

TSUBAKI LAMBDA[®] Chain

RS Double Strand Compatible / LAMBDA Roller / RS160-LMD-1

Lube-free chain

RS Double Strand
Compatible

LAMBDA[®] Roller



RS160-LMD-1

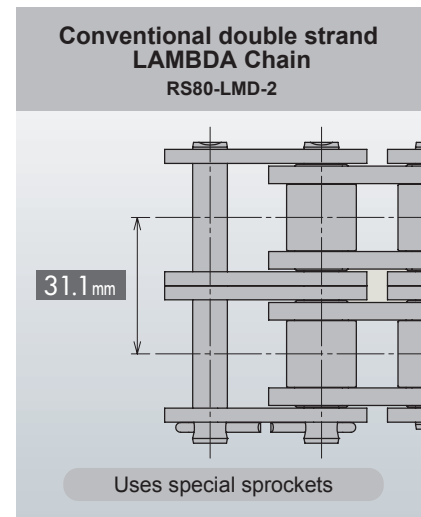
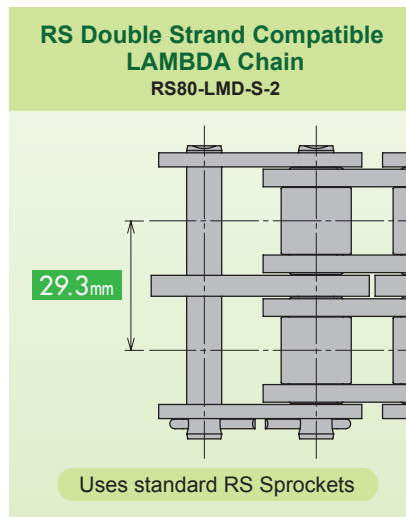
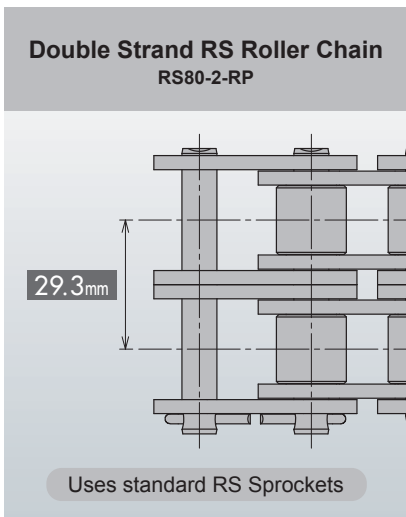


RS Double Strand Compatible LAMBDA[®]

Taking your roller chain operations lube-free just got easier!

Feature 1 Dimensionally compatible

RS Double Strand Compatible LAMBDA Chain can use standard RS Sprockets!

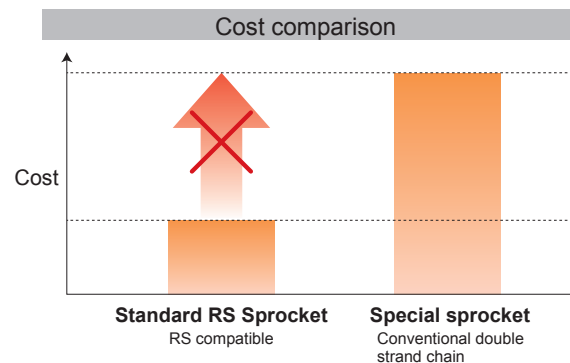


RS Double Strand Compatible LAMBDA Chain has the same transverse pitch as RS Roller Chain!

No need to replace sprockets



Avoids increased costs stemming from sprocket replacement



Chain –



LMD-S-2

Feature 2 Higher multi-strand factor (higher kW ratings)

The multi-strand factor of RS Double Strand Compatible LAMBDA Chain is 1.7, giving you 20% higher kW ratings than conventional double strand LAMBDA Chain.

Multi-strand factor

A coefficient used to calculate kW ratings for double strand chain. You can calculate kW ratings by multiplying this factor by the values in the kW ratings table on pgs. 7 & 8.

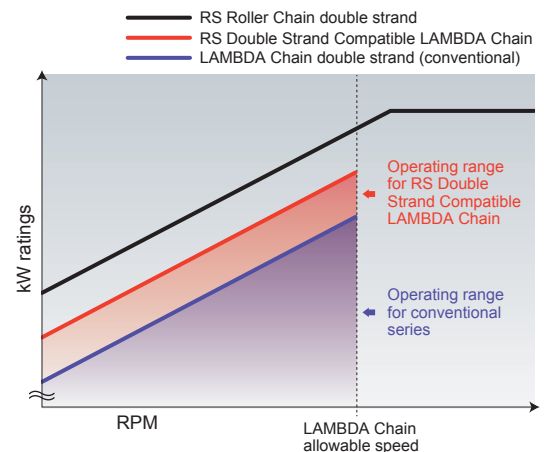
List of multi-strand factors

Chain	Multi-strand factor	kW ratings (index*)
RS Roller Chain double strand	1.7	161
RS Double Strand Compatible LAMBDA Chain	1.7	121
Conventional double strand LAMBDA Chain	1.4	100

*With conventional double strand LAMBDA Chain as our benchmark.

New series provides a larger operating range.

kW ratings comparison



Expanded line-up! More sizes available for double strand LAMBDA Chain!

	RS40	RS50	RS60	RS80	RS100	RS120	RS140	RS160
RS Double Strand Compatible	○	○	○	○	○	○	○	○
Conventional Series	○	○	○	○	○	—	—	—

See pg. 6

Now available on outboard roller and top roller chains! LAMBDA[®] Rollers for a cleaner work environment!



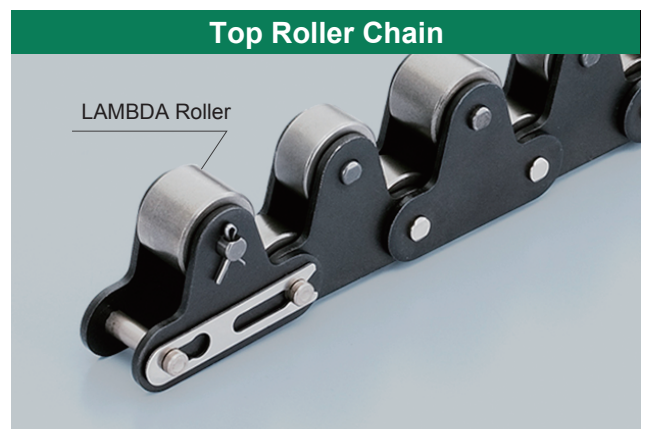
LAMBDA Roller Patent Pending

Steel roller with oil-impregnated sintered bearings
Available on outboard roller and top roller chains.



Outboard Roller Chain

Available for Double pitch: RF2040 – 2080-LMC
RS: RS40 – 80-LMC



Top Roller Chain

Operating temperature range -10 to 150°C

Model Numbering Example

Double Pitch Chain with Outboard Rollers

RF2040 S -LMC- 2L SRLM -T

Chain size	LAMBDA conveyor chain	LAMBDA Roller
	Base chain roller R: R roller S: S roller	Outboard roller spacing 2L: Every 2 links Outboard roller installation type T: Staggered H: Crosswise

Double Pitch Chain with Outboard Rollers

RF2040 S -LMC- 2L SRLM PL

Chain size	LAMBDA conveyor chain	LAMBDA Roller
	Base chain roller R: R roller S: S roller	Outboard roller spacing 2L: Every 2 links Top roller positioning (only when on every even numbered link) PL: Outer link Blank: Inner link

RS Chain with Outboard Rollers

RS40 -LMC- 1L SRLM -T

Chain size	LAMBDA conveyor chain	LAMBDA Roller
	RS Chain with Outboard Rollers	Outboard roller installation type T: Staggered H: Crosswise

RS Chain with Top Rollers

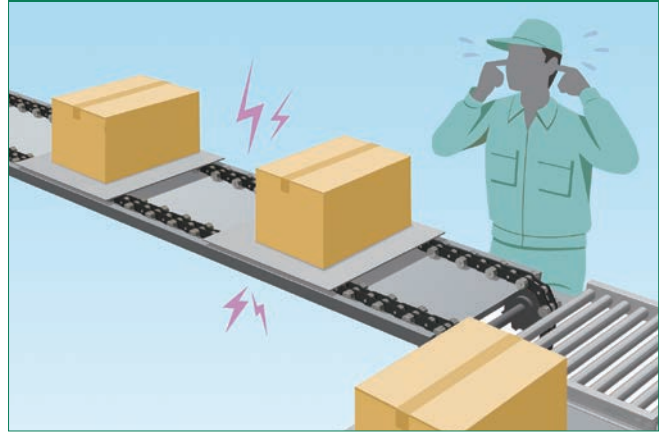
RS40 -LMC- 2L TRLM PL

Chain size	LAMBDA conveyor chain	LAMBDA Roller
	RS Chain with Top Rollers	Outboard roller spacing 2L: Every 2 links Top roller positioning (only when on every even numbered link) PL: Outer link Blank: Inner link

Standard chain needs to be lubed.



