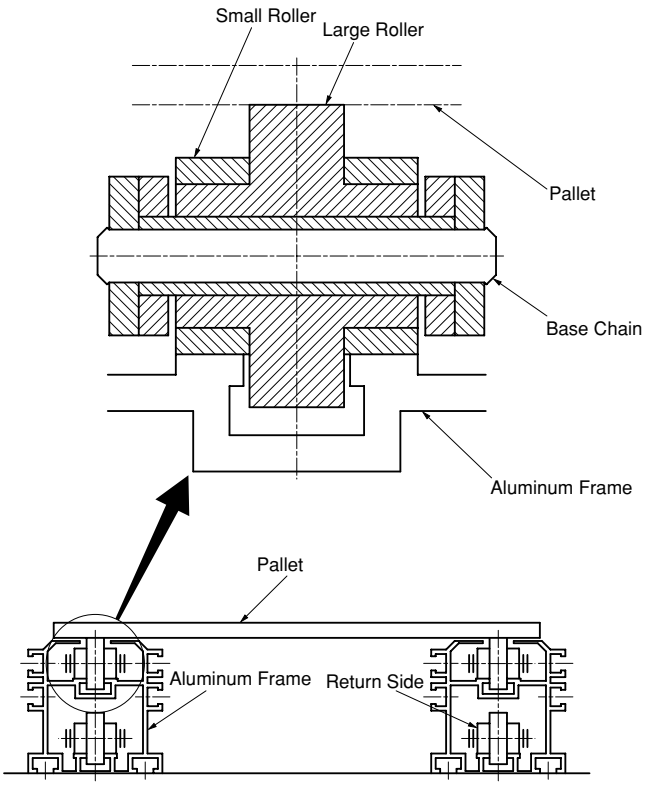
***Connecting links**
Cotter pins/spring clips are not used as per standard chain. The snap cover legs are used instead to hold the connecting link plate down and prevent it from coming off.

Multi-free Flow Chains

Revolutionary TSUBAKI Double Plus chains are drawing lots of attention.

- **Quiet**
- **Safe**
- **Quick Start Up**
- **Easy Installation**
- **Wide Selection**

Guide rails, snap covers, pallet guides, and sprockets for Double Plus chain are also available. (standardized)



How TSUBAKI Double Plus Chain Works

· When conveying

Friction between the large centre roller and the small roller allows them to rotate together in unison. The difference in diameter of the two rollers causes the speed of the conveyed object to be 2.5 times the speed of the chain.

· When Accumulating

The large roller then rotates freely in the opposite direction of the small roller allowing conveyed objects to accumulate. We call this free-flow conveying.

■Roller Use Classification

Specifications	Roller		Application
	Large(Color)	Small(Color)	
VRP-A Standard	Standard (Brown)	Standard (Gray)	General use 10Db quieter than Plastic Side Chain
VRP-B High friction		High friction (Cream)	Rapid response Low noise
VRP-C Electro-conductive	Electro-conductive (Black)	Standard (Gray)	Individual volume surface resistance ratio 10^6 Ωcm
VRP-D Electro-conductive High friction		High friction (Cream)	Individual volume surface resistance ratio 10^6 Ωcm Rapid response
VRP-UA Standard	Urethane (Transparent)	Standard (Gray)	Direct conveying
VRP-UB High friction		High friction (Cream)	Direct conveying Rapid response
VR Steel	Steel	Steel	High load

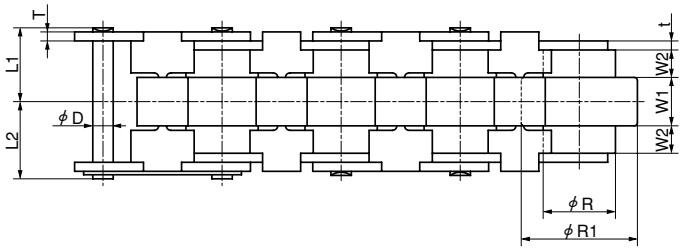
Model Identification

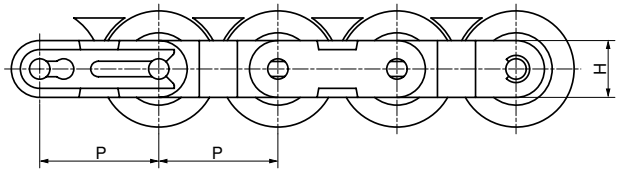
RFC 2040 VRP-SS-A-SC

- Series
  - RFC : Λ
  - RF : Other than Λ
- Chain Size
- VRP : Plastic Roller
- VR : Steel Roller
- Base Chain Specification
  - No code : Standard
  - Λ : Lube-Free
  - HCP : Hard Chrome Plated
  - SS : Stainless Steel
- With snap cover
- Plastic Roller
  - A/B/C/D
  - UA/UB (RF2030 only)
  - No code for steel rollers

Note: 1. Made-to-order items.
2. Base chain is exclusively for snap covers.
3. Snap covers cannot be attached to the Double Plus chain above.
4. Offset links cannot be manufactured.

■Double Plus Chain with Snap Covers

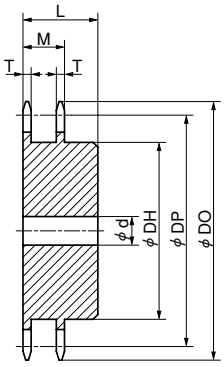




TSUBAKI Chain No.		Pitch P	Roller		Width		Link Plate			Pin			Approx. Mass kg/m		No. of Links /Unit
Engineering Plastic Roller	Steel Roller		R	R1	W1	W2	t	T	H	D	L1	L2	Plastic Roller	Steel Roller	
RF2030VRP-SC	RF2030VR-SC	19.05	11.91	18.3	8.0	4.0	1.5	1.5	9.0	3.59 (3.00)	12.05	13.25	0.6	1.4	160
RF2040VRP-SC	RF2040VR-SC	25.40	15.88	24.6	10.3	5.7	2.0	1.5	12.0	3.97	15.8	17.0	1.0	2.5	120
RF2050VRP-SC	RF2050VR-SC	31.75	19.05	30.6	13.0	7.1	2.4	2.0	15.0	5.09	19.55	21.25	1.4	3.7	96
RF2060VRP-SC	RF2060VR-SC	38.10	22.23	36.6	15.5	8.5	3.2	3.2	17.2	5.96	24.5	26.4	2.0	5.2	80
RF2080VRP-SC	—	50.80	28.58	48.0	20.0	15.0	4.0	4.0	23.0	7.94	35.8	38.0	3.9	—	60

Value shown in ( ) represents dimension for RF2030VRP-Λ

■Double Plus Chain Sprockets



Model Identification

RF2030VRP-10T-SC

- Chain Size
- No. of teeth: 10

TSUBAKI Sprocket No.	Actual Teeth	Pitch Diam. DP	Outer Diam. DO	Teeth Width T	All Teeth Width M	Bore Diam. d		Boss		Approx. Mass kg	Materials
						Stock	Max.	Diam. DH	Length L		
RF2030VRP-10T-SC	10	61.65	63	3.0	15.3	12.7	20	37	25	0.2	Carbon Steel (completely machine finished)
RF2040VRP-10T-SC	10	82.20	85	4.0	20.4	16	32	52	40	0.8	
RF2050VRP-10T-SC	10	102.75	107	5.0	25.5	16	45	66	45	1.5	
RF2060VRP-10T-SC	10	123.30	128	6.0	30.5	19	53	81	50	2.5	
RF2080VRP-10T-SC	10	164.39	172	12.0	47.5	23	72	110	67	7.0	

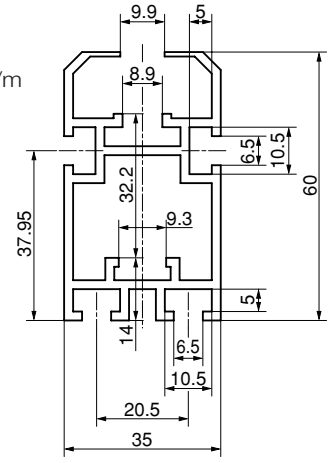
Note : 1. Sprocket No.'s in bold print are stock items for short delivery in Japan.
2. Used together with Double Plus Chain without snap covers.
3. Stainless steel types (SUS304) are made using the same dimensions.

Guide Rail for TSUBAKI Double Plus Chain
< Standard Rail > Material: Anodized Aluminum

Model Number

RF2030VRP-R3L

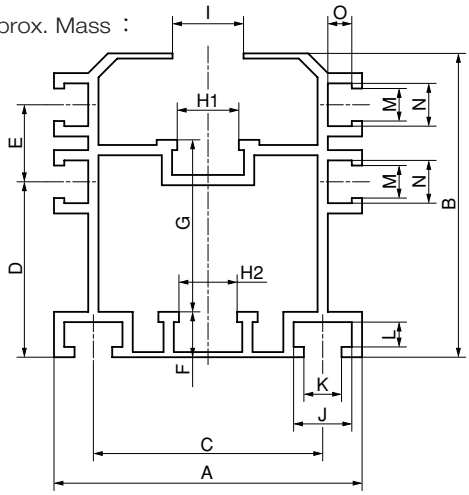
Fixed Length : 3m
Approx. Mass : 1.4kg/m
Stock Item



Model Number

RF2040/RF2050/RF2060VRP-R4L

Fixed Length : 4m
Dimensions /Approx. Mass : See table below
Stock Item



Aluminum Frame Model		A	B	C	D	E	F	G	H_1	H_2	I	J	K	L	M	N	O	Approx. Mass kg/m	
Aluminum Frame	With Steel Rail																	Aluminum Frame	With Steel Rail
RF2040VRP-R4L	**RF2040VRP-R4LS**	63	66	44.5	35.25	18.5	13	34.9	11.4	12	13.5	13.5	8.5	7.5	6.5	10.5	5	2.6	3.7
RF2050VRP-R4L	**RF2050VRP-R4LS**	78	80	55.5	41.75	23.0	15	43.0	14.3	15	16.5	17.5	10.5	9	8.5	13.5	7.5	3.6	5.0
RF2060VRP-R4L	**RF2060VRP-R4LS**	95	91	72.5	51.25	23.5	15	50.5	17.2	18	19.5	17.5	10.5	9	8.5	13.5	7.5	4.2	5.9

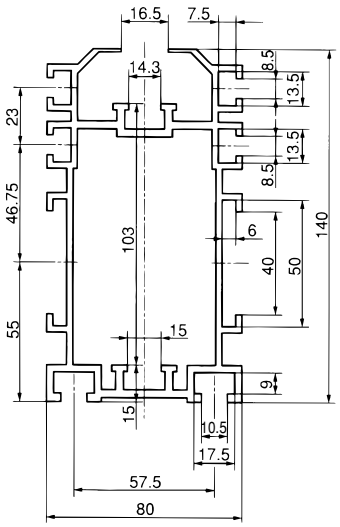
Stock items for short delivery in Japan.

< Optional Rail > Material: Anodized Aluminum

Aluminum Frame

RF2050VRP-R3H

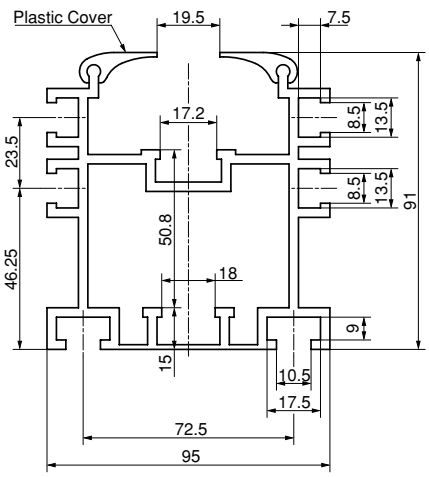
Material: Aluminum
Fixed Length: 3m
Approx. Mass: 5kg/m Stock Item



Aluminum Frame with Plastic Cover

RF2060VRP-R4K
RF2060VRP-Plastic Cover

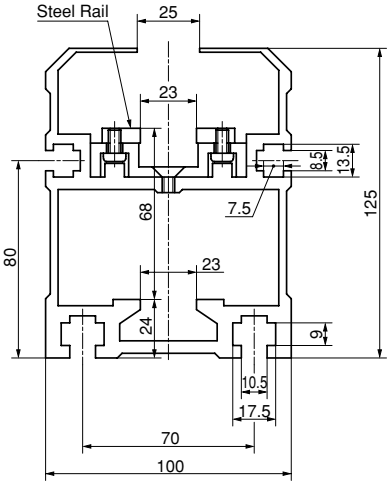
Note: Plastic covers are not supplied together with R4K.
Please order separately.
Material: Base = Aluminum
Fixed Length: 4m Approx. Mass: 4kg/m Stock Item



Model Number

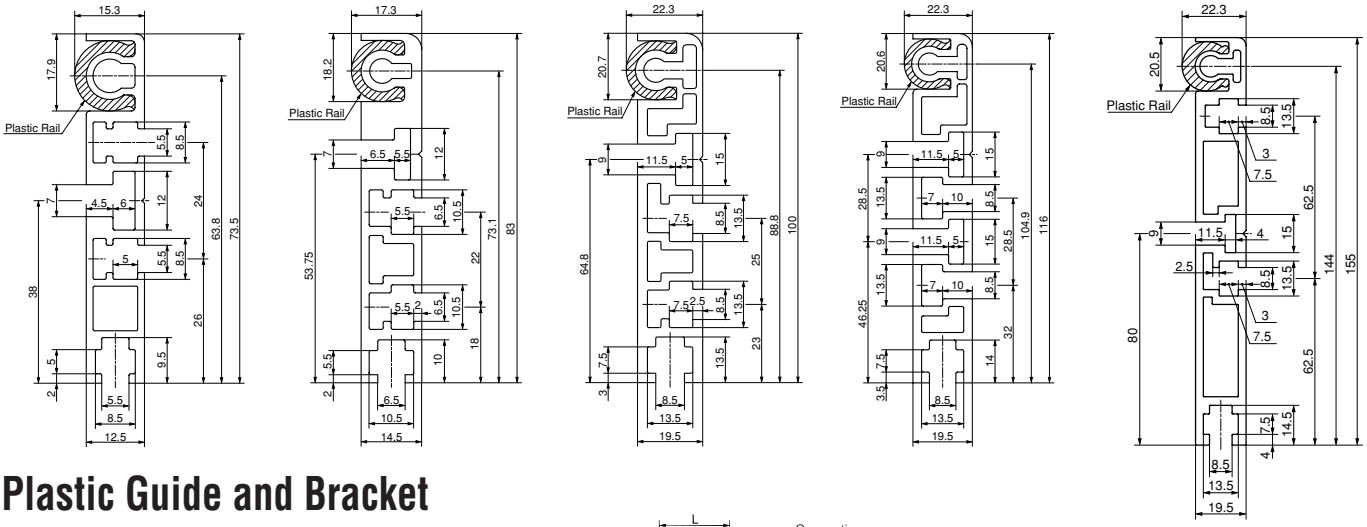
RF2080VRP-R3LS

Fixed Length : 3m
Approx. Mass : 9.9kg/m
Stock Item

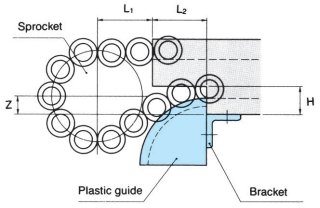


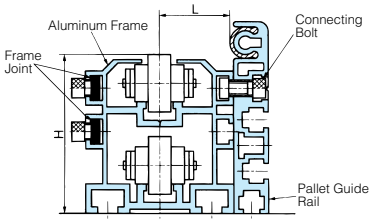
Pallet Guides with Plastic Bumpers
Material: Anodized Aluminum with Plastic Cover

●RF2030VRP ●RF2040VRP ●RF2050VRP ●RF2060VRP ●RF2080VRP



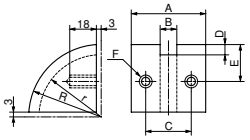
Plastic Guide and Bracket





■Return Guide

Double Plus Chain

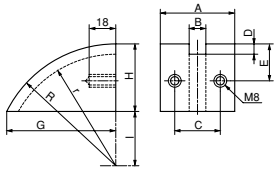


(Use snap cover with RF2030 and RF2040.)
※Can also be used for Center Roller Chain

Return Guide Model	A	B	C	D	E	F	r	R	Applicable Chain
RF2030VRP-RG	34	9	22	6	31	M6	54	60	Double Plus Chain and Double Plus Chain with Snap Covers
RF2040VRP-RG	50	12	30	8	30	M8	52	60	
RF2050VRP-RG	56	15	35	10	32	M8	50	60	Double Plus Chain
RF2060VRP-RG	60	18	39	12.5	32	M8	47.5	60	
RF2080VRP-RG	70	23	45	15	41	M8	65	80	

Material: UHMW Polyethylene. Stock items for short delivery in Japan.