Without lube, chains will make noise and wear quickly.

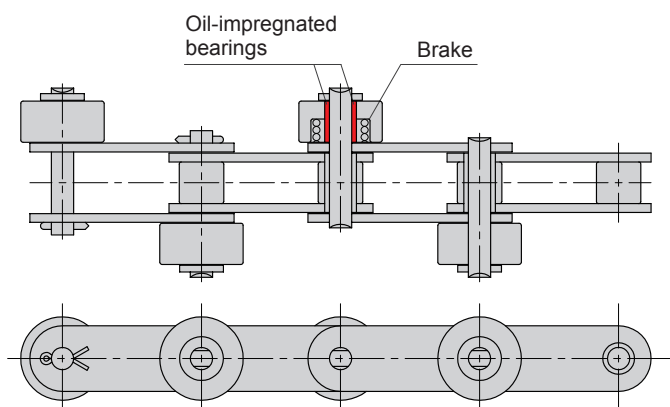


LAMBDA Rollers help maintain a pleasant work environment.



LAMBDA Rollers with brakes are also available.

LAMBDA Rollers with brakes (giving them a high coefficient of friction) positioned at regular intervals allow for quick line starts.



Dimensions & Selection

Has the same dimensions as other chains, while the roller allowable load is the same as with steel rollers. See the Tsubaki Small Size Conveyor Chain catalog for more information.

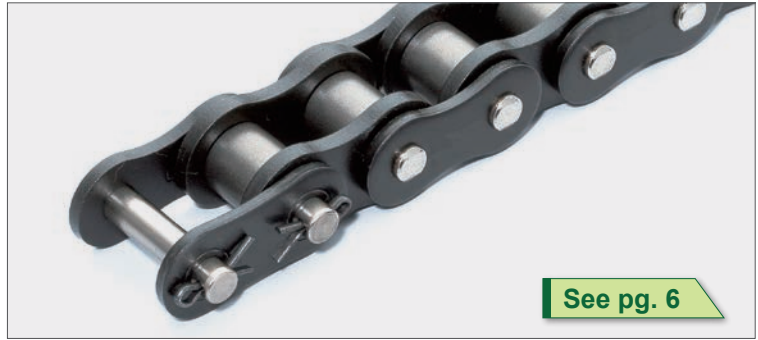
See the respective product pages in the Tsubaki Small Size Conveyor Chain catalog for more information.

Even wider selection to suit your needs.

Drive Chain

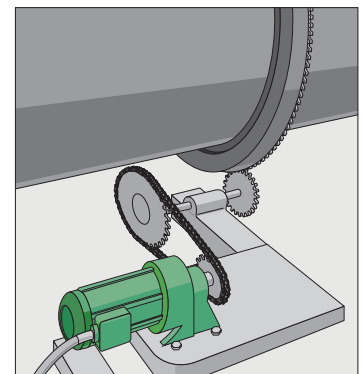
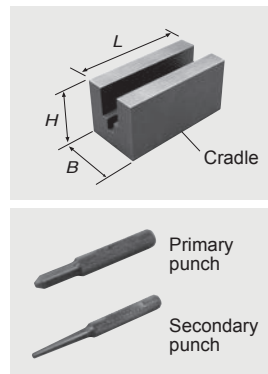
LAMBDA Chain

Chain no.	Pitch <i>P</i>
RS40-LMD-1	12.70
RS50-LMD-1	15.875
RS60-LMD-1	19.05
RS80-LMD-1	25.40
RS100-LMD-1	31.75
RS120-LMD-1	38.10
RS140-LMD-1	44.45
NEW RS160-LMD-1	50.80



Cutting Tools for LAMBDA Chain

Chain no.	<i>L</i>	<i>H</i>	<i>B</i>	Chain size
RS-LMD01-AST	65	32	32	RS40-LMD-1
RS-LMD02-AST	80	40	40	RS50-LMD-1
RS-LMD03-AST	95	48	48	RS60-LMD-1
RS-LMD04-AST	130	60	60	RS80-LMD-1
RS-LMD05-AST	160	73	73	RS100-LMD-1
RS-LMD06-AST	160	88	88	RS120-LMD-1
RS-LMD07-AST	180	98	98	RS140-LMD-1
NEW RS-LMD08-AST	200	114	114	RS160-LMD-1



Note: 1. All items stocked

2. The special punches and cradle come as a set. See the Tsubaki Drive Chain and Sprockets catalog for more information on punch dimensions.

With RS160-LMD-1, you can go lube-free even on large capacity drives!

Small Size Conveyor Chain



LAMBDA Double Pitch Chain

Chain no.	Pitch <i>P</i>
RF2040S/R-LMC	25.40
RF2050S/R-LMC	31.75
RF2060S/R-LMC	38.10
RF2080S/R-LMC	50.80
RF2100S/R-LMC	63.50
NEW RF2120S/R-LMC	76.20

See pg. 9



LAMBDA RS Attachment Chain

Chain no.	Pitch <i>P</i>
RS35-LMC	9.525
RS40-LMC	12.70
RS50-LMC	15.875
RS60-LMC	19.05
RS80-LMC	25.40
RS100-LMC	31.75
NEW RS120-LMC	38.10
NEW RS140-LMC	44.45

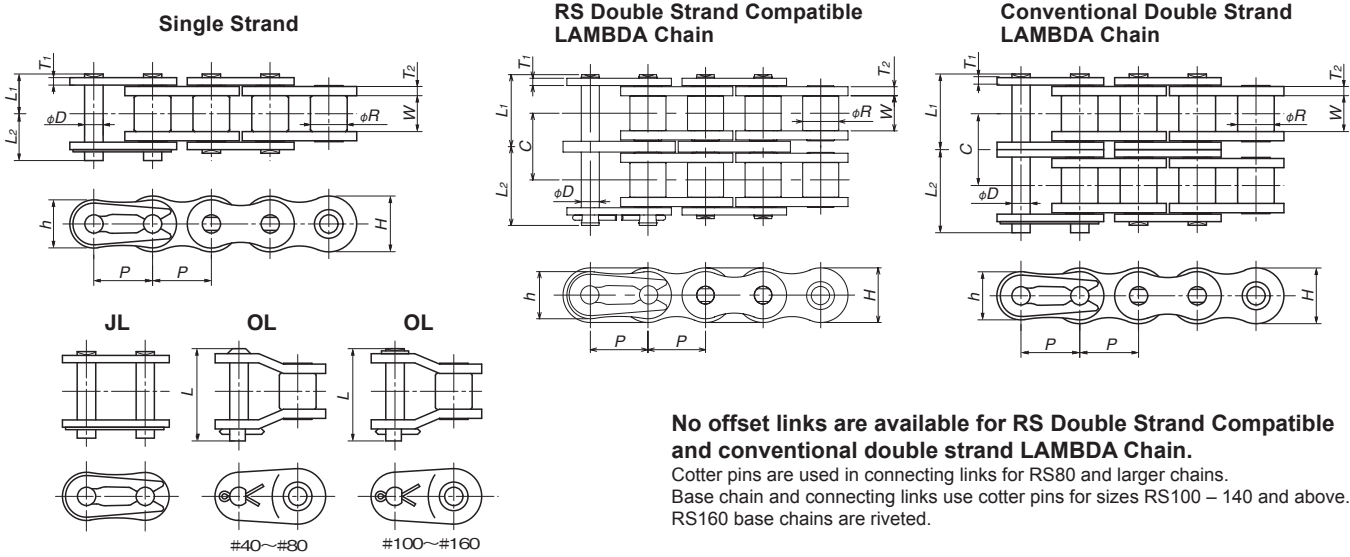
See pg. 11



LAMBDA Attachment Chain BS

Chain no.	Pitch <i>P</i>
RS08B-LM	12.70
RS10B-LM	15.875
RS12B-LM	19.05
RS16B-LM	25.40
NEW RS20B-LM	31.75

See pg. 13



No offset links are available for RS Double Strand Compatible and conventional double strand LAMBDA Chain.
Cotter pins are used in connecting links for RS80 and larger chains. Base chain and connecting links use cotter pins for sizes RS100 – 140 and above. RS160 base chains are riveted.