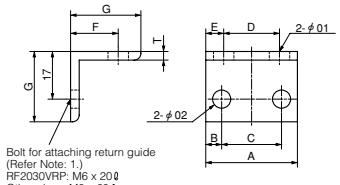
Double Plus Chain with Snap Cover



Return Guide Model	A	B	C	D	E	G	H	I	r	R
RF2050VRP-RG-SC	56	15	35	10	32	90.3	57	43	90	100
RF2060VRP-RG-SC	60	18	39	12.5	32	90.3	57	43	87.5	100
RF2080VRP-RG-SC	70	23	45	15	41	139.6	77	88	150	165

Note: 1. RF2030 and RF2040 can be used with RG-type Double Plus Chain shown on left. Material: UHMW Polyethylene.
Chain No.'s in bold print are stock items for short delivery in Japan.

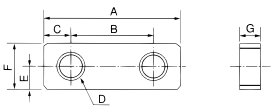
■Bracket



Return Guide Model	A	B	C	D	E	F	G	T	O1	O2
RF2030VRP-GB	34	6	22	20.5	6.7	18	25	3	6.5	6.5
RF2040VRP-GB	60	15	30	44.5	7.7	20	30	3	8.5	8.5
RF2050VRP-GB	76	20.5	35	55.5	10.2	24	35	4	10.5	8.5
RF2060VRP-GB	94	27.5	39	72.5	10.7	24	35	4	10.5	8.5
RF2080VRP-GB	100	27.5	45	70	15	24	35	4	10.5	8.5

Note: 1. Bolts for attaching brackets are not included.
Material: Aluminum
Stock items for short delivery in Japan.

■Frame Joint



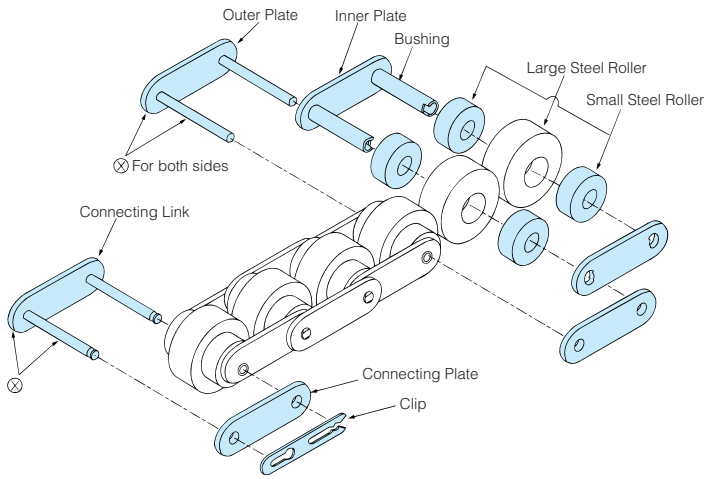
Frame Joint Model	A	B	C	D	E	F	G
RF2030VRP-FJ	40	24	8	M6	5	10	5
RF2040VRP-FJ	40	24	8	M6	5	10	5
RF2050VRP-FJ	40	24	8	M8	6.5	13	6
RF2060VRP-FJ	40	24	8	M8	6.5	13	6
RF2080VRP-FJ	40	24	8	M8	6.5	13	6

Material: Stainless steel
Stock items for short delivery in Japan.

Center Roller Chains

■Center Roller Chain

Construction



⊗ : denotes press-fit connection. Other parts are slip-fit.

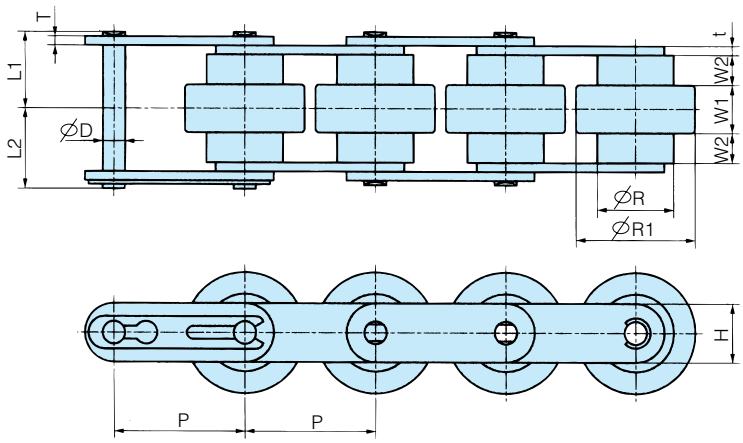
Features

Constant Speed

The speed ratio of the chain and conveyed items is 1 : 1.

Stable Conveyance

Center Roller Chain has a lower center of gravity than Top Roller Chain, and support by the outboard rollers on either side allows for stable conveyance.



RF2040CR

Chain Size
Roller material: Steel
Center Roller

TSUBAKI Chain No.	Pitch P	Roller		Width		Plate			Pin			Approx. Mass kg/m	No. links /Unit
		R	R1	W1	W2	t	T	H	D	L1	L2		
RF2040CR	25.40	15.88	24.6	10.3	5.7	2.0	1.5	12.0	3.97	15.8	17.0	2.5	120
RF2050CR	31.75	19.05	30.6	13.0	7.1	2.4	2.0	15.0	5.09	19.55	21.25	3.7	96
RF2060CR	38.10	22.23	36.6	15.5	8.5	3.2	3.2	17.2	5.96	24.5	26.4	5.6	80

Made-to-Order items.

■Max. Allowable Tensile Strength……Center Roller Chain

Size	Max. Allowable Tensile Strength kN (kgf)	Operating Temperature
RF2040CR	1.57 {160}	−10°C to +150°C (+14°F to +302°F) When operating in temperatures over +60°C (+140°F) please use a 'High Temperature Use' lubricant.
RF2050CR	2.45 {250}	
RF2060CR	3.73 {380}	

■Conveyor Peripheral Parts

Appearance and dimensions are the same as for Double Plus Chain. Double Plus Chain peripheral parts such as sprockets, aluminum frames with steel rails, pallet guide rails, plastic rails, return guides, brackets, and frame joints can all be used.

Outboard Roller Chains

Outboard roller construction makes for a highly compact conveyor. The ability to flex backwards adds to this by allowing easy layout on the return side to save space. Since a large number of rollers can be installed, a conveyor can be easily made where small objects are placed directly with no pallet. Quick starting is also possible by installing a plastic brake.

Outboard Roller chain series

Chain specifications		Outboard roller specifications			
	Roller	Eng. Plastic	Plastic brake	Electro-Conductive	Steel (*Stainless)
Standard	Steel	○	○	○	○
	Plastic *1	○	○	○	
Lambda(Λ)	Steel	○	○	○	○
Poly-Steel	-	○	○	○	
Stainless Steel (SUS304) *2	Stainless Steel	○	○	○	○*
	Plastic *1	○	○	○	

Attention : 1) Made to Order
2) Chain specification excludes side roller material
3) *1 No RS Type
4) *2 Pin only is precipitation hardened SUS
5) For non-lude chain the Steel outboard roller must still be lubricated.

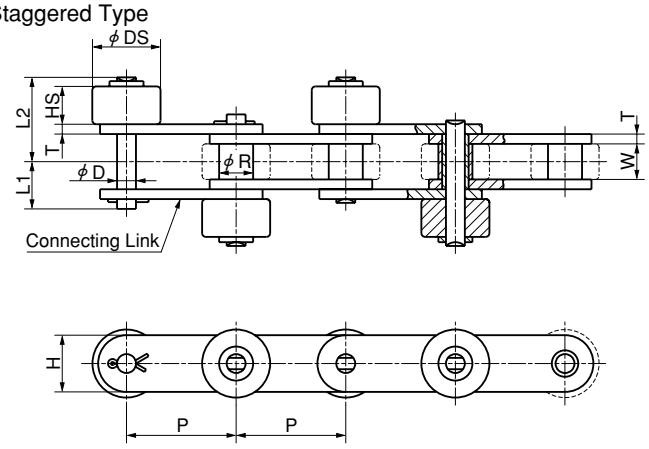
RFC 2040 NP R-Λ-1L SP-PE-T

- Series — RFC: Λ / RF : Other than Λ
- Chain size
- Chain Spec. — No code: Steel / NP : Nickel-plated / SS : Stainless steel
- Chain Roller Type — R: R-Roller / S: S-Roller
- Λ : Lambda (No combination with SS Chain) / P : Plastic roller (When chain roller is Eng.Plastic)
- Outboard Roller spacing — 1L: Every link / 2L: Every 2 links
- Side Roller Spec. — SR-P : Eng.Plastic / SR-PE: Electro-conductive / SR: Steel / B : With brake
- Outboard roller installation — T: Staggered / H: Crosswise

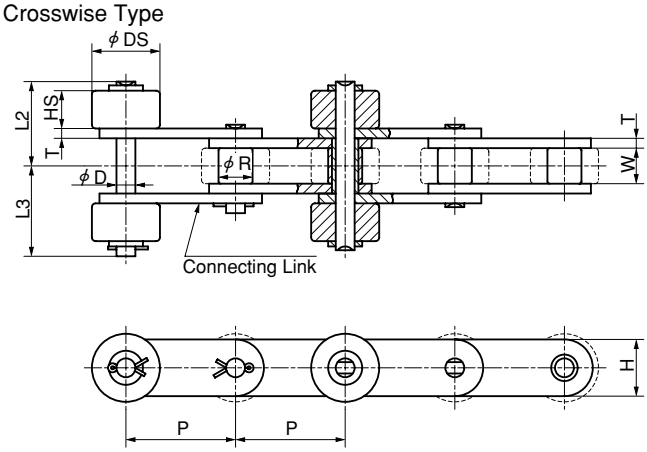
RF Type Outboard Roller chain (All specifications)

The chain drawings show the standard "S" roller drawn in solid lines and oversize "R" roller in dotted lines.

Staggered Type



Crosswise Type



■Without Brake

TSUBAKI Chain No.					Roller Type	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate		Pin			
Plastic Outboard Roller			Steel Outboard Roller						Thickness T	Height H	Diam. D	L1	L2	L3
Standard	Lambda	Electro-Conductive	Standard	Lambda										
RF2040S-SR-P	RFC2040S-Λ-SR-P	RF2040S-SR-PE	RF2040S-SR	RFC2040S-Λ-SR	S	25.40	7.92	7.95	1.5	12.0	3.97	9.65	17.9	19.3
RF2050S-SR-P	RFC2050S-Λ-SR-P	RF2050S-SR-PE	RF2050S-SR	RFC2050S-Λ-SR		31.75	10.16	9.53	2.0	15.0	5.09	11.9	21.6	23.3
RF2060S-SR-P	RFC2060S-Λ-SR-P	RF2060S-SR-PE	RF2060S-SR	RFC2060S-Λ-SR		38.10	11.91	12.70	3.2	17.2	5.96	16.95	29.65	32.05
RF2080S-SR-P	—	—	RF2080S-SR	—		50.80	15.88	15.88	4.0	23.0	7.94	20.95	36.65	39.65
RF2100S-SR-P	—	—	RF2100S-SR	—		63.50	19.05	19.05	4.8	28.6	9.54	24.5	44.2	47.3
RF2040R-SR-P	RFC2040R-Λ-SR-P	RF2040R-SR-PE	RF2040R-SR	RFC2040R-Λ-SR	R	25.40	15.88	7.95	1.5	12.0	3.97	9.65	23.1	24.5
RF2050R-SR-P	RFC2050R-Λ-SR-P	RF2050R-SR-PE	RF2050R-SR	RFC2050R-Λ-SR		31.75	19.05	9.53	2.0	15.0	5.09	11.9	25.3	27.0
RF2060R-SR-P	RFC2060R-Λ-SR-P	RF2060R-SR-PE	RF2060R-SR	RFC2060R-Λ-SR		38.10	22.23	12.70	3.2	17.2	5.96	16.95	29.65	32.05

TSUBAKI Chain No.					Outboard Roller		Approx. Mass kg/m		
							Steel Base Roller		Plastic Base Roller
Plastic Outboard Roller			Steel Outboard Roller		DS	HS	Plastic Outboard Roller	Steel Outboard Roller	Plastic Outboard Roller
Standard	Lambda	Electro-Conductive	Standard	Lambda					
RF2040S-SR-P	RFC2040S-Λ-SR-P	RF2040S-SR-PE	RF2040S-SR	RFC2040S-Λ-SR	15.88	7.8	0.66	1.02	—
RF2050S-SR-P	RFC2050S-Λ-SR-P	RF2050S-SR-PE	RF2050S-SR	RFC2050S-Λ-SR	19.05	9.4	1.03	1.53	—
RF2060S-SR-P	RFC2060S-Λ-SR-P	RF2060S-SR-PE	RF2060S-SR	RFC2060S-Λ-SR	22.23	12.6	1.80	2.56	—
RF2080S-SR-P	—	—	RF2080S-SR	—	28.58	15.8	3.12	4.30	—
RF2100S-SR-P	—	—	RF2100S-SR	—	39.69	19	4.77	7.00	—
RF2040R-SR-P	RFC2040R-Λ-SR-P	RF2040R-SR-PE	RF2040R-SR	RFC2040R-Λ-SR	23	13	1.24	—	0.89
RF2050R-SR-P	RFC2050R-Λ-SR-P	RF2050R-SR-PE	RF2050R-SR	RFC2050R-Λ-SR	27	13	1.70	—	1.23
RF2060R-SR-P	RFC2060R-Λ-SR-P	RF2060R-SR-PE	RF2060R-SR	RFC2060R-Λ-SR	30	12.6	2.64	—	1.93

Note: 1. The mass shown is when outboard rollers are attached to every link in a staggered formation (refer top left drawing) or every second link in a crosswise formation (refer top right drawing). 2. Connecting links are all cotter pin type.

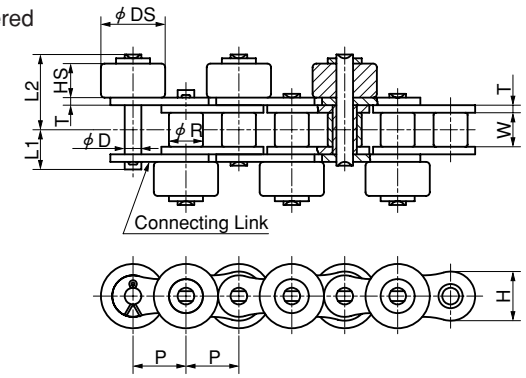
■With Brake

TSUBAKI Chain No.			Roller Type	Pitch P	Roller Diam. R	Width b/w Roller Link Plates W	Link Plate		Pin				Outboard Roller		Approx. Mass kg/m		
							Thick-ness T	Height H	Diam. D	L1	L2	L3	DS	HS	Steel Base Roller		Plastic Base Roller
Plastic Outboard Roller															Plastic Outboard Roller	Steel Outboard Roller	Plastic Outboard Roller
Standard	Lambda	Electro-Conductive															
RF2040S-SR-PB	RF2040S-Λ-SR-PB	RF2040S-SR-PBE	S	25.40	7.92	7.95	1.5	12.0	3.97	9.65	17.9	19.3	15.88	7.8	0.66	1.02	—
RF2050S-SR-PB	RF2050S-Λ-SR-PB	RF2050S-SR-PBE		31.75	10.16	9.53	2.0	15.0	5.09	11.90	21.6	23.2	19.05	9.4	1.03	1.53	—
RF2060S-SR-PB	RF2060S-Λ-SR-PB	RF2060S-SR-PBE		38.10	11.91	12.70	3.2	17.2	5.96	16.95	29.65	32.05	22.23	12.6	1.80	2.56	—
RF2040R-SR-PB	RF2040R-Λ-SR-PB	RF2040R-SR-PBE	R	25.40	15.88	7.95	1.5	12.0	3.97	9.65	23.1	24.5	23	13	1.24	—	0.89
RF2050R-SR-PB	RF2050R-Λ-SR-PB	RF2050R-SR-PBE		31.75	19.05	9.53	2.0	15.0	5.09	11.90	25.3	27.0	27	13	1.70	—	1.23
RF2060R-SR-PB	RF2060R-Λ-SR-PB	RF2060R-SR-PBE		38.10	22.23	12.70	3.2	17.2	5.96	16.95	29.65	32.05	30	12.6	2.64	—	1.93

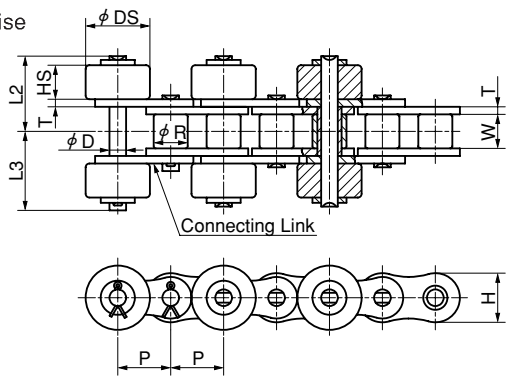
Note: 1. The mass shown is when outboard rollers are attached to every link in a staggered formation (refer top left drawing) or every second link in a crosswise formation (refer top right drawing). 2. Connecting links are all the cotter pin type.

RS Type Outboard Roller chain (All specifications)

Staggered Type



Crosswise Type



■Without Brake

TSUBAKI Chain No.					Pitch	Roller Diam.	Width b/w Roller Link Plates	Link Plate		Pin				Outboard Roller		Approx. Mass kg/m	
Plastic Outboard Roller			Steel Outboard Roller					Thick-ness	Height	Diam.						Plastic Outboard Roller	Steel Outboard Roller
Standard	Lambda	Electro-Conductive	Standard	Lambda	P	R	W	T	H	D	L1	L2	L3	DS	HS		
RS40-SR-P	RSC40-Λ-SR-P	RS40-SR-PE	RS40-SR	RSC40-Λ-SR	12.70	7.92	7.95	1.5	12.0	3.97	9.65	17.9	19.3	15.88	7.8	0.94	1.67
RS50-SR-P	RSC50-Λ-SR-P	RS50-SR-PE	RS50-SR	RSC50-Λ-SR	15.875	10.16	9.53	2.0	15.0	5.09	11.9	21.6	23.2	19.05	9.4	1.42	2.42
RS60-SR-P	RSC60-Λ-SR-P	RS60-SR-PE	RS60-SR	RSC60-Λ-SR	19.05	11.91	12.70	2.4	18.1	5.96	15.25	27.95	30.35	22.23	12.6	2.11	3.63
RS80-SR-P	—	—	RS80-SR	—	25.40	15.88	15.88	3.2	24.1	7.94	19.25	35.05	37.95	28.58	15.8	3.57	5.92
RS100-SR-P	—	—	RS100-SR	—	31.75	19.05	19.05	4.0	30.1	9.54	22.85	42.55	45.65	39.69	19.0	5.56	10.02

Note: 1. The mass shown is when outboard rollers are attached to every link in a staggered formation (refer top left drawing) or every second link in a crosswise formation (refer top right drawing). 2. Connecting links are all the cotter pin type.

■With Brake

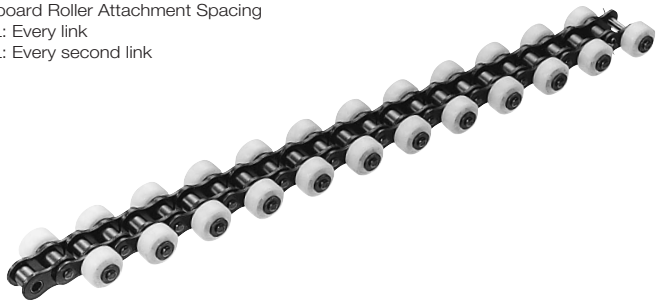
TSUBAKI Chain No.			Pitch	Roller Diam.	Width b/w Roller Link Plates	Link Plate		Pin				Outboard Roller		Approx. Mass kg/m	
Plastic Outboard Roller						Thick-ness	Height	Diam.						Plastic Outboard Roller	Steel Outboard Roller
Standard	Lambda	Electro-Conductive	P	R	W	T	H	D	L1	L2	L3	DS	HS		
RS40-SR-PB	RSC40-Λ-SR-PB	RS40-SR-PBE	12.70	7.92	7.95	1.5	12.0	3.97	9.65	17.9	19.3	15.88	7.8	0.94	1.67
RS50-SR-PB	RSC50-Λ-SR-PB	RS50-SR-PBE	15.875	10.16	9.53	2.0	15.0	5.09	11.9	21.6	23.2	19.05	9.4	1.42	2.42
RS60-SR-PB	RSC60-Λ-SR-PB	RS60-SR-PBE	19.05	11.91	12.70	2.4	18.1	5.96	15.25	27.95	30.35	22.23	12.6	2.11	3.63

Note: 1. The mass shown is when outboard rollers are attached to every link in a staggered formation (refer top left drawing) or every second link in a crosswise formation (refer top right drawing). 2. Connecting links are all the cotter pin type.

Model Identification

RSC 40 NP-Λ-1L SR-P-T

- Series
  - RSC : Λ
  - RS : Other than Λ
- Chain Size
- Base Chain Specification
  - No code: Steel
  - NP : Nickel Plated
  - SS : Stainless Steel (SUS304)
- Λ : Lambda (No combination available with SS base chain).
- P : Plastic Roller (Base chain rollers are made from engineering plastic).
- Outboard Roller Attachment Spacing
  - 1L: Every link
  - 2L: Every second link
- Outboard Roller Type
  - SR-P: Engineering Plastic Roller SR: Steel Roller
  - SR-PE: Electro-Conductive Plastic Rollers Please indicate separately for plastic brakes with rollers.
- Outboard Roller Attachment Formation
  - T: Staggered H: Crosswise



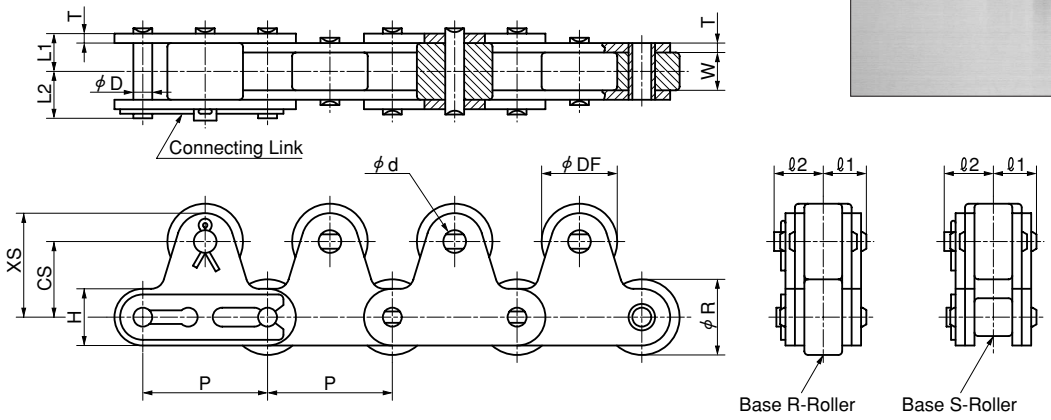
Top Roller Chains (All Types)

Top Roller Chains.
Use of Double-Plus Chain, Plastic Outboard Roller Chain and Top Roller Chain should be differentiated according to the shape and size of the conveyed object and the overall layout of the machine.

Top Roller Chain Series

Specification	Chain roller	Top Roller	
		Steel	Eng. Plastic
Standard	**Steel**	○	-
Plastic Top Roller	**Steel**	-	○
Plastic R-Roller	**Plastic R-Roller**	-	○
Lambda Λ	**Steel**	○	○

RF Top Roller Chain Dimensions (Applicable to all specifications)



1. Connecting links for RF2040 to RF2060 are clip type. All other sizes are cotter pin type.
2. When top rollers appear on every even link, the rollers will be attached to roller links unless otherwise specified.

TSUBAKI Chain No.					Pitch P	Width b/w Roller Link Plates W	Roller Diam. R		Pin			Link Plate	
Plastic Top Roller			Steel Top Roller				S-Roller	R-Roller	Diam. D	L1	L2	Height H	Thickness T
Standard	Lambda	Plastic R-Roller	Standard	Lambda									
RF2040-TR-P	RFC2040-Λ-TR-P	RF2040-P-TR-P	RF2040-TR	RFC2040-Λ-TR	25.40	7.95	7.92	15.88	3.97	8.25	9.95	12.0	1.5
RF2050-TR-P	RFC2050-Λ-TR-P	RF2050-P-TR-P	RF2050-TR	RFC2050-Λ-TR	31.75	9.53	10.16	19.05	5.09	10.3	12.0	15.0	2.0
RF2060-TR-P	RFC2060-Λ-TR-P	RF2060-P-TR-P	RF2060-TR	RFC2060-Λ-TR	38.10	12.70	11.91	22.23	5.96	14.55	16.55	17.2	3.2
RF2080-TR-P	—	RF2080-P-TR-P	RF2080-TR	—	50.80	15.88	15.88	28.58	7.94	18.3	20.9	23.0	4.0
RF2100-TR-P	—	RF2100-P-TR-P	RF2100-TR	—	63.50	19.05	19.05	39.69	9.54	21.8	24.5	28.6	4.8

TSUBAKI Chain No.	Top Roller						Approx. Mass kg/m				
	DF	CS	XS	ℓ1	ℓ2	d	Steel Top Roller		Plastic Top Roller		Plastic R-Roller
							S-Roller	R-Roller	S-Roller	R-Roller	
RF2040 –all specs.	15.88	15.0	21.0	8.25	9.65	3.97	1.33	1.69	0.91	1.27	0.92
RF2050 –all specs.	19.05	19.0	26.5	10.3	11.9	5.09	2.04	2.50	1.44	1.90	1.43
RF2060 –all specs.	22.23	23.0	31.6	14.55	16.95	5.96	3.68	4.36	2.77	3.46	2.75
RF2080 –all specs.	28.58	29.0	40.5	18.5	21.3	11.32	5.65	6.76	4.29	5.40	4.52
RF2100 –all specs.	39.69	35.4	49.7	22.1	27.2	14.52	9.11	11.37	6.51	8.77	6.60

Note: The mass shown is when top rollers appear on every link.

Model Identification

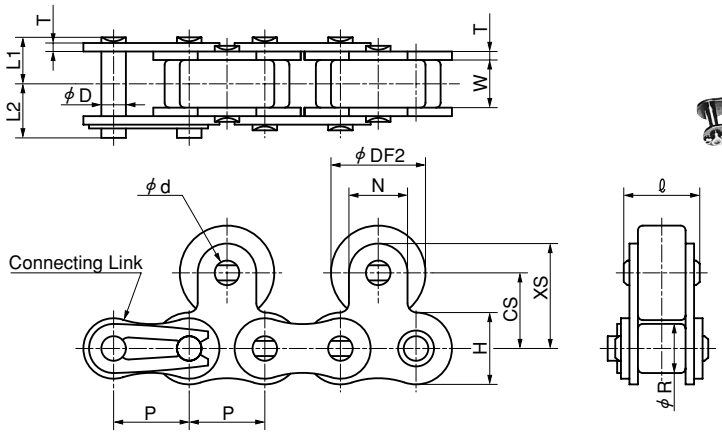
RFC 2040 NP R-Λ-1L TR-P

- Series — RFC : Λ; RF : Other than Λ
- Chain Size — 2040
- Base Chain Specification — No code : Steel NP : Nickel Plated SS : Stainless Steel (SUS304)
- Base Chain Roller Type — R : R-Roller S : S-Roller
- Λ : Lambda P : Plastic R-Roller
- Top Roller Attachment Spacing — 1L : Every link 2L : Every second link
- Top Roller Chain — TR
- Top Roller Material — No code : Steel P : Plastic

Sprocket

No. of teeth / TSUBAKI Chain No.	11	12	13
RF2040R	98	106	115
RF2050R	125	135	145
RF2060R	151	163	176
RF2080R	200	217	233
RF2100R	245	-	-

When top roller spacing is every second link or more

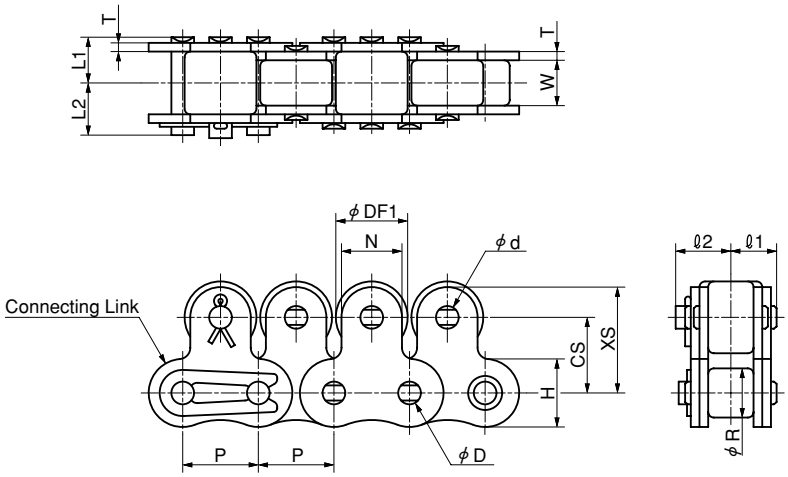


Model Identification

RSC 40 NP-Λ-1L TR-P

- Series: RSC : Λ; RS : Other than Λ
- Chain Size
- Base Chain Specification: No code : Steel; NP : Nickel Plated; SS : Stainless Steel (SUS304)
- Λ : Lambda; P : Plastic R-Roller
- Top Roller Attachment Spacing
- Top Roller Chain
- Top Roller Material: No code : Steel; P : Plastic

When top roller spacing is every link



■Sprocket

RS Standard sprockets can be used.

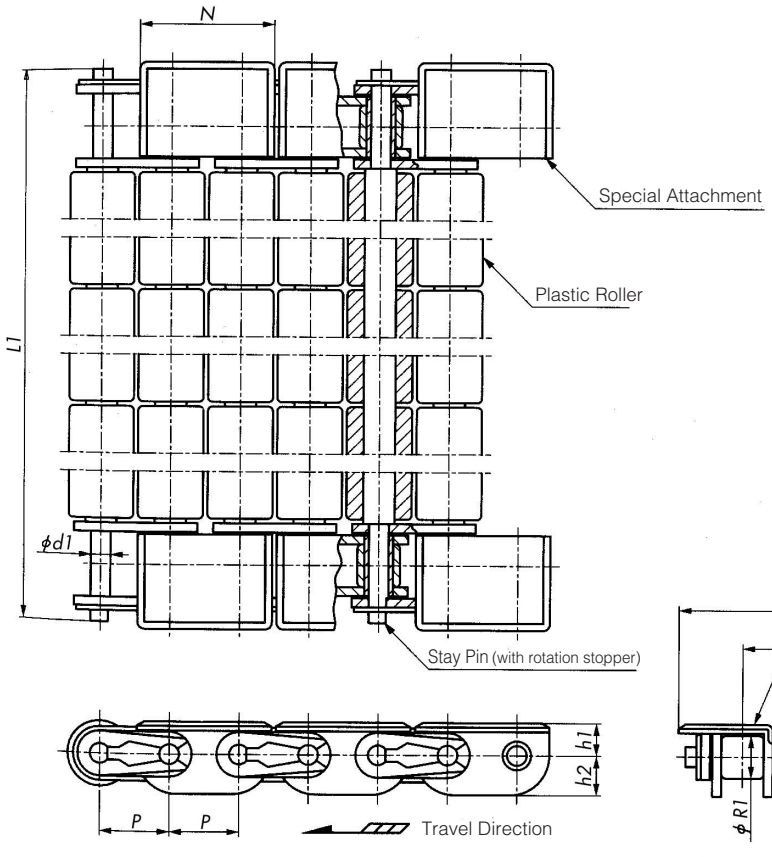
TSUBAKI Chain No.				Pitch P	Width b/w Roller Link Plates W	Base Roller Diam. R	Base Pin			Link Plate	
Plastic Top Roller		Steel Top Roller					Diam. D	L1	L2	Height H	Thickness T
Standard	Lambda	Standard	Lambda								
RS40-TR-P	RSC40-Λ-TR-P	RS40-TR	RSC40-Λ-TR	12.7	7.95	7.92	3.97	8.25	9.95	12.0	1.5
RS50-TR-P	RSC50-Λ-TR-P	RS50-TR	RSC50-Λ-TR	15.875	9.53	10.16	5.09	10.3	12.0	15.0	2.0
RS60-TR-P	RSC60-Λ-TR-P	RS60-TR	RSC60-Λ-TR	19.05	12.70	11.91	5.96	12.85	14.75	18.1	2.4
RS80-TR-P	RSC80-Λ-TR-P	RS80-TR	RSC80-Λ-TR	25.40	15.88	15.88	7.94	16.25	19.25	24.1	3.2
RS100-TR-P	RSC100-Λ-TR-P	RS100-TR	RSC100-Λ-TR	31.75	19.05	19.05	9.54	19.75	22.85	30.1	4.0

TSUBAKI Chain No.	Top Roller									Approx. Mass kg/m			
	DF1	DF2	CS	N	XS	ℓ	ℓ1	ℓ2	d	Steel Top Roller		Plastic Top Roller	
										Every Link	Every Second Link	Every Link	Every Second Link
RS40 –all specs.	11.0	15.88	12.7	9.5	17.45	13.2	8.25	9.65	3.97	1.83	1.41	0.92	0.85
RS50 –all specs.	15.0	19.05	15.9	12.7	22.25	16.2	10.3	11.9	5.09	2.39	2.18	1.56	1.38
RS60 –all specs.	18.0	22.23	18.3	15.9	26.25	20.6	12.85	15.25	5.96	3.60	3.18	2.30	2.03
RS80 –all specs.	24.0	28.58	24.6	19.1	34.15	25.7	16.25	19.25	7.94	6.09	5.27	3.90	3.44
RS100 –all specs.	30.0	39.69	31.8	25.4	44.50	31.0	19.75	22.85	9.54	9.30	8.85	6.06	5.41

Note: 1. "Every Link" and "Every Second Link" in "Approx. Mass" section refer to the top roller spacing.
2. Pins for the connecting links are clip type for sizes RS40 to RS60 and cotter pin type for sizes RS80 to RS100.
3. When top rollers appear on every even link, the rollers will be attached to roller links unless otherwise specified.