Tsubaki Chain No.			Pitch P	Roller Dia. R	Width Between Inner Link Plates W	Plate				Pin			Offset Pin Length L
Single Strand	RS Compatible	Conventional Double Strand				Thickness T ₁	Thickness T ₂	Height H	Height h	Dia. D	L ₁	L ₂	
RS40-LMD-1	RS40-LMD-S-2	RS40-LMD-2	12.70	7.92	7.55	1.5	2.0	12.0	10.4	3.97	8.75 (15.95)	10.45 (17.65)	20.0
RS50-LMD-1	RS50-LMD-S-2	RS50-LMD-2	15.875	10.16	9.26	2.0	2.4	15.0	13.0	5.09	10.75 (19.85)	12.45 (21.55)	24.0
RS60-LMD-1	RS60-LMD-S-2	RS60-LMD-2	19.05	11.91	12.28	2.4	3.2	18.1	15.6	5.96	13.70 (25.15)	15.70 (26.95)	32.0
RS80-LMD-1	RS80-LMD-S-2	RS80-LMD-2	25.40	15.88	15.48	3.2	4.0	24.1	20.8	7.94	17.15 (31.75)	20.25 (34.75)	39.9
RS100-LMD-1	RS100-LMD-S-2	RS100-LMD-2	31.75	19.05	18.70	4.0	4.8	30.1	26.0	9.54	20.65 (38.50)	23.85 (41.60)	47.5
RS120-LMD-1	RS120-LMD-S-2		38.10	22.23	24.75	4.8	5.6	36.2	31.2	11.11	25.75 (48.55)	29.95 (52.55)	59.0
RS140-LMD-1	RS140-LMD-S-2		44.45	25.40	24.75	5.6	6.4	42.2	36.4	12.71	27.70 (52.20)	32.20 (56.60)	63.7
RS160-LMD-1	RS160-LMD-S-2		50.80	28.58	31.2	6.4	7.15	48.2	41.6	14.29	32.75 (62.05)	37.65 (66.85)	74.1

Tsubaki Chain No.			Min. Tensile Strength kN {kgf}			Approx. Mass (kg/m)	No. of Links per Unit	Allowable Speed (m/min)	Transverse Pitch C	
Single Strand	RS Compatible	Conventional Double Strand	Single Strand	RS Compatible	Conventional Double Strand				RS Compatible	Conventional Double Strand
RS40-LMD-1	RS40-LMD-S-2	RS40-LMD-2	17.7 {1800}	30.0 {3060}	35.3 {3600}	0.70 (1.4)	240	150	14.4	15.4
RS50-LMD-1	RS50-LMD-S-2	RS50-LMD-2	28.4 {2900}	48.3 {4930}	56.9 {5800}	1.11 (2.2)	192	135	18.1	19.0
RS60-LMD-1	RS60-LMD-S-2	RS60-LMD-2	40.2 {4100}	68.4 {6970}	80.4 {8200}	1.72 (3.4)	160	120	22.8	24.52
RS80-LMD-1	RS80-LMD-S-2	RS80-LMD-2	71.6 {7300}	122 {12400}	143 {14600}	2.77 (5.5)	120	90	29.3	31.1
RS100-LMD-1	RS100-LMD-S-2	RS100-LMD-2	107 {10900}	181 {18500}	214 {21800}	4.30 (8.6)	96	80	35.8	37.6
RS120-LMD-1	RS120-LMD-S-2		148 {15000}	252 {25700}		6.4 (13.0)	80	50	45.4	
RS140-LMD-1	RS140-LMD-S-2		193 {19700}	329 {33500}		8.1 (16.5)	68	50	48.9	
RS160-LMD-1	RS160-LMD-S-2		255 {26000}	433 {44200}		10.5 (21.4)	60	50	58.5	

- Notes: 1. No offset links available for RS Double Strand Compatible and conventional double strand chain. Use an even number of links.
2. All other models are made-to-order.
3. RS Double Strand Compatible chain uses an RF type plate for the middle plate. RS40 – RS100 use one middle plate, while RS120 – RS160 use two.
4. Contact a Tsubaki representative regarding the pin length (L₁, L₂) and approximate mass for conventional double strand LAMBDA Chain.
5. The dimensions given above are nominal dimensions. Actual dimensions may vary slightly.

Operating Temperature Range: -10°C to 150°C

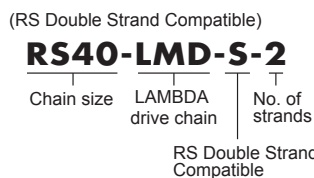
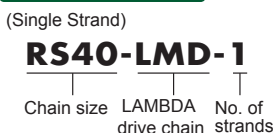
Precautions for Use

- Debris in the bushes accelerates wear. Wet environments can cause the oil in the oil-impregnated bushes to leak out. Chain is coated with less rust-prevention oil than those for RS Roller Chain, which may lead to premature rusting.
- Bush oil can leak out in a vacuum, decreasing wear resistance. Do not use in a vacuum. Contact a Tsubaki representative when considering a chain that can be used in a vacuum.
- Chain life will decrease dramatically if oil in the oil-impregnated bushes is depleted.
- The multi-strand factor for RS Double Strand Compatible chain is 1.7. Recalculate the kW ratings for LAMBDA Chain when replacing RS Roller Chain. The multi-strand factor for conventional double strand LAMBDA Chain was 1.4.
- RS Double Strand Compatible chain can use RS Sprockets. Conventional double strand LAMBDA Chain requires special sprockets. Contact a Tsubaki representative for more information.

■ LAMBDA Chain has a longer pin length (L₁, L₂) than RS Roller Chain. Ensure there will be no interference with the equipment.

Selection, handling, and warranty: See the Tsubaki Drive Chain and Sprockets catalog for more information.

Chain Numbering



Sample Order

Chain size: RS40-1 Chain series: LAMBDA Chain Quantity: 100 links (incl. connecting link)

Chain No.	Quantity	Unit
RS40-LMD-1	99	L
RS40-LMD-1- JL	1	K

*See the Tsubaki Drive Chains & Sprockets catalog for more information on ordering.

Kilowatt Rating Tables (LAMBDA Chain)

RS40-LMD-1 Kilowatt Ratings (Single-Strand Chain)

Small Sprocket Teeth No.	Small Sprocket Max. rpm											
	10	25	50	100	200	300	400	500	700	900	1000	1200
9	0.05	0.11	0.21	0.39	0.72	1.04	1.35	1.65	2.23	2.79	3.07	3.62
10	0.05	0.12	0.23	0.43	0.81	1.16	1.51	1.84	2.50	3.13	3.44	
11	0.06	0.14	0.26	0.48	0.90	1.29	1.67	2.04	2.77	3.47	3.81	
12	0.07	0.15	0.28	0.53	0.98	1.42	1.84	2.24	3.04	3.81		
13	0.07	0.17	0.31	0.57	1.07	1.55	2.00	2.45	3.31	4.15		
14	0.08	0.18	0.33	0.62	1.16	1.67	2.17	2.65	3.59			
15	0.08	0.19	0.36	0.67	1.25	1.80	2.34	2.86	3.87			
16	0.09	0.21	0.39	0.72	1.34	1.93	2.51	3.06	4.15			
17	0.10	0.22	0.41	0.77	1.43	2.06	2.67	3.27				
18	0.10	0.23	0.44	0.82	1.52	2.20	2.84	3.48				
19	0.11	0.25	0.46	0.87	1.62	2.33	3.02	3.69				
20	0.12	0.26	0.49	0.92	1.71	2.46	3.19	3.90				
21	0.12	0.28	0.52	0.97	1.80	2.59	3.36	4.11				
22	0.13	0.29	0.54	1.01	1.89	2.73	3.53	4.32				
23	0.13	0.31	0.57	1.06	1.99	2.86	3.71	4.53				
24	0.14	0.32	0.60	1.11	2.08	3.00	3.88					
25	0.15	0.33	0.62	1.16	2.17	3.13	4.06					
26	0.15	0.35	0.65	1.22	2.27	3.27	4.23					
28	0.17	0.38	0.71	1.32	2.46	3.54	4.58					
30	0.18	0.41	0.76	1.42	2.65	3.81						
32	0.19	0.44	0.82	1.52	2.84	4.09						
35	0.21	0.48	0.90	1.68	3.13	4.50						
40	0.24	0.56	1.04	1.94	3.61							
45	0.28	0.63	1.18	2.20	4.10							