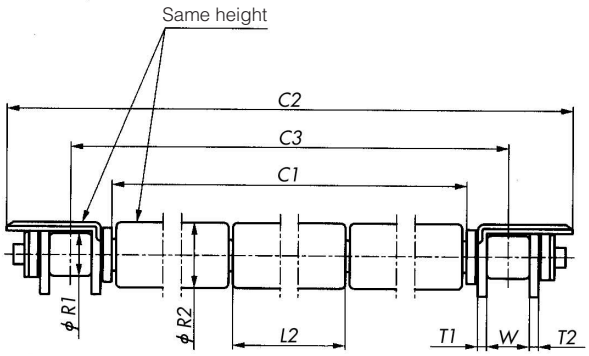
Free-Flow Series ST Type

Line pressure is notably reduced during accumulation because of the low roll-friction coefficient of the plastic rollers (roll-friction coefficient is between 0.06 and 0.10). This low roll-friction coefficient protects the conveyed object from damage and enables smooth divergence and confluence of the conveyor. In addition, smooth transfer to the next line is ensured by the plastic rollers and special attachments with the same surface height.



SS: Stainless steel
NP: Nickel plating

Maximum allowable conveying load varies depending upon the width of the roller table and the machine length.



■Dimensions

TSUBAKI Chain No.	Pitch *P*	Width b/w Roller Link Plates *W*	Roller (Bushing) Diam. *R1*	Attachment Height *h1*	Link Plate Height *h2*	Attachment Width *N*	Attachment Thickness *T1*	Link Plate Thickness *T2*	Pin Diam. *d1*	Plastic Roller Outer Diam. *R2*	Plastic Roller Length *L2*	Max. Allowable Conveying Load ※ kg/m²
ST300	9.525	4.78	(5.08)	4.4	5.2	18.3	0.75	1.25	3.54	9.2	10.0	50
ST400	12.70	7.95	7.94	5.7	7.0	24.4	1.2	1.5	3.92	12.0	25.0	250
ST500	15.875	9.53	10.16	7.1	8.5	30.5	1.5	2.0	5.00	15.0	25.0	350

Note: 1. The base chain for ST300 (#35) is rollerless and bushed type. All items are made-to-order.

2. ※ The max. allowable conveying load changes depending on the width and length of the roller table.

■Component Dimensions

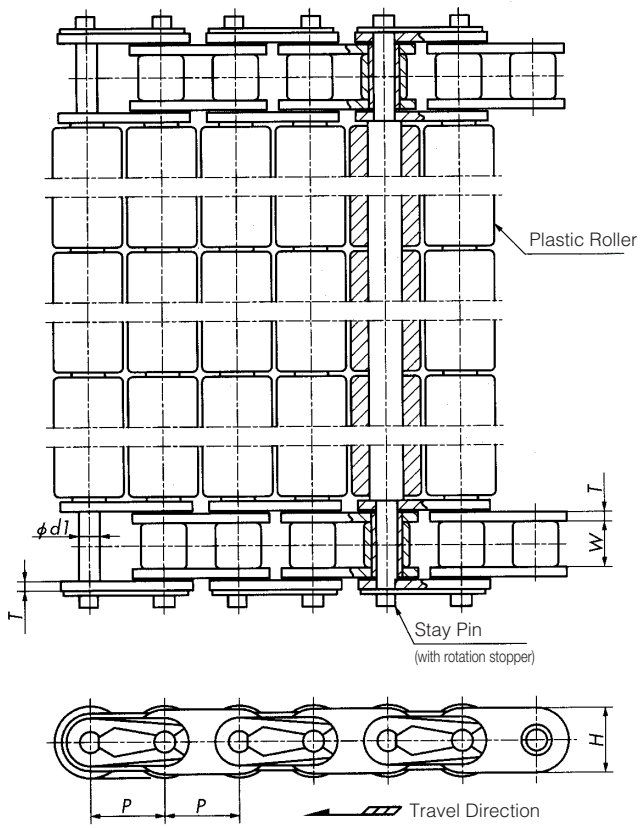
Roller Table No.	Effective Width *C1*	Total Width *C2*	Center Distance *C3*	Pin Length *L1*	Approx. Mass kg/m
ST305SS	50.0	75.0	60.4	74.2	1.75
ST310SS	100.0	125.0	110.4	124.2	2.68
ST315SS	150.0	175.0	160.4	174.2	3.61
ST320SS	200.0	225.0	210.4	224.2	4.54

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

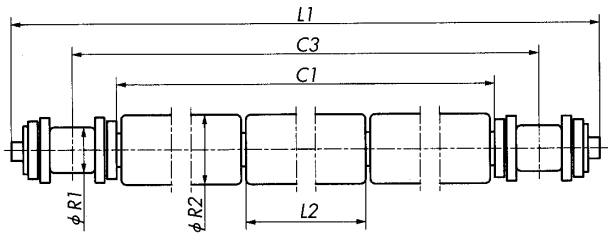
Roller Table No.	Effective Width *C1*	Total Width *C2*	Center Distance *C3*	Pin Length *L1*	Approx. Mass kg/m
ST504SS (NP)	101.2	145.2	119.0	142.8	6.16
ST506SS (NP)	151.2	195.2	169.0	192.8	8.08
ST508SS (NP)	201.2	245.2	219.0	242.8	9.88
ST510SS (NP)	251.2	295.2	269.0	292.8	11.74
ST512SS (NP)	301.2	345.2	319.0	342.8	13.60
ST514SS (NP)	351.2	395.2	369.0	392.8	15.46
ST516SS (NP)	401.2	445.2	419.0	442.8	17.31
ST518SS (NP)	451.2	495.2	469.0	492.8	19.18
ST520SS (NP)	501.2	545.2	519.0	542.8	21.04
ST522SS (NP)	551.2	595.2	569.0	592.8	22.90
ST524SS (NP)	601.2	645.2	619.0	642.8	24.76

RT type has a wider plastic roller width than ST type and can be used for the transfer of large wide objects such as pallets and cases.
Line pressure is notably reduced during accumulation because of the low roll-friction coefficient of the plastic rollers (roll-friction coefficient is between 0.06 and 0.10). This low roll-friction coefficient protects the conveyed object from damage and enables smooth divergence and confluence of the conveyor.

■RT Roller Table



1. RS Standard sprockets (B-type) can be used when the number of teeth is at least 15. When the number of teeth is less than 15, the sprocket boss will come into contact with the chain link plates. In this case, sprockets exclusively for roller tables should be used.
2. The link plate width H for the outer link plate and inner link plate is the same.



Roller Table No.	Pitch *P*	Width b/w Roller Link Plates *W*	Roller Diam. (Bushing) *C3*	Link Plate		Pin		Plastic Roller		Effective Width *C1*	Center Distance *C3*	Max. Allowable Conveying Load※ kg/m²	Approx. Mass kg/m
				Width *H*	Thickness *T*	Diam. *d1*	Length *L1*	Diam. *R2*	Length *L2*				
RT305SS	9.525	4.78	(5.08)	8.2	1.25	3.54	74.2	9.2	10.0	50.5	60.4	50	1.68
RT310SS							124.2			100.0	110.4		2.61
RT315SS							174.2			150.0	160.4		3.54
RT320SS							224.2			200.0	210.4		4.47
RT404SS	12.70	7.95	7.94	11.1	1.5	3.92	135.6	12.2	50.0	101.2	115.6	200	4.03
RT408SS							235.6			201.2	215.6		6.76
RT412SS							335.6			301.2	315.6		9.48
RT416SS							435.6			401.2	415.6		12.21
RT504SS	15.875	9.53	10.16	13.9	2.0	5.00	142.8	15.2	50.0	101.2	119.0	300	5.80
RT508SS							242.8			201.2	219.0		9.48
RT512SS							342.8			301.2	319.0		13.17
RT516SS							442.8			401.2	419.0		16.89
RT520SS							542.8			501.2	519.0		20.54
RT524SS							642.8			601.2	619.0		24.23
RT604SS	19.05	12.70	11.91	16.8	2.4	5.96	153.6	18.3	50.0	101.2	124.0	300	6.73
RT608SS							253.6			201.2	224.0		10.38
RT612SS							353.6			301.2	324.0		14.03
RT616SS							453.6			401.2	424.0		17.68
RT620SS							553.6			501.2	542.0		21.32
RT624SS							653.6			601.2	624.0		24.97

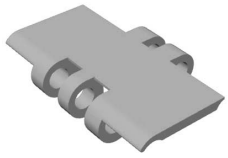
Note: 1. The base chain for ST300 (#35) is rollerless and bushed type. All items are made-to-order.
2. ※ The max. allowable conveying load changes depending on the width and length of the roller table.

Specifications Outline (Plastic Chain Material)

1. Standard Specification

Made of polyacetal resin and used previously as a general-purpose product.

The chain link's colors appear on the pages in each product section.
Color is gray when no annotations are shown.



2. MW Low Friction / Anti-Wear Series

Comes in three different colors with the same specifications.

MW Color WHITE (MW)

MWG Color LIGHT GREEN (MWG)

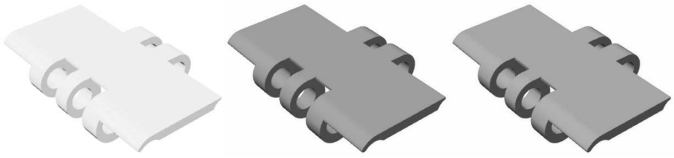
MWB Color LIGHT BROWN (MWB)

Engineering plastic adopted in chain links

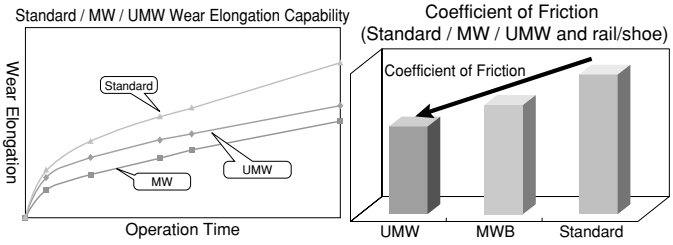
1. The coefficient of friction has been reduced by 15 to 45% in comparison with standard types. Abatement of line pressure when accumulation occurs results in the alleviation of goods being damaged.
2. Chain life is 1.2 to 2 times longer than that of standard types. Reduced chain load increases the chain's service life.
3. Divergence and accumulation of conveyed goods is smooth.
4. Reduction of required drive power.

Applications

- Ideal in harsh conditions (high speed / high load) where chain elongation is accelerated resulting in short chain replacement cycles.
- Ideal in high line pressure conditions where conveyed items may be scratched.
- Ideal in situations where products topple over upon contact with rails at points where conveyors converge and diverge.



MW MWG MWB



3. MWS Antibacterial / Mold Resistant Series

Symbol : [MWS]

Engineering plastic adopted in chain links

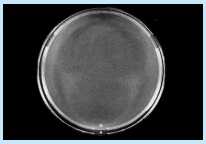
*Color : Cream

1. **Antibacterial and Mold Resistant:**
   MWS chain employs innovative bacterial preventive agents developed in collaboration with antibacterial product manufacturers. As well as having preventive functions against bacteria such as colon bacillus (e-coli), staphylococcus and lactobacillus, its anti-mold properties are effective against blue and other forms of mold.
2. **Enduring Qualities**
   Combines inorganic antibacterial features with long chain life and high endurance. Chain links disperse uniformly due to the plastic tempering steps that the chain undergoes during manufacturing. Even if wear eventually occurs on the chain surface, the antibacterial and anti-mold functions continue to perform.
3. **Safety Features**
   Worry free due to high antibacterial safety standards. Tsubaki engineering plastic products have always been in accordance with Japan's Ministry of Welfare's food sanitary laws (item #20), and with the addition of antibacterial and anti-mold properties, these products are even more suitable for food and beverage related uses.
4. **Advanced Functions**
   The link materials are ideal for low friction specifications (i.e. MW type). Virtually no change in power and efficiency arise from the addition of antibacterial properties. The low wear and friction enduring qualities are second to none.

Applications

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

Antibacterial / Anti-mold Features

MWS	MW
	

*Test Method Based on Antibacterial Processed Goods Test Method I (1995 edition) Film Contact Method

- Conducted by The Japan Food Testing Analysis Foundation
- Test results issued on August 6, 1997
- Test results reference number 397050652-002 & 397050652-003

4. UMW Ultra Low Friction Series

Code : [UMW]

Engineering plastic adopted in chain links

*Color : Ultra Marine

1. **Ultra Low Friction :** The coefficient of friction has been sharply reduced by the adoption of a special material which comprises a silicone based lubricant. It has been reduced by 15 to 30% compared to that of the MW series (dry conveyance). Abatement of line pressure when accumulation occurs results in the alleviation of goods being damaged.
2. **Divergence and accumulation of conveyed goods is smooth.**
3. **Reduction of required drive power.**
4. **Printing Process :** As a lubricant comprising of silicone is used, please refrain from use where there is a concern of printing bubbles forming in the printing process.

Applications

- Ideal for conveying pet bottles and paper packs.
- Ideal in the accumulation area just before case packaging machines and testing equipment.
- Ideal where multiple rows come together to form one row.
- Ideal when wanting to reduce or eliminate lubricants (soapy water, etc.)
- Ideal when surface friction of MW type is excessive.

5. KV Heat Resistant / High Speed Series

Code : [KV180, KV250]

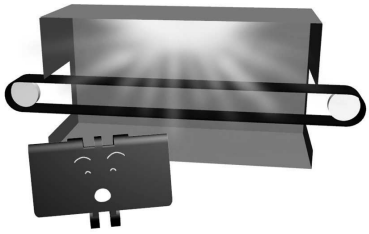
Engineering plastic adopted in chain links

*Color : Black

1. **Maximum Operational Temperature :** 180˚C (KV180), 250˚C (KV250)
2. **Maximum Speed : 200m/min**
3. **Chemical Resistance :** Possesses outstanding tolerance against chemicals used in washing and sterilization.
4. **Conductivity :** Surface electrical resistance is low ($10^6\Omega$) and no generation of static electricity. Suitable for preventing dust adhesion and sparks.
5. **Fire Resistant Qualities :** Constructed with V-O class engineering plastic, UL standard's highest fire resistant class.
6. **Conforms to Food Sanitation Regulations :** KV chain is manufactured from materials in accordance with food sanitation regulations.
7. **Noise :** Noise increases by 2 to 3 db in comparison with standard chains.

Heat Resistant Properties

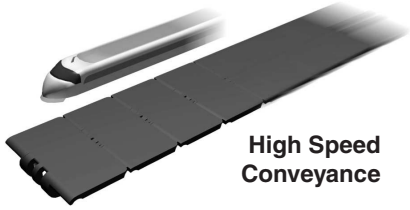
Can be used inside furnaces and heaters!



Applications

- Heat Resistance
- High Speed
- Chemical Resistance

- Shrink Packaging
- Drying Line
- Empty can high speed conveyor line
- Conveyor for before and after drink filling
- Where polyester chain links are invaded by chemicals.



High Speed Conveyance

6. Plastic Pin Specification

Code : [P]

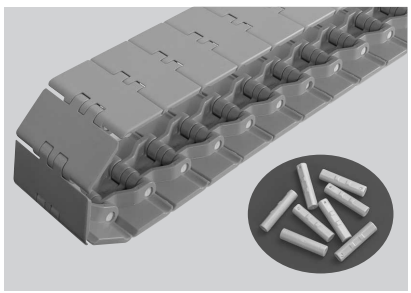
Special engineering plastic pins adopted in place of stainless steel pins

1. **Allowable load is roughly equal to stainless steel pins (80 to 100%) :** The structure of the thick plastic pin and hinge has been altered.
2. **Long Life :** Even under dry, soapy water, and wet conditions, the chain exhibits outstanding wear resistance between the pin and bushing due to the combination of Tsubaki's characteristic materials. Effects are demonstrated especially with water lubricants.
3. **Light Weight :** 75 to 85% of stainless steel pin top chain. Easy to handle and effective in the reduction of required power and noise.
4. **Easy Disposal :** As the chain is completely made of plastic, it can be disposed of as is.
5. **Conforms to Food Sanitation Regulations :** The links and pins are manufactured from materials in accordance with food sanitation regulations.

Applications

- Easily disposed
- Electro-magnetic Wave
- Water Lubricant

- Reduced disposal costs
- Metal detector, heating equipment, others
- Ideal when wear elongation life is short when stainless steel pins are used.



NB : Operating temperature up to 60˚C is allowed when Plastic Pin specification is used in wet conditions.

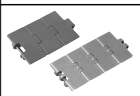
7. Other Specifications

The following series are available: Electro-conductive, Chemical Resistant, Super Chemical Resistant, Acid Resistant, Electro-static Preventive, High Friction and Ultra-Violet Ray Resistant. Please refer to page 63 for more details.

Specification	Features / Applications	Important Matters on Use
Electro-conductive Specification <E>	• Link : Special Engineering Plastic, Black • Pin : SUS304 / Plastic D shaped pin • Volume Specific Resistance : $1\times10^{6}\Omega$/cm (Standard $1\times10^{14\sim15}\Omega$/cm) • In addition to countermeasuring dust and wear dust adhesion by static electricity, the generation of electric noise and sparks are suppressed. (Ideal for low electricity conveyors)	• Allowable load is about 70% of standard spec. • Coefficient of Friction is equal to that of standard spec. • Serrated pin spec. : **Not available** • Plastic Pin spec. : Available • An earth is necessary when sprockets and rails, etc. are made of steel.
Electro-static Preventive Type <SE>	• Link : Special Engineering Plastic, Light Gray • Pin : SUS304, Plastic Pin • Volume Specific Resistance : $1\times10^{13}\Omega$ / cm (Standard $1\times10^{14\sim15}\Omega$ / cm) • Countermeasures dust and wear dust adhesion by static electricity. (Countermeasures static electricity when conveyance is dry)	• Allowable load is equal to that of standard type. • Coefficient of friction is equal to that of standard type. • Serrated pin type. : Available • Plastic Pin type. : Available • An earth is necessary when sprockets and rails, etc. are made of steel.
Chemical Resistant Type <Y>	• Link : Special Engineering Plastic, White • Pin : SUS304 • Not affected by organic solvents, inorganic salts, acids, alkalis and oxidants. • Ideal for conveying standard batteries, strong acidic batteries and strong alkaline bleach.	• Allowable load is 50% that of standard type. • Coefficient of friction is equal to that of standard type. • Plastic Pin Type : **Not available**
Super Chemical Resistant <SY>	• Link : Special Engineering Plastic, White • Pin : Titanium • Y-type pin changed to titanium, thereby enhancing chemical resistance even more.	• Allowable load is 50% that of standard type. • Coefficient of friction is equal to that of standard type. • D shaped pin type : **Not available** • Plastic Pin Type : **Not available**
Acid Resistant Specification <AR>	• Link : Special Engineering Plastic, White • Pin : SUS304 • Compared to standard and MW type, corrosion resistance is excellent. However, affected by strong acids and alkalis. • Soapy water containing Sodium Hypochlorous acid acts as a measure against corrosion, etc.	• Allowable load is 90% that of standard type. • Coefficient of friction is equal to that of standard type. • Plastic Pin Type : **Not available** • Use in an environment where exposed to water of a temperature greater than 60℃ : **Not available**
High Friction Specification <HF>	• Link : Special Engineering Plastic, Cream • Pin : SUS304 / Plastic D shaped pin • Ideal for inclined conveyors, etc.	• Allowable load is 50% that of standard type. • Coefficient of friction is 1.1 times that of standard type and 1.6 times that of MW type. • Serrated Pin type : **Not available** • Plastic Pin type : Available
Ultra-Violet Ray Resistant Specification <UVR>	• Link : Special Engineering Plastic, Light Gray • Pin : SUS304 D shaped pin, Plastic Pin • Ultra-violet ray deterioration (discoloration and decline in strength) resistance is excellent compared to standard and MW type. • Ideal for conveyance in an ultra-violet ray sterilization process, etc.	• Allowable load is equal to that of standard type. • Coefficient of friction is equal to that of standard type. • Serrated Pin type : **Not available** • Plastic Pin type : Available

(※)Specifications other than those mentioned above can be manufactured to suit customer's environment .
Please contact Tsubaki for more details.

Top Chain Specifications

Chain Type		Specifications		Parts, etc.				Chain Specifications				Chain Material			※ Top Plate Width
				Machine Parts	Electronic Parts	Wooden Products	Ceramic Products	Max. Allowable Load kN {kgf}	Max. Chain Speed m/min: With Lube	Max. Chain Speed m/min: Without Lube	Ambient Temperature ℃	Top Plate	Pin	Base Chain (Chain part when independent from top plate)	
Chain with Plastic Top Plate	Linear Movement	TTP		○			○	0.83 { 85}	100	50	−20～80	POM	SUS304	—	63～190
		TTP-MW		○			○	0.83 { 85}	100	50	−20～80	SEP	SUS304	—	63～190
		TTP-P-MW		○			○	0.83 { 85}	100	50	−20～60 (80)	SEP	SEP	—	63～190
		TTP-D-UMW		○			○	0.69 { 70}	100	50	−20～80	SEP	SUS304	—	63～114
		TTP-PD-UMW		○			○	0.59 { 60}	100	50	−20～60 (80)	SEP	SEP	—	63～114
		TTP-KV180		○			○	0.83 { 85}	200	200	−20～180	SEP	SUS304	—	82
		Double Hinge Type		○			○	1.67 {170}	100	50	−20～80	SEP	SUS304	—	190～305
		TP		○			○	1.18 {120}	100	50	−20～80	POM	SUS304	—	76～127
		TP-I、IIMW		○			○	1.18 {120}	100	50	−20～80	SEP	SUS304	—	76～127
		TP-P-II-MW		○			○	0.98 {100}	100	50	−20～60 (80)	SEP	SEP	—	82/114
		TP-P-II-UMW		○			○	0.82 { 84}	100	50	−20～60 (80)	SEP	SEP	—	82/114
		TP-II-KV180,250		○			○	0.98 {100}	200	200	−20～180/250	SEP	SUS304	—	82
		TPH830		○			○	1.18 {120}	100	50	−20～80	SEP	SUS304	—	83
		TPH830-MW		○			○	1.18 {120}	100	50	−20～80	SEP	SUS304	—	83
		TPH830-UMW		○			○	0.83 { 85}	100	50	−20～80	SEP	SUS304	—	83
		TPH830P		○			○	0.78 { 80}	100	50	−20～60 (80)	SEP	SEP	—	83
		TPH830P-MW		○			○	0.78 { 80}	100	50	−20～60 (80)	SEP	SEP	—	83
		TPH830P-UMW		○			○	0.59 { 60}	100	50	−20～60 (80)	SEP	SEP	—	83
		MTP826T		○			○	1.18 {120}	100	50	−20～80	POM	SUS304	—	82
		MTP826T-MW		○			○	1.18 {120}	100	50	−20～80	SEP	SUS304	—	82
		MTP826T-UMW		○			○	0.83 { 85}	100	50	−20～80	SEP	SUS304	—	82
		MTP826SNT		○			○	1.18 {120}	100	50	−20～80	POM	SUS304	—	82
		MTP826SNT-MW		○			○	1.18 {120}	100	50	−20～80	SEP	SUS304	—	82
		MTP826SNT-UMW		○			○	0.83 { 85}	100	50	−20～80	SEP	SUS304	—	82
		MTP826P-SNT		○			○	0.78 { 80}	100	50	−20～80	POM	SEP	—	82
		MTP826P-SNT-MW		○			○	0.78 { 80}	100	50	−20～80	SEP	SEP	—	82
		MTP826P-SNT-UMW		○			○	0.59 { 60}	100	50	−20～80	SEP	SEP	—	82
		TN		○				6.28 {640}	120	60	−10～80	POM	—	Steel	82～190
		TN-NP		○				6.28 {640}	120	60	−10～80	POM	—	NPS	82～190
		TN-NP-Λ		○				6.28 {640}	—	60	−10～80	POM	—	NPS	82～190
		TN-SS		○				1.03 {105}	70	45	−20～80	POM	—	SUS304	82～190
		TN-PC		○				0.88 { 90}	100	50	−20～80	POM	—	POM+SUS304	82
Chain with Plastic Top Plate	Curved Movement	TTUP		○			○	1.08 {110}	100	50	−20～80	POM	SUS304	—	82～190
		TTUP-MW		○			○	1.08 {110}	100	50	−20～80	SEP	SUS304	—	82～190
		TTUP-UMW		○			○	0.78 { 80}	100	50	−20～80	SEP	SUS304	—	82～190
		TTUP-P-MW		○			○	0.88 { 90}	100	50	−20～60 (80)	SEP	SEP	—	82/114
		TTUP-P-UMW		○			○	0.61 { 62}	100	50	−20～60 (80)	SEP	SEP	—	82/114
		TTUP-KV180		○			○	0.98 {100}	200	200	−20～180	SEP	SUS304	—	82
		TPU		○			○	0.98 {100}	100	50	−20～80	POM	SUS304	—	82
		TPU-MW		○			○	0.98 {100}	100	50	−20～80	SEP	SUS304	—	82
		TPU-UMW		○			○	0.69 { 70}	100	50	−20～80	SEP	SUS304	—	82
		TPU-P-MW		○			○	0.88 { 90}	100	50	−20～60 (80)	SEP	SEP	—	82
		TPU-P-UMW		○			○	0.61 { 62}	100	50	−20～60 (80)	SEP	SEP	—	82
		TPU-KV180,250		○			○	0.98 {100}	200	200	−20～180/250	SEP	SUS304	—	82
		MTPU826T		○			○	0.98 {100}	100	50	−20～80	POM	SUS304	—	82
		MTPU826T-MW		○			○	0.98 {100}	100	50	−20～80	SEP	SUS304	—	82
		MTPU826T-UMW		○			○	0.69 { 70}	100	50	−20～80	SEP	SUS304	—	82
		TPSR826T		○			○	0.98 {100}	100	50	−20～80	POM	SUS304	—	82
		TPSR826T-MW		○			○	0.98 {100}	100	50	−20～80	SEP	SUS304	—	82
		TPSR826T-UMW		○			○	0.69 { 70}	100	50	−20～80	SEP	SUS304	—	82
		TNU		○				4.02 {410}	100	60	−10～80	POM	—	Steel	82～127
		TNU-NP		○				4.02 {410}	100	60	−10～80	POM	—	NPS	82～127
		TNU-AS		○				0.78 { 80}	—	45	−20～80	POM	—	SSS	82～127
Chain with Stainless Steel Top Plate	Linear Movement	TT-N		○		○	○	1.47 {150}	100	60	−20～400	SUS430	SUS304	—	63～190
		TT-SS		○		○	○	2.16 {220}	100	60	−20～400	SUS304	SUS304	—	63～190
		TS-P		○		○	○	2.94 {300}	120	60	−10～150	SUS430	—	Steel	55～190
		TS-NP-P		○		○	○	2.94 {300}	120	60	−10～150	SUS430	—	NPS	55～190
		TS-NP-P-Λ		○		○	○	2.94 {300}	—	60	−10～150	SUS430	—	NPS	55～190
		TS-SS-P		○		○	○	1.03 {105}	70	45	−20～400	SUS304	—	SUS304	55～190
		TS-PA		○		○	○	2.94 {300}	120	60	−10～150	SUS430	—	Steel	55～190
		TS-NP-PA		○		○	○	2.94 {300}	120	60	−10～150	SUS430	—	NPS	55～190
		TS-NP-PA-Λ		○		○	○	2.94 {300}	—	60	−10～150	SUS430	—	NPS	55～190
		TS-SS-PA		○		○	○	1.03 {105}	70	45	−20～400	SUS304	—	SUS304	55～190
	Curved Movement	TTU		○		○	○	2.16 {220}	80	50	−20～400	SUS304	SUS304	—	82～190
		TKU		○		○	○	2.84 {290}	45	45	−10～150	SUS430	—	Steel	82/110
		TRU		○		○	○	4.02 {410}	100	60	−10～150	SUS430	—	Steel	76～127
		TRU-SS		○		○	○	0.69 { 70}	70	45	−20～400	SUS304	—	SUS304	76～127
		TO		○		○	○	2.94 {300}	60	60	−10～150	SUS430	—	Steel	82～177
		TU		○		○	○	0.98 {100}	60	60	−10～150	SUS430	—	Steel	82/114

Note:

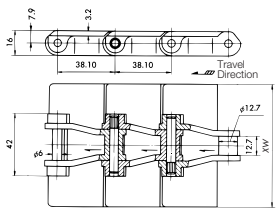
1. Antibacterial and anti-mold specifications (MWS) are included in MW series.
2. The maximum allowable load will decrease depending on temperature and speed.
3. Operational temperature of (80℃) is for dry conditions (ie lube-free)
4. This catalog shows the minimum and maximum widths of top plates marked with (※). There are items available incrementally between this span.
5. Chain specifications are based upon general use criteria and as such, the customer needs to carefully consider the actual conditions of use and then decide on chain type. Moreover, this criteria is based on conditions where no glass, etc., fragments will impede operations.

SEP : Special Engineering Plastic
NPS: Nickel Plated Steel
SSS: Special Stainless Steel
POM: Polyoxymethylene

TP-Linear Movement

TSUBAKI TP Top Chain consists of polyacetal resin top plates and 18-8 stainless steel pins.
The uniquenly shaped top plate with TSUBAKI technology ensures high strength and maximum chain life.
TSUBAKI TP Top Chain can be easily assembled and disassembled, and maintenance is minimal.

TP762-I, TP826-I (Standard/MW)

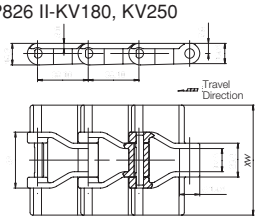


TP Type

Top plates are made of polyacetal. Pins are made of 18-8 stainless steel.

TSUBAKI Chain No.	Slat Width XW	Approx. Weight kg/m	Type	Colour
TP 762	76.2	0.85	I	Gray (Standard)
TP 826	82.6	0.85	I	
TP 1016	101.6	1.05	II	
TP 1143	114.3	1.1	II	
TP 1270	127.0	1.2	II	

TP826 II-KV180, KV250

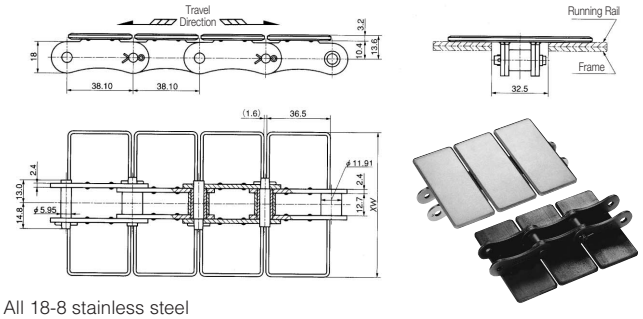


Top Chain Line Up

TS-Linear Movement

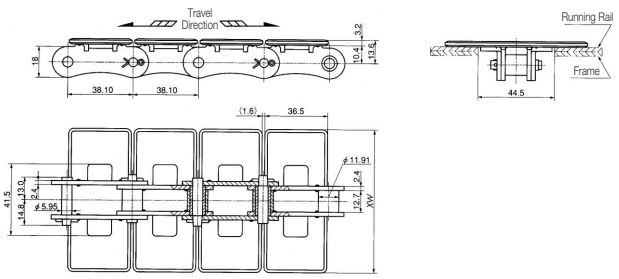
TSUBAKI TS Top Chain consists of top plates (made of 18 chrome stainless steel or 18-8 stainless steel) and steel roller chain identical to RS2060. The top plates are firmly projection-welded to the link plate of the chain, the fitting force of whch is extremely strong for reliable operation.
TS Top Chains are specially designed for use in packaging, bottling, and labelling equipment.