RS50-LMD-1 Kilowatt Ratings (Single-Strand Chain)

Small Sprocket Teeth No.	Small Sprocket Max. rpm											
	10	25	50	100	200	300	400	500	600	700	800	900
9	0.10	0.23	0.43	0.80	1.49	2.15	2.78	3.40	4.01	4.61	5.19	5.77
10	0.11	0.26	0.48	0.90	1.67	2.41	3.12	3.81	4.49	5.16	5.82	
11	0.12	0.29	0.53	0.99	1.85	2.67	3.46	4.23	4.98	5.72		
12	0.14	0.31	0.58	1.09	2.03	2.93	3.80	4.64	5.47	6.28		
13	0.15	0.34	0.64	1.19	2.22	3.20	4.14	5.06	5.96			
14	0.16	0.37	0.69	1.29	2.40	3.46	4.49	5.48	6.46			
15	0.17	0.40	0.74	1.39	2.59	3.73	4.83	5.91				
16	0.19	0.43	0.80	1.49	2.78	4.00	5.18	6.33				
17	0.20	0.46	0.85	1.59	2.96	4.27	5.53	6.76				
18	0.21	0.49	0.91	1.69	3.15	4.54	5.88					
19	0.23	0.51	0.96	1.79	3.34	4.81	6.24					
20	0.24	0.54	1.01	1.89	3.53	5.09	6.59					
21	0.25	0.57	1.07	2.00	3.72	5.36	6.95					
22	0.26	0.60	1.12	2.10	3.92	5.64						
23	0.28	0.63	1.18	2.20	4.11	5.92						
24	0.29	0.66	1.24	2.31	4.30	6.20						
25	0.30	0.69	1.29	2.41	4.50	6.48						
26	0.32	0.72	1.35	2.51	4.69	6.76						
28	0.34	0.78	1.46	2.72	5.08	7.32						
30	0.37	0.84	1.57	2.93	5.47							
32	0.40	0.90	1.69	3.15	5.87							
35	0.44	1.00	1.86	3.46	6.47							
40	0.50	1.15	2.14	4.00	7.47							
45	0.57	1.31	2.44	4.55								

RS60-LMD-1 Kilowatt Ratings (Single-Strand Chain)

Small Sprocket Teeth No.	Small Sprocket Max. rpm											
	10	25	50	100	150	200	250	300	400	500	600	700
9	0.18	0.41	0.76	1.41	2.03	2.64	3.22	3.80	4.92	6.01	7.08	8.14
10	0.20	0.45	0.85	1.58	2.28	2.95	3.61	4.25	5.51	6.74	7.94	
11	0.22	0.50	0.94	1.75	2.53	3.27	4.00	4.71	6.11	7.47		
12	0.24	0.55	1.03	1.93	2.78	3.60	4.40	5.18	6.71	8.20		
13	0.26	0.60	1.13	2.10	3.03	3.92	4.79	5.65	7.32			
14	0.29	0.65	1.22	2.28	3.28	4.25	5.19	6.12	7.92			
15	0.31	0.70	1.31	2.45	3.53	4.58	5.59	6.59	8.54			
16	0.33	0.75	1.41	2.63	3.79	4.91	6.00	7.07				
17	0.35	0.81	1.50	2.81	4.04	5.24	6.40	7.54				
18	0.38	0.86	1.60	2.99	4.30	5.57	6.81	8.02				
19	0.40	0.91	1.70	3.16	4.56	5.91	7.22	8.51				
20	0.42	0.96	1.79	3.35	4.82	6.24	7.63	8.99				
21	0.44	1.01	1.89	3.53	5.08	6.58	8.04	9.48				
22	0.47	1.06	1.99	3.71	5.34	6.92	8.46					
23	0.49	1.12	2.08	3.89	5.60	7.26	8.87					
24	0.51	1.17	2.18	4.07	5.87	7.60	9.29					
25	0.54	1.22	2.28	4.26	6.13	7.94	9.71					
26	0.56	1.28	2.38	4.44	6.40	8.29						
28	0.61	1.38	2.58	4.81	6.93	8.98						
30	0.65	1.49	2.78	5.18	7.47	9.67						
32	0.70	1.60	2.98	5.56	8.00							
35	0.77	1.76	3.28	6.12	8.82							
40	0.89	2.03	3.79	7.07	10.2							
45	1.01	2.31	4.30	8.03								

RS80-LMD-1 Kilowatt Ratings (Single-Strand Chain)

Small Sprocket Teeth No.	Small Sprocket Max. rpm											
	10	25	50	75	100	125	150	200	250	300	350	
9	0.40	0.91	1.69	2.44	3.16	3.86	4.55	5.90	7.21	8.50	9.76	
10	0.45	1.02	1.90	2.73	3.54	4.33	5.10	6.61	8.08	9.52	10.9	
11	0.49	1.13	2.10	3.03	3.93	4.80	5.66	7.33	8.96	10.6		
12	0.54	1.24	2.31	3.33	4.31	5.27	6.21	8.05	9.84			
13	0.59	1.35	2.52	3.63	4.70	5.75	6.77	8.78	10.7			
14	0.64	1.46	2.73	3.93	5.10	6.23	7.34	9.51	11.6			
15	0.69	1.58	2.94	4.24	5.49	6.71	7.91	10.2				
16	0.74	1.69	3.15	4.54	5.89	7.19	8.48	11.0				
17	0.79	1.80	3.37	4.85	6.28	7.68	9.05	11.7				
18	0.84	1.92	3.58	5.16	6.68	8.17	9.63					
19	0.89	2.03	3.80	5.47	7.09	8.66	10.2					
20	0.94	2.15	4.01	5.78	7.49	9.16	10.8					
21	0.99	2.27	4.23	6.09	7.89	9.65	11.4					
22	1.05	2.38	4.45	6.41	8.30	10.1	12.0					
23	1.10	2.50	4.67	6.72	8.71	10.6	12.5					
24	1.15	2.62	4.89	7.04	9.12	11.1						
25	1.20	2.74	5.11	7.36	9.53	11.7						
26	1.25	2.86	5.33	7.67	9.94	12.2						
28	1.36	3.09	5.77	8.31	10.8	13.2						
30	1.46	3.33	6.22	8.96	11.6							
32	1.57	3.57	6.67	9.60	12.4							
35	1.73	3.94	7.35	10.6	13.7							
40	1.99	4.55	8.48	12.2								
45	2.26	5.16	9.64	13.9								

Notes: 1. Kilowatt ratings when using a one-pitch offset link (OL) are 80% that of the above values.
 2. For RS Double Strand Compatible Chain, multiply the kW ratings in the tables above by a multi-strand factor of 1.7.
 3. For conventional double strand LAMBDA Chain, multiply the kW ratings in the tables above by a multi-strand factor of 1.4.
 4. Kilowatt ratings for RS Roller Chain differ from the above.