TS-P



All 18-8 stainless steel

TS-PA



All 18-8 stainless steel

TS-P & TS-NP(Λ)/SS-P

Carbon steel hardened chain and NP chain with 18-8 stainless steel top plate

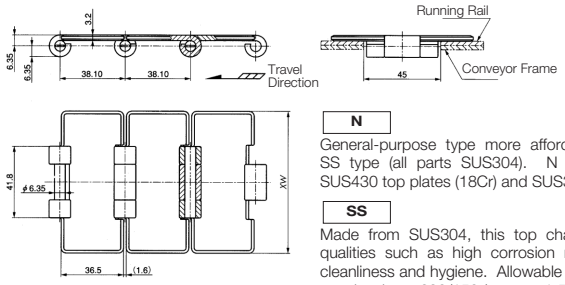
TS-PA & TS-NP(Λ)/SS-PA

Carbon steel hardened chain and NP chain with 18-8 stainless steel top plate

TSUBAKI Chain No.				TSUBAKI Chain No.				Top Plate Width	Max. Allowable Load kN{kgf}		Approx. Mass kg/m	
P	NP	Lambda (Λ)	SS	PA	NP	Lambda (Λ)	SS	XW	P/NP Λ	SS	TS-P	TS-PA
TS550-P	TS550NP-P	TS550NP-P-Λ	TS550SS-P	TS550-PA	TS550NP-PA	TS550NP-PA-Λ	TS550SS-PA	55.0	2.94 {300}	1.03 {105}	2.5	2.8
TS635-P	TS635NP-P	TS635NP-P-Λ	TS635SS-P	**TS635-PA**	**TS635NP-PA**	TS635NP-PA-Λ	TS635SS-PA	63.5			2.7	3.0
TS762-P	TS762NP-P	TS762NP-P-Λ	TS762SS-P	TS762-PA	TS762NP-PA	TS762NP-PA-Λ	TS762SS-PA	76.2			3.0	3.3
TS826-P	TS826NP-P	TS826NP-P-Λ	TS826SS-P	**TS826-PA**	**TS826NP-PA**	TS826NP-PA-Λ	TS826SS-PA	82.6			3.2	3.5
TS950-P	TS950NP-P	TS950NP-P-Λ	TS950SS-P	**TS950-PA**	**TS950NP-PA**	TS950NP-PA-Λ	TS950SS-PA	95.0			3.5	3.8
TS1016-P	TS1016NP-P	TS1016NP-P-Λ	TS1016SS-P	TS1016-PA	TS1016NP-PA	TS1016NP-PA-Λ	TS1016SS-PA	101.6			3.7	4.0
TS1100-P	TS1100NP-P	TS1100NP-P-Λ	TS1100SS-P	**TS1100-PA**	TS1100NP-PA	TS1100NP-PA-Λ	TS1100SS-PA	110.0			3.9	4.2
TS1143-P	TS1143NP-P	TS1143NP-P-Λ	TS1143SS-P	**TS1143-PA**	TS1143NP-PA	TS1143NP-PA-Λ	TS1143SS-PA	114.3			4.0	4.3
TS1270-P	TS1270NP-P	TS1270NP-P-Λ	TS1270SS-P	TS1270-PA	TS1270NP-PA	TS1270NP-PA-Λ	TS1270SS-PA	127.0			4.3	4.6
TS1524-P	TS1524NP-P	TS1524NP-P-Λ	TS1524SS-P	**TS1524-PA**	**TS1524NP-PA**	TS1524NP-PA-Λ	TS1524SS-PA	152.4			4.9	5.2
TS1905-P	TS1905NP-P	TS1905NP-P-Λ	TS1905SS-P	**TS1905-PA**	**TS1905NP-PA**	TS1905NP-PA-Λ	TS1905SS-PA	190.5			5.8	6.1

TT-Linear Movement

TT Top Chain is made of only two parts-stainless steel top plate with a rolled hinge and pin. This extremely simple construction ensures high strength and unusually long service life. In addition, the chains pick up fewer impurities and remain clean longer. The result is highly simplified handling and maintenance.



N

General-purpose type more affordable than SS type (all parts SUS304). N type uses SUS430 top plates (18Cr) and SUS304 pins.

SS

Made from SUS304, this top chain boasts qualities such as high corrosion resistance, cleanliness and hygiene. Allowable load of SS type is a large 220/150 (approx. 1.5).

TT-N

Top plates are made of 18 Chrome Stainless Steel. Pins are made of 18-8 Stainless Steel.

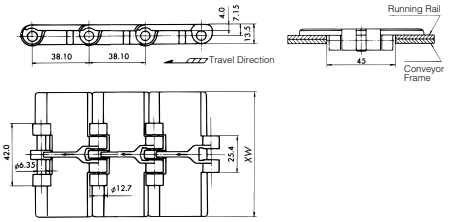
TT-SS

All parts are made of 18-8 Stainless Steel.

TSUBAKI Chain No.		Top Plate Width XW	Max. Allowable Load kN{kgf}		Approx. Mass kg/m
N	SS		N	SS	
TT635N	TT635SS	63.5	1.47 (150)	2.16 (220)	2.3
TT762N	TT762SS	76.2			2.6
TT826N	**TT826SS**	82.6			2.7
TT1016N	TT1016SS	101.6			3.2
TT1143N	TT1143SS	114.3			3.5
TT1270N	TT1127SS	127.0			3.8
TT1524N	TT1524SS	152.4			4.4
TT1905N	TT1905SS	190.5			5.3

TTP-Linear Movement

TSUBAKI TT Top Chain has a simple design of polyacetal resin top plate and 18-8 stainless steel pin.
Maximum allowable load is lower than TP type, but economical when replacement is required.



TTP

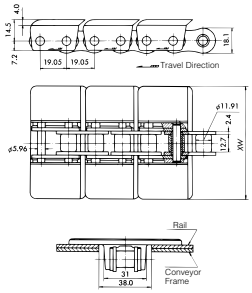
Plates are made of Polyacetal.
Pins are available in 18-8 stainless steel or plastic.

TSUBAKI Chain No.	Top Plate Width XW	Max. Allowable Load kN{kgf}	Approx. Mass kg/m	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
		SS Pins		Plastic Pins	
TTP635▲	63.5	・Standard ・MW ・KV 0.83{85} ・UMW 0.69{70}	0.8	・Standard ・MW ・UMW 0.59{60}	0.55
TTP762▲	76.2		0.9		0.65
TTP826▲●	82.6		0.9		0.65
TTP1016▲	101.6		1.0		0.75
TTP1143▲	114.3		1.0		0.80
TTP1270	127.0		1.1		0.85
TTP1524	152.4		1.2		0.95
TTP1651	165.1		1.3		1.05
TTP1905	190.5		1.4		1.20

▲ UMW available
● KV available (SS pin type only)

TN-Linear Movement

TSUBAKI TN Top Chain consists of polyacetal resin top plates snapped on to a special chain identical in size to RS60 chain.
This chain is available in three types—carbon steel, nickel plated carbon steel, and 18-8 stainless steel—to meet any application requirement.
The top plate can be correctly and firmly snapped on to the special pins and the chain without any trouble.



TN, TN-NP, TN-NP-Λ, TN-SS & TN-PC

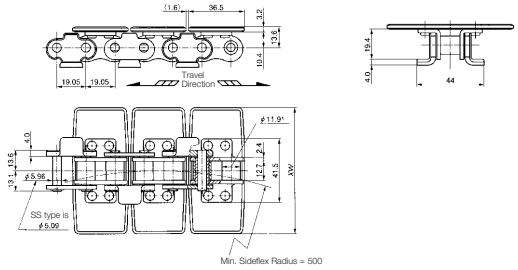
Top plates are Polyacetal.
Chains are carbon steel, nickel plated, 18-8 stainless steel and poly steel.

TSUBAKI Chain No.					Top Plate Width *XW*	Approx. Mass kg/m	Top Plate Material
Standard	NP	NP-Λ	SS	PC			
TN826	**TN826NP**	**TN826NP-Λ**	**TN826SS**	**TN826PC**	82.6	2.1(1.5)	Polyacetal (Color: Gray)
TN1016	**TN1016NP**	**TN1016NP-Λ**	**TN1016SS**	———	101.6	2.2	
TN1143	**TN1143NP**	**TN1143NP-Λ**	**TN1143SS**	———	114.3	2.3	
TN1270	**TN1270NP**	**TN1270NP-Λ**	**TN1270SS**	———	127.0	2.4	
TN1905	**TN1905NP**	**TN1905NP-Λ**	**TN1905SS**	———	190.5	2.8	
6.28{640}			1.03{105}	0.88{ 90}	←Max. Allowable Load kN{kgf}		

Note: 1. All types are stock items for short delivery in Japan.
2. MW, MWG and MWB top plates can also be manufactured. (Made-to-order items)
3. Mass in ( ) is for PC type.

TRU-Curved Movement

TSUBAKI TRU Top Chain uses top plates riveted on to RS60 Roller Chains as a base with special provisions for curving.
A float-prevention tab prevents floating at corners to allow creation of complex, curved conveyors. The same tab may also be used for inclined conveyors to keep the chain in position.



TRU

Top plates are made of 18 Chrome Stainless Steel. Chains are carbon Steel.

TRU-SS

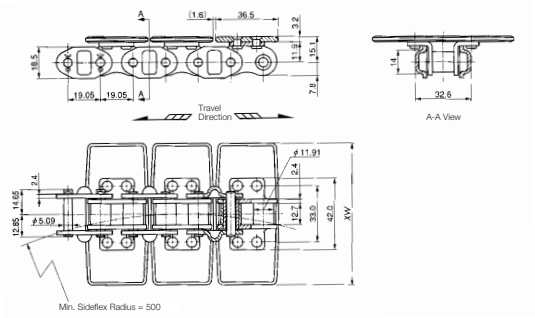
All parts are made of 18-8 Stainless Steel.

TSUBAKI Chain No.		Top Plate Width *XW*	Max. Allowable Load kN{kgf}		Approx. Mass kg/m
Standard	SS		Standard	SS	
TRU762	TRU762SS	76.2	4.02{410}	0.69{70}	3.9
TRU826	TRU826SS	82.6			4.1
TRU1016	TRU1016SS	101.6			4.6
TRU1100	TRU1100SS	110.0			4.8
TRU1143	TRU1143SS	114.3			4.9
TRU1270	TRU1270SS	127.0			5.2

Note: 1. Chain No.'s in bold print are stock items for short delivery in Japan.
Those without bold print are made-to-order.
2. Chain pitches per standard length: 160 (No. of links of base chain)

TKU-Curved Movement

TSUBAKI TKU Top Chain uses top plates riveted on to RS60 roller chain as a base with special provisions for curving. As the chain has no float-prevention tabs, it is recommended that slow and simple curved running be used.



TKU

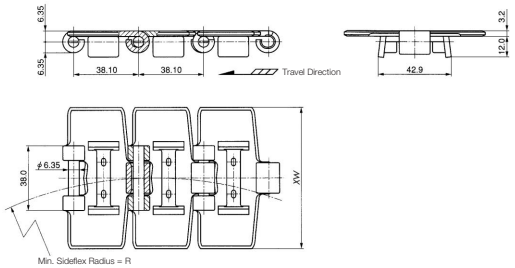
Top plates are 18 chrome stainless steel.
Chains are carbon steel.

TSUBAKI Chain No.	Top Plate Width *XW*	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
TKU826	82.6	2.84{280}	3.8
TKU1100	110.0		4.5

Note: 1. Chain No.'s in bold print are stock items for short delivery in Japan.
Those without bold print are made-to-order.
2. Chain pitches per standard length : 160 (No. of links on base chain)
3. SS: Max. Allowable Load = 0.69kN{70kgf} can also be manufactured.
4. For low speed (up to 45m/min) sideflex conveyance.

TTU-Curved Movement

TSUBAKI TTU Top Chain consists of top plates, connecting pins and guide-plates for float-prevention around curves. All parts are made of 18-8 stainless steel which ensures strong resistance to rust and clean handling.



TTU

All parts are made of 18-8 stainless steel.

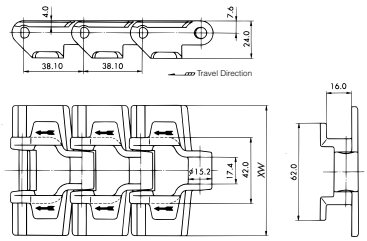
TSUBAKI Chain No.	Top Plate Width *XW*	Max. Allowable Load kN{kgf}	Min. Sideflex Radius *R*	Approx. Mass kg/m
TTU762	76.2	2.16{220}	460	2.7
TTU826	82.6			2.8
TTU1143	114.3			3.6
TTU1905	190.5		600	5.2

Note: 1. Chain No.'s in bold print are stock items for short delivery in Japan.
Those without bold print are made-to-order.
2. Chain pitches per standard length : 80

TPU-Curved Movement

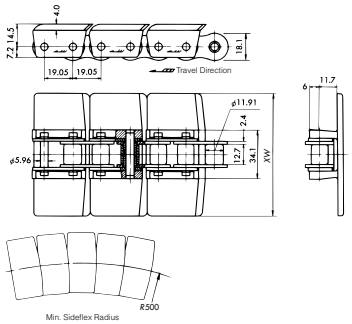
TSUBAKI TPU Top Chain consists of polyacetal resin top plates fitted with float-prevention tabs and 18-8 stainless steel pins.

TPU826 (Standard / MW / UMW / KV)



TNU-Curved Movement

TSUBAKI TNU Top Chain consists of polyacetal resin top plates snapped on to a special chain identical in size to RS60 chain carbon steel or nickel plated carbon steel chain.
The outside surface of the snap is tapered for float prevention.



TPU

Top plates are made of polyacetal.
Pins are made of 18-8 stainless steel.

■Stainless Steel Pin

TSUBAKI Chain No.							Top Plate Width XW	Approx. Mass kg/m
Standard	MW				UMW	KV		
	MW	MWG	MWB	MWS				
TPU826	TPU826MW	**TPU826MWG**	**TPU826MWB**	TPU826MWS	TPU826UMW	TPU826KV180 TPU826KV250	82.6	1.0
0.98{100}					0.69{ 70}	0.98{100}	←Max. Allowable Load kN{kgf}	

Note: Chain No.'s in bold print are stock items for short delivery in Japan.
Those without bold print are made-to-order. Chain pitches per standard length : 80

TNU, TNU-UP & TNU-AS

Top plates are made of polyacetal.
Chains are carbon steel, nickel plated and stainless steel.

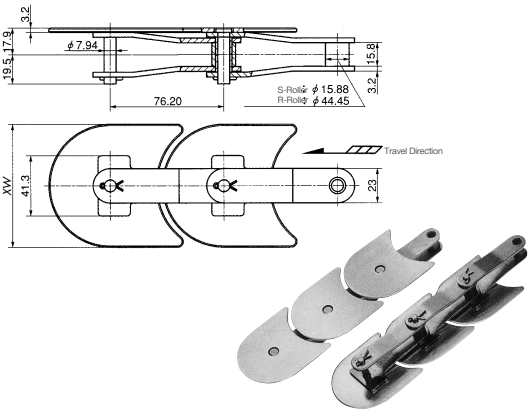
TSUBAKI Chain No.			Top Plate Width XW	Approx. Mass kg/m	Top Plate Material
Standard	NP	AS			
TNU826	TNU826NP	TNU826AS	82.6	2.2	Polyacetal (Color: Gray)
TNU1143	TNU1143NP	TNU1143AS	114.3	2.3	
TNU1270	TNU1270NP	TNU1270AS	127.0	2.5	
4.02{410}		0.78{ 80}	←Max. Allowable Load kN{kgf}		

Note: 1. Items are made-to-order.
2. MW, MWG and MWB can also be manufactured (MTO).

TO-Curved Movement

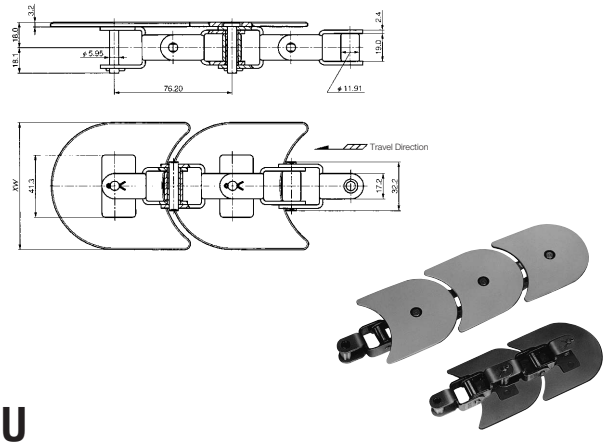
TSUBAKI TO Crescent Plate Chain is used to convey many types of containers and materials in the bottling and canning industries.
It is especially useful when the length of the conveyor is long and the load factor is high.
- Stronger than TS Top Plate Chain.
- Can follow any horizontal route.
- The use of multiple drives makes a longer conveyor length possible.
- A turn-table and guide roller are unnecessary on the return side.
- Min. radius of TO Crescent Plate Chain is 101.6mm.