**RS100-LMD-1 Kilowatt Ratings
(Single-Strand Chain)**

Small Sprocket Teeth No.	Small Sprocket Max. rpm											
	10	25	50	75	100	125	150	175	200	225	250	275
9	0.66	1.51	2.82	4.07	5.27	6.44	7.59	8.72	9.83	10.9	12.0	13.1
10	0.74	1.70	3.16	4.56	5.90	7.22	8.51	9.77	11.0	12.3	13.5	
11	0.82	1.88	3.51	5.05	6.54	8.00	9.43	10.8	12.2	13.4		
12	0.91	2.06	3.85	5.55	7.19	8.79	10.4	11.9	13.4			
13	0.99	2.25	4.20	6.05	7.84	9.58	11.3	13.0				
14	1.07	2.44	4.55	6.56	8.49	10.4	12.2	14.1				
15	1.15	2.63	4.90	7.06	9.15	11.2	13.2					
16	1.23	2.82	5.26	7.57	9.81	12.0	14.1					
17	1.32	3.01	5.61	8.08	10.5	12.8						
18	1.40	3.20	5.97	8.60	11.1	13.6						
19	1.49	3.39	6.33	9.12	11.8	14.4						
20	1.57	3.58	6.69	9.64	12.5	15.3						
21	1.66	3.78	7.05	10.2	13.2							
22	1.74	3.97	7.41	10.7	13.8							
23	1.83	4.17	7.78	11.2	14.5							
24	1.91	4.36	8.15	11.7	15.2							
25	2.00	4.56	8.51	12.3	15.9							
26	2.09	4.76	8.88	12.8								
28	2.26	5.16	9.62	13.9								
30	2.43	5.55	10.4	14.9								
32	2.61	5.96	11.1	16.0								
35	2.88	6.56	12.2									
40	3.32	7.58	14.1									
45	3.77	8.61	16.1									

**RS120-LMD-1 Kilowatt Ratings
(Single-Strand Chain)**

Small Sprocket Teeth No.	Small Sprocket Max. rpm											
	5	10	15	20	25	30	40	50	60	80	100	125
9	0.65	1.22	1.75	2.27	2.77	3.27	4.23	5.17	6.10	7.90	9.65	11.8
10	0.73	1.36	1.96	2.54	3.11	3.66	4.74	5.80	6.83	8.85	10.8	13.2
11	0.81	1.51	2.17	2.82	3.44	4.06	5.25	6.43	7.57	9.81	12.0	
12	0.89	1.66	2.39	3.09	3.78	4.46	5.77	7.06	8.32	10.8	13.2	
13	0.97	1.81	2.60	3.37	4.12	4.86	6.29	7.70	9.07	11.7	14.4	
14	1.05	1.96	2.82	3.65	4.47	5.26	6.82	8.34	9.82	12.7		
15	1.13	2.11	3.04	3.94	4.81	5.67	7.35	8.98	10.6	13.7		
16	1.21	2.26	3.26	4.22	5.16	6.08	7.88	9.63	11.3	14.7		
17	1.29	2.42	3.48	4.51	5.51	6.49	8.41	10.3	12.1			
18	1.38	2.57	3.70	4.79	5.86	6.91	8.94	10.9	12.9			
19	1.46	2.72	3.92	5.08	6.21	7.32	9.48	11.6	13.7			
20	1.54	2.88	4.15	5.37	6.57	7.74	10.0	12.3	14.4			
21	1.63	3.03	4.37	5.66	6.92	8.16	10.6	12.9	15.2			
22	1.71	3.19	4.60	5.95	7.28	8.58	11.1	13.6				
23	1.79	3.35	4.82	6.25	7.64	9.00	11.7	14.3				
24	1.88	3.51	5.05	6.54	8.00	9.42	12.2	14.9				
25	1.96	3.66	5.28	6.84	8.36	9.85	12.8	15.6				
26	2.05	3.82	5.51	7.13	8.72	10.3	13.3	16.3				
28	2.22	4.14	5.96	7.72	9.45	11.1	14.4					
30	2.39	4.46	6.43	8.32	10.2	12.0	15.5					
32	2.56	4.78	6.89	8.92	10.9	12.9	16.7					
35	2.82	5.27	7.59	9.83	12.0	14.2						
40	3.26	6.09	8.77	11.4	13.9	16.4						
45	3.70	6.91	9.96	12.9	15.8							

**RS140-LMD-1 Kilowatt Ratings
(Single-Strand Chain)**

Small Sprocket Teeth No.	Small Sprocket Max. rpm											
	5	10	15	20	25	30	40	50	60	80	100	125
9	1.02	1.90	2.74	3.55	4.34	5.12	6.63	8.10	9.55	12.4	15.1	18.5
10	1.14	2.13	3.07	3.98	4.87	5.73	7.43	9.08	10.7	13.9	16.9	
11	1.27	2.36	3.41	4.41	5.39	6.36	8.23	10.1	11.9	15.4	18.8	
12	1.39	2.60	3.74	4.85	5.93	6.98	9.05	11.1	13.0	16.9		
13	1.52	2.83	4.08	5.29	6.46	7.61	9.86	12.1	14.2	18.4		
14	1.64	3.07	4.42	5.73	7.00	8.25	10.7	13.1	15.4	19.9		
15	1.77	3.31	4.76	6.17	7.54	8.89	11.5	14.1	16.6			
16	1.90	3.54	5.11	6.61	8.08	9.53	12.3	15.1	17.8			
17	2.03	3.78	5.45	7.06	8.63	10.2	13.2	16.1	19.0			
18	2.16	4.03	5.80	7.51	9.18	10.8	14.0	17.1	20.2			
19	2.29	4.27	6.15	7.96	9.73	11.5	14.9	18.2				
20	2.42	4.51	6.50	8.42	10.3	12.1	15.7	19.2				
21	2.55	4.75	6.85	8.87	10.8	12.8	16.6	20.2				
22	2.68	5.00	7.20	9.33	11.4	13.4	17.4	21.3				
23	2.81	5.25	7.55	9.79	12.0	14.1	18.3					
24	2.94	5.49	7.91	10.2	12.5	14.8	19.1					
25	3.08	5.74	8.27	10.7	13.1	15.4	20.0					
26	3.21	5.99	8.62	11.2	13.7	16.1	20.8					
28	3.48	6.49	9.34	12.1	14.8	17.4	22.6					
30	3.74	6.99	10.1	13.0	15.9	18.8						
32	4.02	7.49	10.8	14.0	17.1	20.1						
35	4.42	8.25	11.9	15.4	18.8	22.2						
40	5.11	9.53	13.7	17.8	21.7							

**RS160-LMD-1 Kilowatt Ratings
(Single-Strand Chain)**

Small Sprocket Teeth No.	Small Sprocket Max. rpm											
	5	10	15	20	25	30	40	50	60	80	100	
9	1.54	2.87	4.13	5.35	6.54	7.70	9.98	12.2	14.4	18.6	22.8	
10	1.72	3.21	4.63	5.99	7.33	8.63	11.2	13.7	16.1	20.9		
11	1.91	3.56	5.13	6.64	8.12	9.57	12.4	15.2	17.9	23.1		
12	2.10	3.91	5.63	7.30	8.92	10.5	13.6	16.6	19.6	25.4		
13	2.28	4.26	6.14	7.96	9.73	11.5	14.8	18.1	21.4			
14	2.48	4.62	6.65	8.62	10.5	12.4	16.1	19.7	23.2			
15	2.67	4.98	7.17	9.29	11.4	13.4	17.3	21.2	25.0			
16	2.86	5.34	7.68	9.96	12.2	14.3	18.6	22.7	26.8			
17	3.05	5.70	8.20	10.6	13.0	15.3	19.8	24.2				
18	3.25	6.06	8.73	11.3	13.8	16.3	21.1	25.8				
19	3.44	6.42	9.25	12.0	14.7	17.3	22.4	27.3				
20	3.64	6.79	9.78	12.7	15.5	18.2	23.6					
21	3.83	7.16	10.3	13.4	16.3	19.2	24.9					
22	4.03	7.52	10.8	14.0	17.2	20.2	26.2					
23	4.23	7.90	11.4	14.7	18.0	21.2	27.5					
24	4.43	8.27	11.9	15.4	18.9	22.2	28.8					
25	4.63	8.64	12.4	16.1	19.7	23.2						
26	4.83	9.01	13.0	16.8	20.6	24.2						
28	5.23	9.76	14.1	18.2	22.3	26.2						
30	5.64	10.5	15.2	19.6	24.0	28.3						
32	6.04	11.3	16.2	21.0	25.7	30.3						
35	6.66	12.4	17.9	23.2	28.3							
40	7.69	14.4	20.7	26.8								

Notes: 1. Kilowatt ratings when using a one-pitch offset link (OL) are 80% that of the above values.
 2. For RS Double Strand Compatible Chain, multiply the kW ratings in the tables above by a multi-strand factor of 1.7.
 3. For conventional double strand LAMBDA Chain, multiply the kW ratings in the tables above by a multi-strand factor of 1.4.
 4. Kilowatt ratings for RS Roller Chain differ from the above.