TOS (R) 826、1143



TU-Universal Movement

TSUBAKI TU Crescent Plate Chain is similar to the other styles of Tsubaki Top Chains, but is designed for multi-plane operation.
It conveys cans, bottles or packages in a straight or curved line on a horizontal plane and the return can travel in any path best suited to conditions.
- Can follow any horizontal and vertical route.
- Standard carbon steel chain with 18Cr stainless steel.
- Crescent shaped top plates provided unless otherwise specified.



TO

Top plates are made of 18 chrome stainless steel.
Chains are carbon steel.

TSUBAKI Chain No.		Top Plate Width XW	Max. Allowable Load kN{kgf}	Approx. Mass kg/m	
S-Roller	R-Roller			S-Roller	R-Roller
TOS826	TOR826	82.6	2.94{300}	4.1	5.9
TOS1143	TOR1143	114.3		4.8	6.9
TOS1778	TOR1778	177.8		6.3	8.1

Note: 1. Items are made-to-order. Chain pitches per standard length : 40
2. SS: Max. Allowable Load = 1.77kN{180kgf} can also be manufactured.

TU

Top plates are made of 18 chrome stainless steel.
Chains are carbon steel.

TSUBAKI Chain No.	Top Plate Width XW	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
TU826	82.6	0.98{100}	3.8
TU1100	114.3		4.5

Note: 1. Items are made-to-order. Chain pitches per standard length : 40
2. SS: Max. Allowable Load = 1.77kN{180kgf} can also be manufactured.

Low Noise Plastic Top Chain

MTP-SNT Top Chain

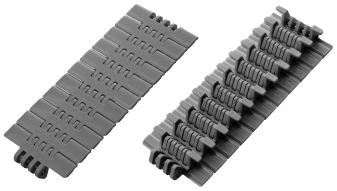
Linear Movement

1. Design Concept : Less noise & chordal action.

- Quieter environment and comfortable working conditions.
- More than 10dB(A) quieter than conventional plastic top chain (38.1mm pitch).
- MTP826SNT targets high speed and smooth conveying.

2. Specifications.

- Engagement : Silent chain type
- Chain pitch : 19.05mm (half of conventional type)
- Top plate width : 82.6mm
- Link material : Polyacetal
- Pin : 304 stainless steel / Polyacetal



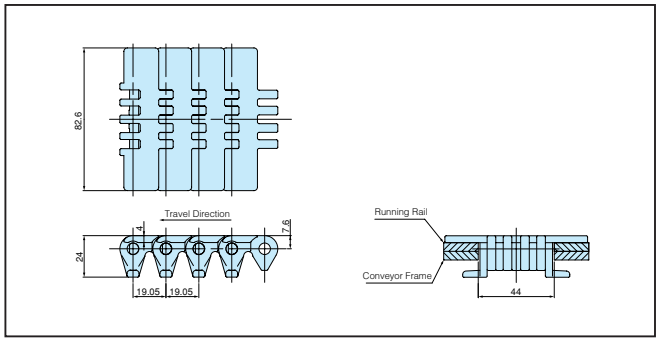
●Standard Specification (Color : Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial/ Mold Resistant+Low Friction Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)

■Stainless Steel Pin

Standard	TSUBAKI Chain No. MW				UMW	Top Plate Width	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
	MW	MWG	MWB	MWS				
MTP826SNT	MTP826SNT-MW	MTP826SNT-MWG	MTP826SNT-MWB	MTP826SNT-MWS	MTP826SNT-UMW	82.6	·Standard ·MW 1.18{120} ·UMW 0.83{ 85}	1.4

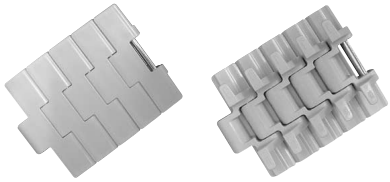
■Plastic Pin

Standard	TSUBAKI Chain No. MW				UMW	Top Plate Width	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
	MW	MWG	MWB	MWS				
MTP826P-SNT	MTP826P-SNT-MW	MTP826P-SNT-MWG	MTP826P-SNT-MWB	MTP826P-SNT-MWS	MTP826P-SNT-UMW	82.6	·Standard ·MW 0.78{80} ·UMW 0.59{60}	1.1



MTP Top Chain

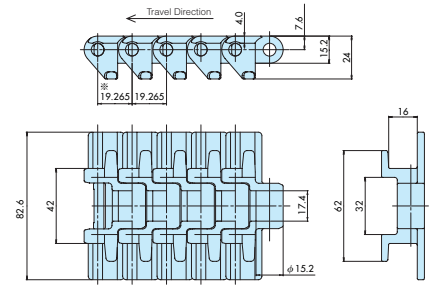
Linear Movement



●Standard Specification (Color : Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial/ Mold Resistant+Low Friction / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)

Standard	TSUBAKI Chain No. MW				UMW	Top Plate Width	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
	MW	MWG	MWB	MWS				
MTP826T	MTP826T-MW	MTP826T-MWG	MTP826T-MWB	MTP826T-MWS	MTP826T-UMW	82.6	·Standard ·MW 1.18{120} ·UMW 0.83{ 85}	1.4

Note: 1. Items are made-to-order. Chain pitches per standard length : 160

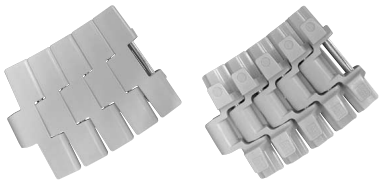


· Open Hole Ratio : 3%
· Pin Material : SUS304 (D shaped pin)

(※)The pitch (p=19.265) has been set so that all teeth of the TP sprockets (TP2-1012T / TP : Effective Teeth 21T) engage the links.

MTPU Top Chain

Curved Movement

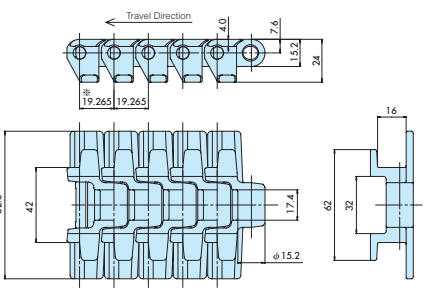


●Standard Specification (Color : Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial/ Mold Resistant+Low Friction / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)

■Mini Plastic Top Chain

Standard	TSUBAKI Chain No. MW				UMW	Top Plate Width	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
	MW	MWG	MWB	MWS				
MTPU826T	MTPU826T-MW	MTPU826T-MWG	MTPU826T-MWB	MTPU826T-MWS	MTPU826T-UMW	82.6	·Standard ·MW 0.98{100} ·UMW 0.69{ 70}	1.4

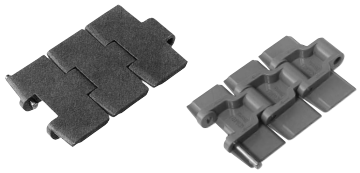
Note: 1. Items are made-to-order. Chain pitches per standard length : 160



· Open Hole Ratio : 7%
· Pin Material : SUS304 (D shaped pin)

TTUP Top Chain

Curved Movement



●Standard Specification (Color : Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial / Mold Resistant+Low Friction / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)
●KV Heat Resistant / High Speed (Color : Black)

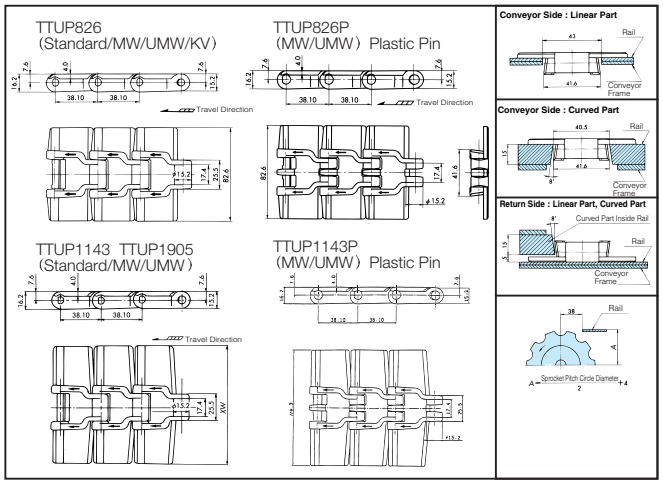
■Stainless Steel Pin

TSUBAKI Chain No.							Top Plate Width *XW*	Approx. Mass kg/m
Standard	MW				UMW	KV		
	MW	MWG	MWB	MWS				
TTUP826	TTUP826MW	**TTUP826MWG**	**TTUP826MWB**	TTUP826MWS	**TTUP826UMW**	TTUP826KV180	82.6	1.0
TTUP1143	TTUP1143MW	**TTUP1143MWG**	**TTUP1143MWB**	TTUP1143MWS	**TTUP1143UMW**	—	114.3	1.1
TTUP1905	TTUP1905MW	**TTUP1905MWG**	**TTUP1905MWB**	TTUP1905MWS	TTUP1905UMW	—	190.5	1.6
1.08{110}					0.78{ 80}	0.98{100}	←Max. Allowable Load kN{kgf}	

■Plastic Pin

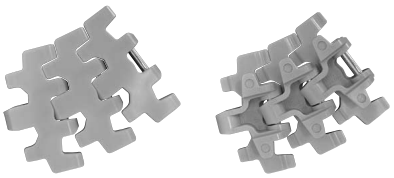
TSUBAKI Chain No.						Top Plate Width *XW*	Approx. Mass kg/m
P-MW				P-UMW			
P-MW	P-MWG	P-MWB	P-MWS				
TTUP826P-MW	**TTUP826P-MWG**	**TTUP826P-MWB**	TTUP826P-MWS	**TTUP826P-UMW**		82.6	0.7
TTUP1143P-MW	TTUP1143P-MWG	TTUP1143P-MWB	TTUP1143P-MWS	TTUP1143P-UMW		114.3	0.8
0.88{90}				0.61{62}		←Max. Allowable Load kN{kgf}	

Note: Chain No.'s in bold print are stock items for short delivery in Japan.
Those without bold print are made-to-order. Chain pitches per standard length : 80



TPSR Top Chain

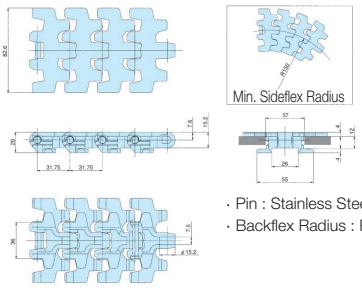
Curved Movement



●Standard Specification (Color : Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial / Mold Resistant+Low Friction / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)

TSUBAKI Chain No.						Top Plate Width	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
Standard	MW				UMW			
	MW	MWG	MWB	MWS				
TPSR826T	TPSR826T-MW	**TPSR826T-MWG**	**TPSR826T-MWB**	TPSR826T-MWS	**TPSR826T-UMW**	82.6	·Standard · MW 0.98{100} ·UMW 0.69{ 70}	0.9

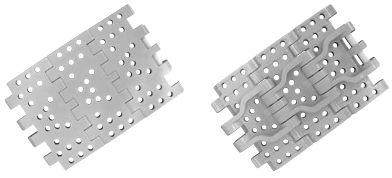
Note: Chain No.'s in bold print are stock items for short delivery in Japan.
Chain pitches per standard length : 96



· Pin : Stainless Steel D shaped pin
· Backflex Radius : R=25mm

TPH Top Chain

Linear Movement



●Standard Specification=Electro-static Preventive (Color : Light Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial / Mold Resistant+Low Friction / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)

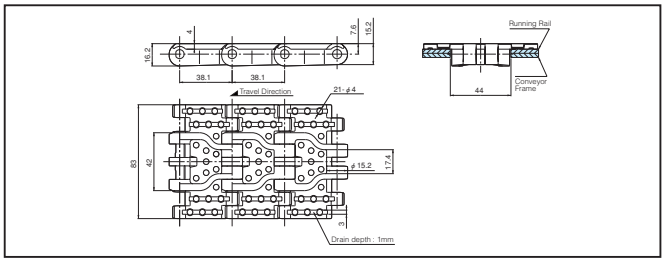
■Stainless Steel Pin

TSUBAKI Chain No.						Top Plate Width	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
Standard	MW				UMW			
	MW	MWG	MWB	MWS				
TPH830	TPH830MW	TPH830MWG	TPH830MWB	TPH830MWS	**TPH830UMW**	83	·Standard · MW 1.18{120} ·UMW 0.83{ 85}	1.0

■Plastic Pin

TSUBAKI Chain No.						Top Plate Width	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
Standard	P-MW				P-UMW			
	P-MW	P-MWG	P-MWB	P-MWS				
TPH830P	TPH830P-MW	TPH830P-MWG	TPH830P-MWB	TPH830P-MWS	**TPH830P-UMW**	83	·Standard · MW 0.78{80} ·UMW 0.59{60}	0.75

Note: Chain No.'s in bold print are stock items for short delivery in Japan.
Those without bold print are made-to-order. Chain pitches per standard length : 80



RS Plastic Chain

RS Plastic chain consists of polyacetal chain links and 18-8 stainless steel or plastic pins (see photos below) and operates with standard roller chain sprockets based on power transmission roller chains. TSUBAKI RS-type has a flat top side for power transmission or conveying use. Available types are shown in the tables below.

Available Types

■Table of Special Materials (RS Plastic Chain)

Chain Type \ Specification		Low Friction Anti-Wear MW	Antibacterial Mold-Resistant MWS	Ultra Low Friction UMW	Heat-Resistant / High Speed KV KV180	KV250	Electro-conductive E	Pin Material (SY is titanium)
RS Plastic Chain	RS35P[1]	◎	◎	◎	◎	▲	◎	SUS304
	RS40P	◎	◎	◎	◎	○	◎	SUS304
	RS50P[1]	◎	◎	◎	×	×	◎	SUS304
	RS60P	◎	◎	◎	◎	○	◎	SUS304
	RSP40P	◎	◎	×	×	×	○	Special Engineering Plastic
	RSP60P	◎	◎	×	×	×	○	Special Engineering Plastic
	RS2040-P	◎	◎	◎	×	×	○	SUS304
	RS60P-2	◎	◎	◎	×	×	○	SUS304
	RS60PU	◎	◎	◎	×	×	○	SUS304
	RSP60PU	◎	◎	×	×	×	○	Special Engineering Plastic
	RS60PU-2	◎	◎	◎	×	×	○	SUS304

Chain Type \ Specification		Electro-static Preventive SE	Chemical Resistant Y	Super Chemical Resistant SY	Acid Resistant AR	High Friction HF	Ultra Violet Ray Resistant UVR	Pin Material (SY is titanium)
RS Plastic Chain	RS35P[1]	○	◎	×	○	○	○	SUS304
	RS40P	○	◎	◎	○	○	○	SUS304
	RS50P[1]	○	◎	×	○	○	○	SUS304
	RS60P	○	◎	◎	○	○	○	SUS304
	RSP40P	○	○	×	×	○	○	Special Engineering Plastic
	RSP60P	○	○	×	×	○	○	Special Engineering Plastic
	RS2040P	○	○	○	○	○	○	SUS304
	RS60P-2	○	○	○	○	○	○	SUS304
	RS60PU	○	○	×	○	○	○	SUS304
	RSP60PU	○	○	×	×	○	○	Special Engineering Plastic
	RS60PU-2	○	○	×	○	○	○	SUS304

・Please refer to pages ??? and ??? for more details on each specification.
・(1) New items ・(◎) Denotes items shown in catalog. ・(○) Design stock available. ・(▲) There are circumstances where design stock is available. Contact Tsubaki for conditions of use, etc. ・(X) Cannot manufacture. ・(▭) Plastic Pin spec. is shown. ・Plastic Pin spec. cannot be used in an environment where exposed to water greater than 60℃.

New Design

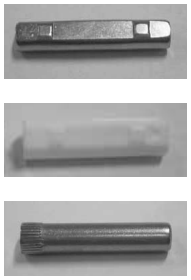
●The new design shown on right is available for RS35P, RS50P, RSP40P and RSP60P types only.

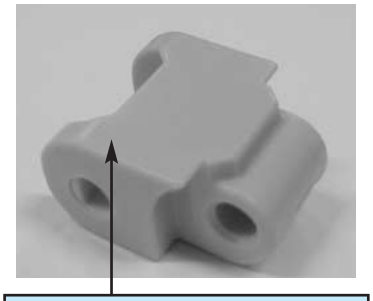
●D-shaped pins help relieve stress build-up common around pinholes.

●The use of plastic pins reduces chain weight,lowers energy costs, and makes recycling simple.