LAMBDA® Double Pitch Chain

Base Chain

S Roller

Offset Link

R Roller

Offset Link

• Connecting links: RF2040-LMC to RF2060-LMC use spring clips. RF2080-LMC and RF2100-LMC as well as chains with GNK1 attachments (all sizes) use cotter pins. Base chain pins are riveted.

Attachments

A1 Attachment

A2 Attachment

K1 Attachment

K2 Attachment

SA1 Attachment

SA2 Attachment

EP Attachment

SK1 Attachment

SK2 Attachment

GNK1 Attachment

R roller type not available.

• Pin end diameter on EP attachments is slightly larger.
 • Actual dimension P' may differ from P. Please contact a Tsubaki representative for details.

• Pins other than those on connecting links are riveted regardless of whether attachments are present.
 • Attachments shown are S roller type. However, the dimensions for attachments are the same when R rollers are used. Also, the drawings show attachments on every link.



Base Chain Dimensions

Tsubaki Chain No.	Roller Type	Pitch P	P ¹	Width Between Inner Link Plates W	Roller Dia.		Pin			Offset Pin Length L	Plate	
					S Roller R ₁	R Roller R ₂	Dia. D	L ₁	L ₂		Thickness T	Height H
RF2040-LMC	S · R	25.40	Contact a Tsubaki representative for details.	7.95	7.92	15.88	3.97	8.25	9.95	18.2	1.5	12.0
RF2050-LMC		31.75		9.53	10.16	19.05	5.09	10.30	12.0	22.6	2.0	15.0
RF2060-LMC		38.10		12.70	11.91	22.23	5.96	14.55	16.55	31.5	3.2	17.2
RF2080-LMC		50.80		15.88	15.88	28.58	7.94	18.30	20.90	39.9	4.0	23.0
RF2100-LMC		63.50		19.05	19.05	39.69	9.54	21.80	24.50	47.5	4.8	28.6
RF2120-LMC		76.20		25.40	22.23	44.45	11.11	26.95	30.55	59.0	5.6	34.4

Attachment Dimensions

Tsubaki Chain No.	Attachment															
	C	C ₁	C ₂	K	N	O	O ₁	S	T	X	X ₂	X _S	D	L ₃	L ₄	G
RF2040-LMC	12.7	11.1	13.6	9.5	19.1	3.6	5.2	9.1	1.5	19.3	17.6	19.8	3.97	9.5	16.75	4.1
RF2050-LMC	15.9	14.3	15.9	11.9	23.8	5.2	6.8	11.1	2.0	24.2	22.0	24.6	5.09	11.9	21.0	5.1
RF2060-LMC	21.45	17.5	19.1	14.3	28.6	5.2	8.7	14.7	3.2	31.5	28.2	30.6	5.96	14.3	27.45	6.1
RF2080-LMC	27.8	22.2	25.4	19.1	38.1	6.8	10.3	19.1	4.0	40.7	36.6	40.5	7.94	19.1	35.5	8.1
RF2100-LMC	33.35	28.6	31.8	23.8	47.6	8.7	14.3	23.4	4.8	49.9	44.9	50.4	9.54	23.8	43.4	10.1
RF2120-LMC	39.7	33.3	37.3	28.6	57.2	14.0	16.0	27.8	5.6	60.7	54.4	59.9	—	—	—	—

Tsubaki Chain No.	Max. Allowable Load kN {kgf}	Approx. Mass (kg/m)		Additional Weight per Attachment (kg)			No. of Links per Unit
		S Roller	R Roller	A, SA	K, SK	EP	
RF2040-LMC	2.65 {270}	0.51	0.87	0.003	0.006	0.001	120
RF2050-LMC	4.31 {440}	0.84	1.30	0.006	0.012	0.002	96
RF2060-LMC	6.28 {640}	1.51	2.19	0.017	0.034	0.003	80
RF2080-LMC	10.7 {1090}	2.41	3.52	0.032	0.064	0.007	60
RF2100-LMC	17.1 {1740}	3.54	5.80	0.06	0.12	0.012	48
RF2120-LMC	23.9 {2440}	5.08	8.13	0.100	0.200	—	40

Note: Dimensions O and O₁ are slightly smaller on NEP Series LAMBDA Chains.

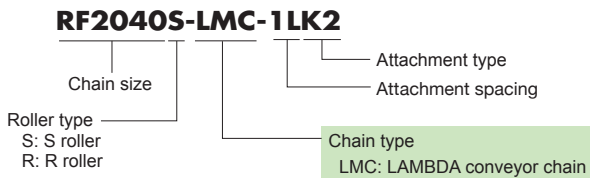
Operating Temperature Range:

LAMBDA Double Pitch Chain: -10 to 150°C

Selection, handling, and warranty:

See the Tsubaki Small Size Conveyor Chain catalog for more information.

Chain Numbering



Sample Order

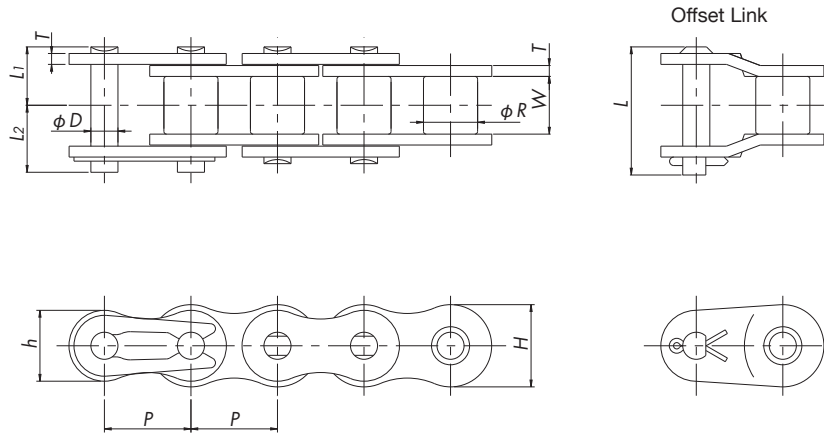
Chain size=RF2040 Roller type=S Rollers
Chain type=LAMBDA conveyor chain
Attachment spacing/type=1LK2 Qty.=400 links

Chain No.	Quantity	Unit
RF2040S-LMC-1LK2	400	L

*See the Tsubaki Small Size Conveyor Chain catalog for more information on ordering.

LAMBDA[®] RS Attachment Chain

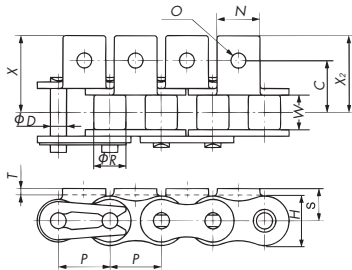
Base Chain



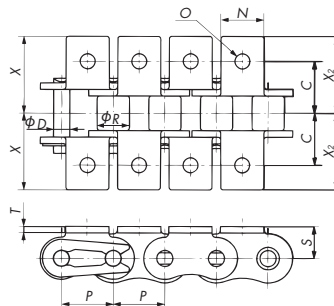
- Connecting links: RS35-LMC to RS60-LMC use spring clips. RS80-LMC and RS100-LMC use cotter pins. Base chain pins are riveted.
- RS35-LMC is a bushed chain.

Attachments

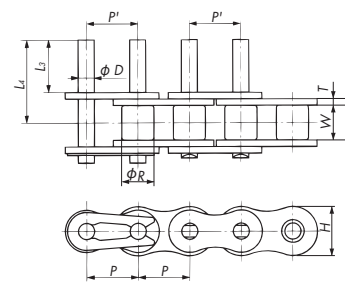
A1 Attachment



K1 Attachment

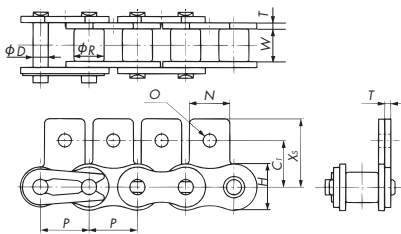


EP Attachment

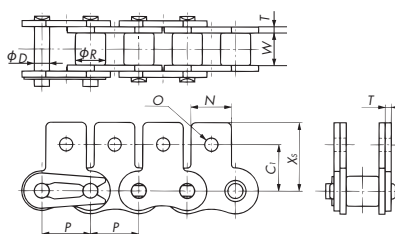


- Pin end diameter on EP attachments is slightly larger.
- Actual dimension P' may differ from P. Please contact a Tsubaki representative for details.

SA1 Attachment



SK1 Attachment



- Pins other than those on connecting links are riveted regardless of whether attachments are present.
- Drawings show attachments on every link.



Base Chain Dimensions

Tsubaki Chain No.	Pitch <i>P</i>	<i>P'</i>	Width Between Inner Link Plates <i>W</i>	Roller Dia. (Bush Dia.) <i>R</i>	Pin				Plate			Max. Allowable Load kN {kgf}	Approx. Mass (kg/m)	No. of Links per Unit
					Dia. <i>D</i>	<i>L</i> ₁	<i>L</i> ₂	<i>L</i>	Thickness <i>T</i>	Height <i>H</i>	Height <i>h</i>			
RS35-LMC	9.525	Contact a Tsubaki representative for details.	4.78	(5.08)	3.00	5.85	6.85	13.5	1.25	9.0	7.8	1.52 {155}	0.33	320
RS40-LMC	12.70		7.95	7.92	3.97	8.25	9.95	18.2	1.5	12.0	10.4	2.65 {270}	0.64	240
RS50-LMC	15.875		9.53	10.16	5.09	10.3	12.0	22.6	2.0	15.0	13.0	4.31 {440}	1.04	192
RS60-LMC	19.05		12.70	11.91	5.96	12.85	14.75	28.2	2.4	18.1	15.6	6.28 {640}	1.53	160
RS80-LMC	25.40		15.88	15.88	7.94	16.25	19.25	36.6	3.2	24.1	20.8	10.7 {1090}	2.66	120
RS100-LMC	31.75		19.05	19.05	9.54	19.75	22.85	43.7	4.0	30.1	26.0	17.1 {1740}	3.99	96
RS120-LMC	38.10		25.40	22.23	11.11	24.90	28.90	55.0	4.8	36.2	31.2	23.9 {2440}	5.93	80
RS140-LMC	44.45		25.40	25.4	12.71	26.90	31.70	59.5	5.6	42.2	36.4	32.4 {3300}	7.49	68

Attachment Dimensions

Tsubaki Chain No.	Attachment										Additional Weight per Attachment (kg)		
	<i>C</i>	<i>C_T</i>	<i>N</i>	<i>O</i>	<i>S</i>	<i>X</i>	<i>X₂</i>	<i>X_S</i>	<i>L₃</i>	<i>L₄</i>	<i>A-SA</i>	<i>K-SK</i>	<i>EP</i>
RS35-LMC	9.5	9.5	7.9	3.4	6.35	14.3	14.3	14.55	9.5	14.6	0.0008	0.0016	0.0008
RS40-LMC	12.7	12.7	9.5	3.6	8.0	17.8	17.8	17.40	9.5	16.75	0.002	0.004	0.001
RS50-LMC	15.9	15.9	12.7	5.2	10.3	23.4	23.4	23.05	11.9	21.0	0.003	0.006	0.002
RS60-LMC	19.05	18.3	15.9	5.2	11.9	28.2	28.2	26.85	14.3	25.75	0.007	0.014	0.003
RS80-LMC	25.4	24.6	19.1	6.8	15.9	36.6	36.6	35.45	19.1	33.85	0.013	0.026	0.007
RS100-LMC	31.75	31.8	25.4	8.7	19.8	44.9	44.9	44.0	23.8	41.75	0.026	0.052	0.012
RS120-LMC	38.1	36.5	28.6	10.3	23.0	55.8	50.8	52.9	28.6	51.4	0.044	0.088	0.020
RS140-LMC	44.5	44.5	34.9	11.9	28.6	63.1	57.2	63.5	33.3	57.9	0.071	0.142	0.030

- Note: 1. Pin diameters for LAMBDA RS35-LMC and standard RS35 differ and therefore they cannot be connected together.
 2. RS35-LMC has no rollers.
 3. Dimension D of the RS35-LMC EP attachment is ϕ 3.0mm and is smaller than that of standard RS35.
 4. Dimensions given are nominal dimensions and may differ from actual dimensions.

Operating Temperature Range:

LAMBDA RS Attachment Chain: -10 to 150°C

Selection, handling, and warranty:

See the Tsubaki Small Size Conveyor Chain catalog for more information.

Chain Numbering

RS40-LMC-1LSA1

Chain size: RS40
 Attachment type: LMC
 Attachment spacing: 1

Chain type
 LMC: LAMBDA conveyor chain

Sample Order

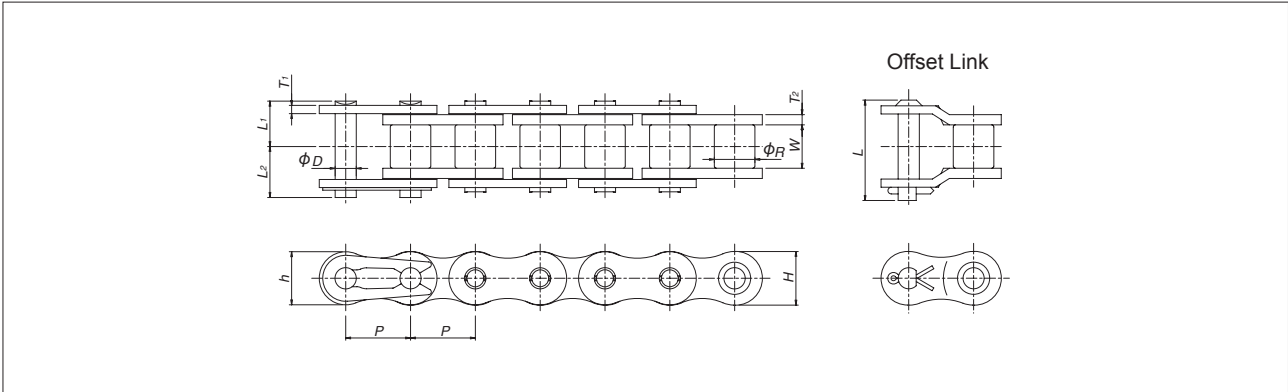
Chain size=RS40
 Chain type=LAMBDA conveyor chain
 Attachment spacing/type=1LSA1 Qty.=400 links