* Reduces residual stress
* Prevents cracking
* Raised area prevents ascape

⇒ *Smooth surface and rounded edges*
⇒ *D-shaped pin (stainless & plastic)*
⇒ *Wider selection of plastic materials*





Round edges prevent conveyed items from getting caught.

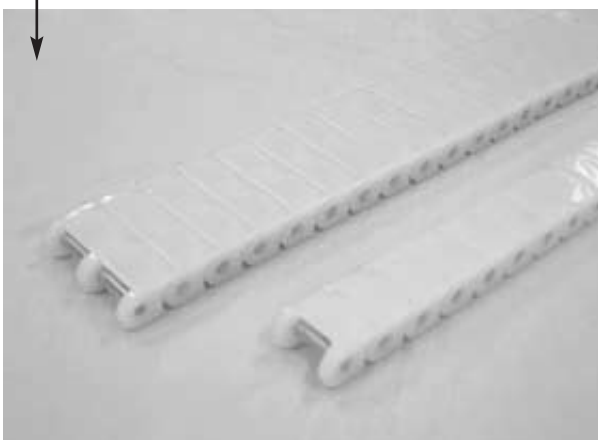
Latest Release

●Specifically designed for the bakery industry and used at oven exits.

●Reduces potential for food contamination common with metal-on-metal contact.

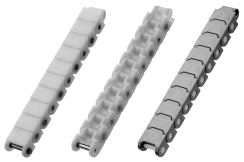
●Light color plastic is ideal for the food industry offering a more sanitary look.

RS60P-2 & RS60PU-2
120°C (248°F) Heat Resistant Type



Note: Must be used in dry areas.
Nylon material absorbs moisture and may lead to chain failure.

RS Plastic Chain (RS35P,RS40P,RS50P,RS60P) Linear Movement



●Standard Specification (Color : Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial / Mold Resistant+Low Friction / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)
●KV Heat-Resistant / High Speed (Color : Black)

TSUBAKI Chain No.	P	R	W	L	H1	H2	H	D	Y1	Approx. Mass kg/m	Links / Unit
RS35P	9.525	5.08	4.78	13	4	5	9	3.6	16	0.15	320
RS40P	12.7	7.92	7.95	20	6	6.7	12.7	4	23	0.36(0.26)	240
RS50P	15.875	10.16	9.53	22.5	7	8	15	5	25.5	0.46	192
RS60P	19.05	11.91	12.7	30	8.5	8.8	17.3	6	33	0.72(0.53)	160

Note: Mass shown in ( ) is for Plastic Pin.

■Stainless Steel Pin

Standard		MW		UMW		KV	
TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	TSUBAKI Chain No.	Max. Allowable Load kN{kgf}
RS35P	0.18{18}	RS35P-MW (MWG,MWB,MWS)	0.18{18}	RS35P-UMW	0.13{13}	RS35P-KV180	0.18{18}
RS40P	0.44{45}	RS40P-MW (MWG,MWB,MWS)	0.44{45}	RS40P-UMW	0.30{30}	RS40P-KV180	0.44{45}
RS50P	0.69{70}	RS50P-MW (MWG,MWB,MWS)	0.69{70}	RS50P-UMW	0.49{50}	—	—
RS60P	0.88{90}	RS60P-MW (MWG,MWB,MWS)	0.88{90}	RS60P-UMW	0.64{65}	RS60P-KV180	0.88{90}

Electro-conductive		Chemical / Super Chemical-Resistant	
TSUBAKI Chain No.	Max. Allowable Load kN{kgf}	TSUBAKI Chain No.	Max. Allowable Load kN{kgf}
RS35PE	0.13{13}	RS35PY (—)	0.10{10}
RS40PE	0.34{35}	RS40PY (PSY)	0.25{25}
RS50PE	0.49{50}	RS50PY (—)	0.39{40}
RS60PE	0.64{65}	RS60PY (PSY)	0.49{50}

■Plastic Pin

P-MW	
TSUBAKI Chain No.	Max. Allowable Load kN{kgf}
RSP40P-MW (MWG,MWB,MWS)	0.25{25}
RSP60P-MW (MWG,MWB,MWS)	0.59{60}

Note: Chain No.'s in bold print are stock items for short delivery in Japan.
Those without bold print are made-to-order.

RS Plastic Chain (RS60PU) Curved Movement

●Standard Specification (Color : White)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial / Mold Resistant+Low Friction / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)

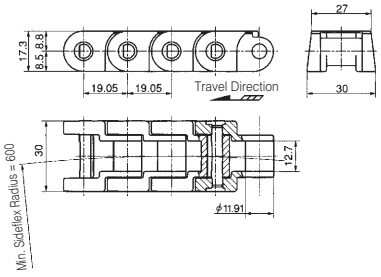
■Stainless Steel Pin

Standard	TSUBAKI Chain No. MW				UMW仕様	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
	MW	MWG	MWB	MWS			
RS60PU	RS60PU-MW	RS60PU-MWG	RS60PU-MWB	RS60PU-MWS	RS60PU-UMW	·Standard ·MW 0.83{85} ·UMW 0.59{60}	0.7

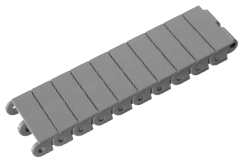
■Plastic Pin

Standard	TSUBAKI Chain No. P-MW				Max. Allowable Load kN{kgf}	Approx. Mass kg/m
	P-MW	P-MWG	P-MWB	P-MWS		
RSP60PU	RSP60PU-MW	RSP60PU-MWG	RSP60PU-MWB	RSP60PU-MWS	0.44{45}	0.5

Note: Chain No.'s in bold print are stock items for short delivery in Japan.
Chain pitches per standard length : 160



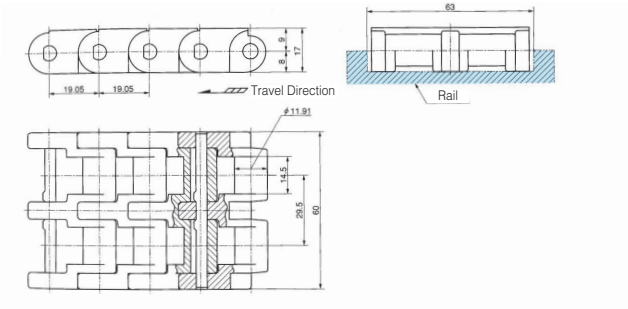
RS Plastic Chain (RS60P-2) Linear Movement



●Standard Specification (Color : Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial / Mold Resistant+Low Frictionn / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)

Standard	TSUBAKI Chain No. MW				UMW	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
	MW	MWG	MWB	MWS			
RS60P-2	RS60P-2-MW	RS60P-2-MWG	RS60P-2-MWB	RS60P-2-MWS	RS60P-2-UMW	·Standard ·MW 1.27{130} ·UMW 0.88{ 90}	1.5

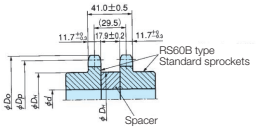
Note: Chain No.'s in bold print are stock items for short delivery in Japan.
Chain pitches per standard length : 160



■Sprocket (RS60P-2, RS60PU-2)

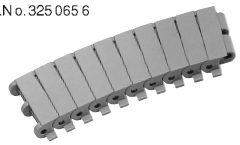
1. Use two standard RS60B type sprockets together.
2. Adjust the width between the two sprockets by inserting a spacer.

Note:
1. RS60-2 Duplex standard sprockets cannot be used.
2. Align the teeth of both sprockets.
3. Use sprockets with at least 12 teeth.



RS Plastic Chain (RS60PU-2) Curved Movement

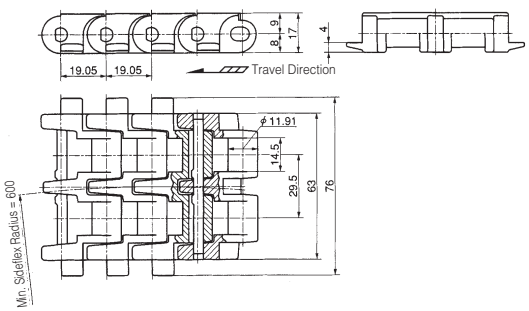
PAT.No.3250656



●Standard Specification (Color : Gray)
●MW Low Friction / Anti-Wear (Color : White)
●MWG Low Friction / Anti-Wear (Color : Light Green)
●MWB Low Friction / Anti-Wear (Color : Light Brown)
●MWS Antibacterial / Mold Resistant+Low Friction / Anti-Wear (Color : Cream)
●UMW Ultra Low Friction (Color : Ultra Marine)

Standard	TSUBAKI Chain No. MW				UMW	Max. Allowable Load kN{kgf}	Approx. Mass kg/m
	MW	MWG	MWB	MWS			
RS60PU-2	RS60PU-2-MW	RS60PU-2-MWG	RS60PU-2-MWB	RS60PU-2-MWS	RS60PU-2-UMW	·Standard ·MW 1.08{110} ·UMW 0.7 { 80}	1.5

Note: Chain No.'s in bold print are stock items for short delivery in Japan.
Chain pitches per standard length : 160

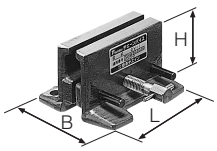


Roller Chain Peripheral Instruments

Chain Cutting Tools

The chain you have purchased is either fixed length (3,048 mm) or on a reel. We have a selection of tools below, which allow you to cut the chain to the necessary length.

1. Chain Vices



RSCV-1

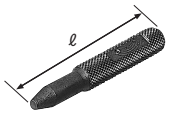
RSCV-2

RSCV-3

Type	Suitable Chain			Dimensions		
	Single Strand	Double Strand	Triple Strand	L	H	B
RSCV-1	RS40 ~ 80	RS40	—	100	65	94 ~ 115
RSCV-2	RS40 ~ 160	RS40 ~ 100	RS40 ~ 100	180	110	120 ~ 151
RSCV-3	RS80 ~ 240	RS80 ~ 160	RS80 ~ 100	200	170	180 ~ 220

Note: All types are stock items

2. Punches



Primary Punch

Secondary Punch

Riveting Punch

Type				Suitable Chain
Primary Punch	ℓ	Secondary Punch	ℓ	
RSS-1	60	**RSD-1**	80	RS 40 ~ 60
RSS-2	70	**RSD-2**	90	RS 80 ~ 120
RSS-3	80	**RSD-3**	120	RS140 ~ 240

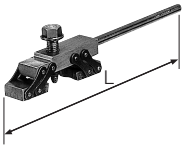
Type		Suitable Chain
Riveting Punch	ℓ	
RS40 Punch	100	RS40
RS50 Punch	100	RS50
RS60 Punch	100	RS60
RS80 Punch	100	RS80

Note: All types are stock items

3. Chain Breakers

RSCS-A

RSCS-B



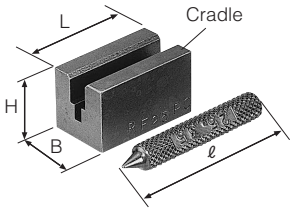
RSCS-C

Type	L	Suitable Chain (Single Strand)	Type	L	Suitable Chain (Single & Double Strand)
RSCS-A1	116	RS25	**RSCS-B1**	185	RS40 ~ 60
RSCS-A2	119	RS35	**RSCS-C1**	222	RS80 · 100
RSCS-A3	119	RS41	**RSCS-C2**	290	RS120 · 140
RSCS-A4	119	RF06B	**RSCS-C3**	708	RS160 ~ 240

Note: All types are stock items. They can also be used for other chains besides RS Roller Chain, such as BS Roller Chain, and Marine Engine Chain. However, breakers exclusively for Marine Engine Chain are manufactured separately.

4. Cutting Tools for Poly Steel Chain

Standard cutting tools cannot be used for Poly Steel chain. An exclusive Poly Steel Chain punch and cradle is required.



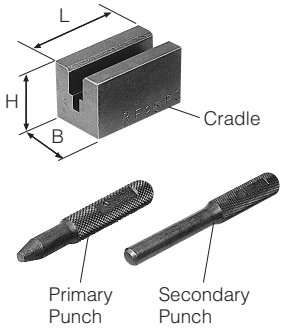
Cutting Tool

Type	L	H	B	ℓ	Suitable Chain
RF25PC-KOGU	35	20	20	52	RF25PC
RF35PC-KOGU	50	30	30	52	RF35PC
RF40PC-KOGU	65	35	35	56	RF40PC
RF50PC-KOGU	80	40	35	56	RF50PC
RF60PC-KOGU	100	45	40	56	RF60PC

Note: 1. All types are stock items.
2. The exclusive punch and cradle are a set.

5. Cutting Tools for Lambda (Λ) Chain

An exclusive cradle, primary punch and secondary punch are required for the disassembly of Lambda chain.



Cutting Tool

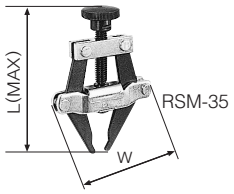
Type	L	H	B	Suitable Chain
RSD 40Λ-KOGU	65	32	32	RSD40-Λ
RSD 50Λ-KOGU	80	40	40	RSD50-Λ
RSD 60Λ-KOGU	95	48	48	RSD60-Λ
RSD 80Λ-KOGU	130	60	60	RSD80-Λ
RSD100Λ-KOGU	160	73	73	RSD100-Λ
RSD120Λ-KOGU	160	88	88	RSD120-Λ
RSD140Λ-KOGU	180	98	98	RSD140-Λ

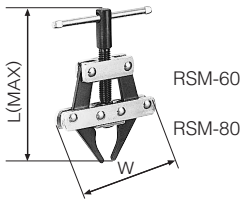
Note: 1. All types are stock items.
2. The exclusive punch and cradle are a set. The dimensions of the punches are the same as those shown in No. 2 on the left.

Chain Connecting Tools

1. Chain Pullers

This tool is used to bring the chain ends together when installing on a machine.



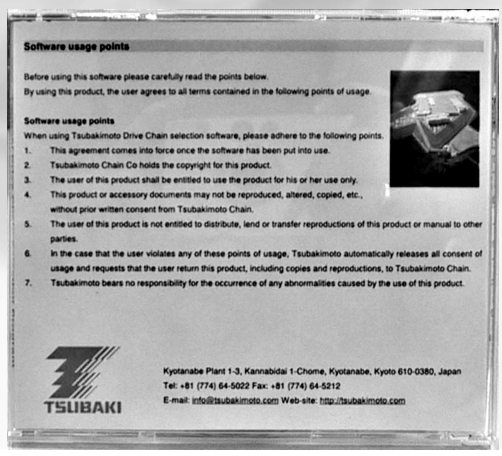


Type	L	W	Suitable Chain
RSM-35	118	70	RS35 ~ 60
RSM-60	185	110	RS60 ~ 100
RSM-80	250	145	RS80 ~ 240

Note: All types are stock items.

TSUBAKI
DRIVE CHAIN SELECTION PROGRAM

Selecting the best chain for your equipment is vital not only for the smooth running of your machinery, but also to achieve the best chain performance possible. Some chains will outperform others depending on various factors such as the application involved and operating conditions. And with the number of chain types available these days, it can be a rather confusing task deciding on which chain best suits your application. In order to make things a little easier for our customers, TSUBAKI has developed a user-friendly Drive Chain Selection Program, which is based entirely on the General and Slow-Selection methods outlined in TSUBAKI catalogs. Available on CD-ROM, this program allows customers to confidently select the optimal chain for their equipment. All you have to do is fill in the fields on the input screen and let the program do the rest. And with a chain line-up including, BS/DIN, ANSI 80th, DP, LAMBDA, SUPER Series, and WP, you're guaranteed to find the best chain to meet your drive chain needs.



Don't waste anymore of your precious time deciding on which chain to go with. For your free copy of TSUBAKI's Drive Chain Selection Program, contact your local TSUBAKI representative today.

⚠ WARNING

USE CARE TO PREVENT INJURY. COMPLY WITH THE FOLLOWING TO AVOID SERIOUS PERSONAL INJURY.

1. Guards must be provided on all chain and sprocket installations in accordance with provisions of ANSI/ASME B15.1-1984 "Safety Standards for Mechanical Power Transmission Apparatus", and ANSI/ASME B20.1-1990 "Safety Standards for Conveyors and Related Equipment", or other applicable safety standards.
   When revisions of these standards are published, the updated edition shall apply.

2. Always lock out the power switch before installing, removing, lubricating or servicing a chain system.

3. When connecting or disconnecting chain:
   a. Eye protection is required. Wear safety glasses, protective clothing, gloves and safety shoes.

   b. Support the chain to prevent uncontrolled movement of chain and parts.

   c. Use of pressing equipment is recommended. Tools must be in good condition and correctly used.

   d. Determine correct direction for pin/rivet removal or insertion.

MEMO

MEMO

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