Chain No.	Quantity	Unit
RS40-LMC-1LSA1	400	L

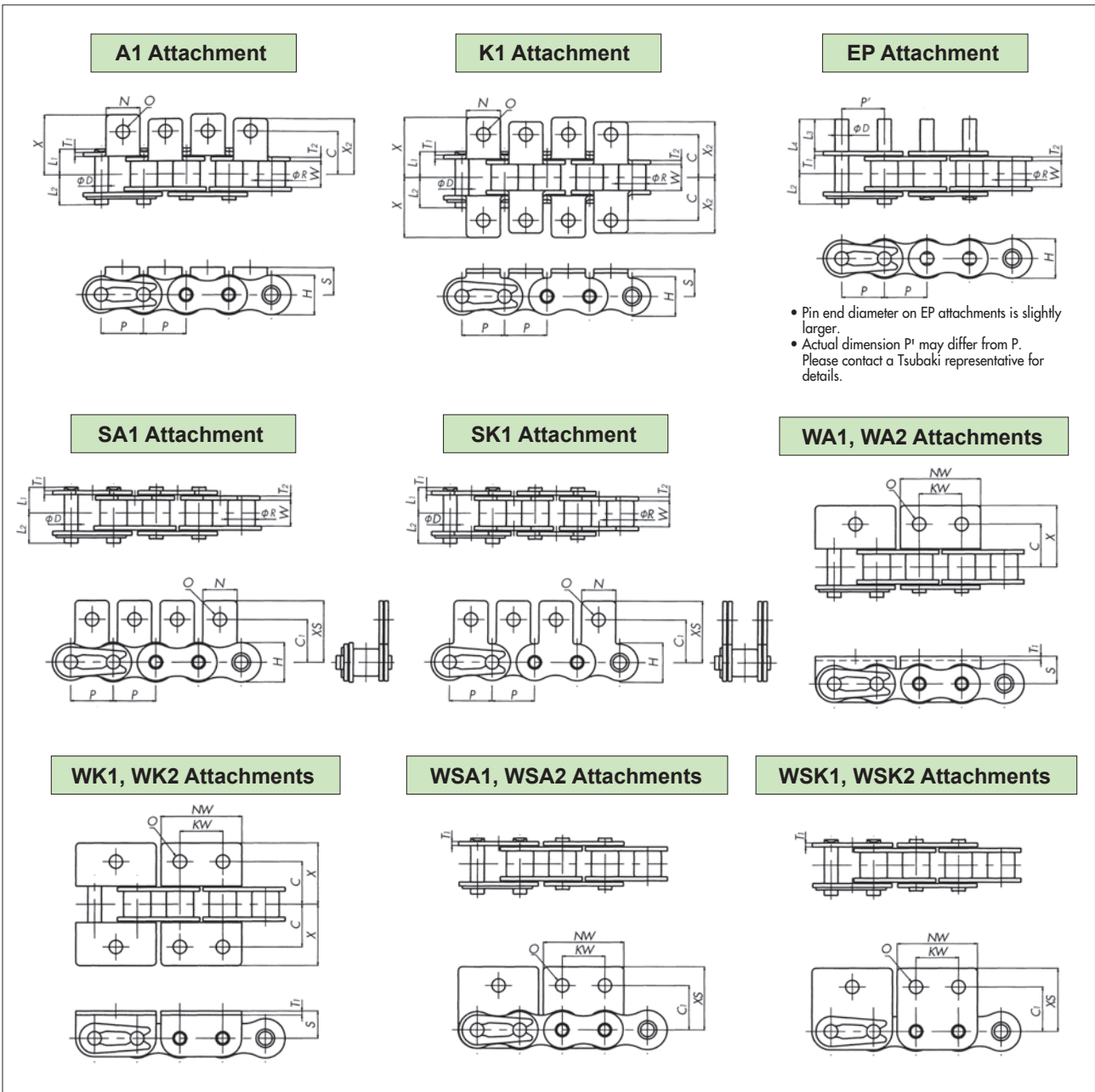
*See the Tsubaki Small Size Conveyor Chain catalog for more information on ordering.

LAMBDA® Attachment Chain BS

Base Chain



Attachments





Base Chain Dimensions

Tsubaki Chain No.	Pitch <i>P</i>	<i>P</i> '	Roller Dia. <i>R</i>	Width Between Inner Link Plates <i>W</i>	Plate				Pin Dia. <i>D</i>
					Thickness <i>T</i> ₂	Thickness <i>T</i> ₁	Height <i>H</i>	Height <i>h</i>	
RS08B-LM	12.70	Contact a Tsubaki representative for details.	8.51	7.75	1.6	1.6	12.0	10.4	4.45
RS10B-LM	15.875		10.16	9.65	1.5	1.5	14.7	13.7	5.08
RS12B-LM	19.05		12.07	11.68	1.8	1.8	16.1	16.1	5.72
RS16B-LM	25.40		15.88	17.02	4.0	3.2	21.0	21.0	8.28
RS20B-LM	31.75		19.05	19.56	4.4	3.4	26.0	26.0	10.19
RS24B-LM	38.10		25.40	25.40	6.0	5.6	33.4	31.2	14.63

Tsubaki Chain No.	Pin Length			Offset Pin Length <i>L</i>	Min. Tensile Strength kN {kgf}	Approx. Mass (kg/m)	No. of Links per Unit
	<i>L</i> ₁ + <i>L</i> ₂	<i>L</i> ₁	<i>L</i> ₂				
RS08B-LM	18.4	8.4	10.0	18.6	13.7 {1400}	0.70	240
RS10B-LM	20.8	9.55	11.25	20.8	16.1 {1640}	0.95	192
RS12B-LM	24.1	11.1	13.0	24.4	19.5 {1990}	1.25	160
RS16B-LM	37.7	17.75	19.95	39.3	54.1 {5520}	2.70	120
RS20B-LM	43.0	11.1	23.1	46.6	95.0 {9680}	3.85	96
RS24B-LM	58.5	26.65	31.85	61.7	160 {16300}	7.45	80

Attachment Dimensions

Tsubaki Chain No.	A1,SA1,K1,SK1 Attachments								Additional Weight per Attachment (kg)		
	<i>C</i>	<i>C</i> ₁	<i>N</i>	<i>O</i>	<i>S</i>	<i>X</i>	<i>X</i> ₂	<i>X</i> _s	A·SA	K·SK	
RS08B-LM	11.9	12.7	11.4	4.2	8.9	19.05	17.15	19.3	0.002	0.004	
RS10B-LM	15.9	15.9	12.7	5.0	10.2	22.25	20.6	22.9	0.003	0.006	
RS12B-LM	19.05	22.2	16.5	7.1	13.5	29.85	27.8	32.05	0.006	0.012	
RS16B-LM	23.8	23.9	24.3	6.7	15.2	37.35	34.4	34.1	0.014	0.028	
RS20B-LM	31.75	31.8	25.4	8.7	19.8	44.85	41.6	44.0	0.024	0.048	
RS24B-LM	Contact a Tsubaki representative for details.										

Tsubaki Chain No.	WA2,WSA2,WK2,WSK2 Attachments WA1,WSA1,WK1,WSK1 Attachments								EP Attachment			Additional Weight per Attachment (kg)		
	<i>C</i>	<i>C</i> ₁	<i>NW</i>	<i>O</i>	<i>S</i>	<i>X</i>	<i>X</i> _s	<i>KW</i>	<i>D</i>	<i>L</i> _s	<i>L</i> ₄	WA·WSA	WK·WSK	EP
RS08B-LM	12.7	13.1	24.6	4.9	8.9	20.3	20.7	12.7	4.45	9.5	17.0	0.005	0.010	0.001
RS10B-LM	15.9	16.6	30.0	5.0	10.2	22.85	23.6	15.9	5.08	11.9	20.25	0.006	0.012	0.002
RS12B-LM	17.45	17.6	34.8	5.5	11.4	25.65	25.75	19.1	5.72	14.3	24.1	0.009	0.018	0.003
RS16B-LM	28.6	26.0	46.0	8.1	15.9	39.25	36.7	25.4	8.28	19.1	35.25	0.030	0.060	0.008
RS20B-LM	Contact a Tsubaki representative for details.								10.19	23.8	42.0	—	—	—
RS24B-LM	Contact a Tsubaki representative for details.													

Note: Dimensions given are nominal dimensions and may differ from actual dimensions.

Operating Temperature Range: -10°C to 150°C

Sprockets:

BS Roller Chain sprockets (conforming to ISO B Series) must be used.

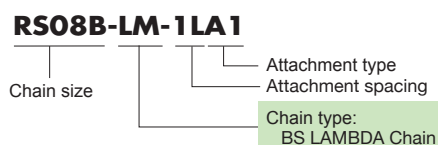
Pin Shape:

Single-strand chains in sizes RS08B-LM through RS16B-LM use easy disassembly pins (with center sink riveting). All other sizes, including multi-strand chains, use double stake riveting.

Chain Selection: Contact a Tsubaki representative regarding chain selection.

- Made-to-order product.

Chain Numbering



Sample Order

Chain size=RS08B
Chain type=BS LAMBDA Chain
Attachment spacing/type=1LA1 Qty.=400 links

Chain No.	Quantity	Unit
RS08B-LM-1LA1	400	L

*See the Tsubaki Small Size Conveyor Chain catalog for more information on ordering.



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CHINA

China	Tsubakimoto Chain (Shanghai) Co., Ltd.	+86 215396-6651/2	http://tsubaki.cn/
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The Tsubaki Eco Link logo is used only on products that satisfy the standards for environmental friendliness set by the Tsubaki Group.