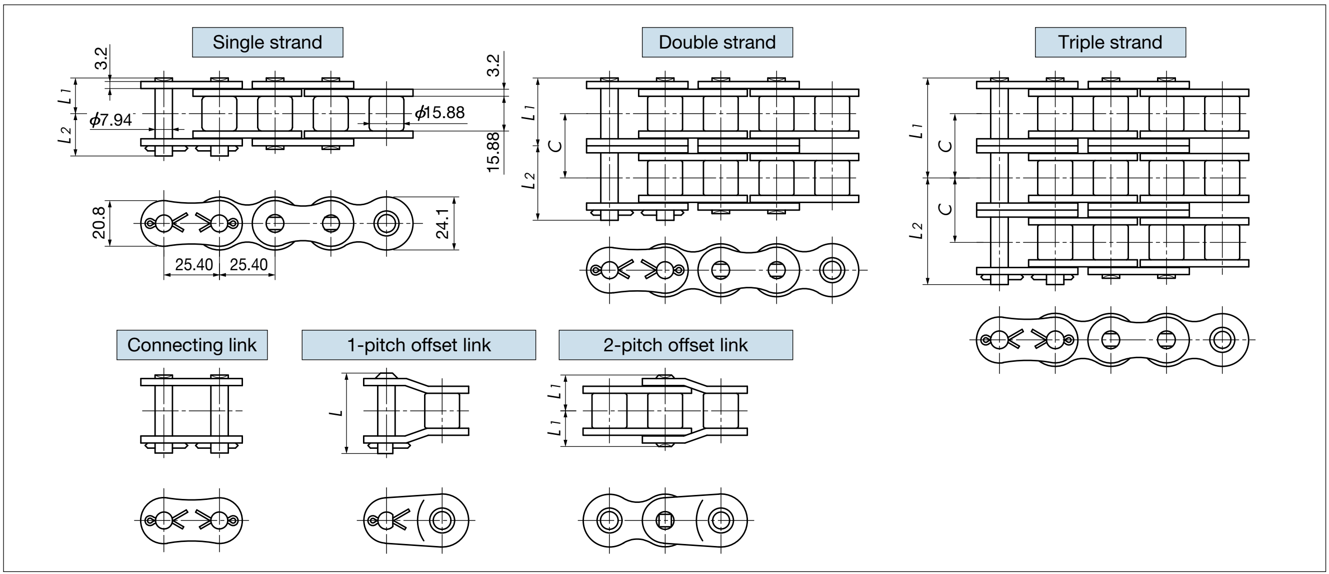
Standard Roller Chains and Sprockets RS Roller Chain RS80

(JIS identification no. 80)



Specifications

Size	Number of strands	Dimensions L_1	Dimensions L_2	Offset pin length L	Transverse pitch C	ASME standard min. tensile strength kN{kgf}	Min. tensile strength kN{kgf}	Max. allowable load kN{kgf}	Approx. mass kg/m
RS80	**1**	16.25	19.25	36.6	29.3	55.6 {5670}	71.6{7300}	14.7{1500}	2.66
	2	30.9	33.9	67.5		111.2{11340}	143 {14600}	25.0{2550}	5.27
	3	45.6	48.5	96.9		166.8{17009}	215 {21900}	36.8{3750}	7.89
	4	60.25	63.25	126.3		–	286 {29200}	48.5{4950}	10.50
	5	74.95	77.95	155.6		–	358 {36500}	57.4{5850}	13.11
	6	89.6	92.5	184.9		–	430 {43800}	67.7{6900}	15.73

Note: 1. Maximum allowable load when using a one-pitch offset link is 65% of the above.
2. Number of links per unit = 120. Items in bold are stocked in units.

RS80 Maximum kilowatt ratings table (kW ratings for single strand chain)

Small sprocket no. of teeth \ Small sprocket max rpm	10	25	50	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2700	3000	3400
Lubrication	AI				AII			B										C							
9	0.53	1.21	2.26	4.21	6.07	7.86	11.3	14.7	17.9	18.2	18.2	15.1	12.7	10.8	9.39	8.24	6.54	5.35	4.48	3.83	3.32	2.91	2.44	2.08	1.73
10	0.59	1.36	2.53	4.72	6.80	8.81	12.7	16.4	20.1	20.4	20.4	17.7	14.9	12.7	11.0	9.65	7.66	6.27	5.25	4.48	3.89	3.41	2.86	2.44	2.02
11	0.66	1.50	2.80	5.23	7.54	9.76	14.1	18.2	22.3	22.6	22.6	20.4	17.1	14.6	12.7	11.1	8.83	7.23	6.06	5.17	4.48	3.94	3.30	2.82	1.27
12	0.72	1.65	3.08	5.75	8.28	10.7	15.4	20.0	24.5	24.9	24.9	23.3	19.5	16.7	14.5	12.7	10.1	8.24	6.90	5.89	5.11	4.48	3.76	3.21	
13	0.79	1.80	3.36	6.27	9.03	11.7	16.8	21.8	26.7	27.1	27.1	26.3	22.0	18.8	16.3	14.3	11.3	9.29	7.78	6.65	5.76	5.06	4.24	3.62	
14	0.85	1.95	3.64	6.79	9.78	12.7	18.2	23.6	28.9	29.4	29.4	29.4	24.6	21.0	18.2	16.0	12.7	10.4	8.70	7.43	6.44	5.65	4.74	4.04	
15	0.92	2.10	3.92	7.31	10.5	13.6	19.7	25.5	31.1	32.6	32.6	32.6	27.3	23.3	20.2	17.7	14.1	11.5	9.65	8.24	7.14	6.27	5.25	4.48	
16	0.99	2.25	4.20	7.84	11.3	14.6	21.1	27.3	33.4	35.9	35.9	35.9	30.1	25.7	22.2	19.5	15.5	12.7	10.6	9.08	7.87	6.90	5.79	4.94	
17	1.05	2.40	4.49	8.37	12.1	15.6	22.5	29.2	35.6	39.3	39.3	39.3	32.9	28.1	24.4	21.4	17.0	13.9	11.6	9.94	8.62	7.56	6.34	5.41	
18	1.12	2.56	4.77	8.91	12.8	16.6	23.9	31.0	37.9	42.8	42.8	42.8	35.9	30.6	26.5	23.3	18.5	15.1	12.7	10.8	9.39	8.24	6.90	5.89	
19	1.18	2.71	5.06	9.44	13.6	17.6	25.4	32.9	40.2	46.0	46.0	46.0	38.9	33.2	28.8	25.3	20.1	16.4	13.8	11.7	10.2	8.93	7.49	6.39	
20	1.24	2.87	5.35	9.98	14.4	18.6	26.8	34.8	42.5	48.7	48.7	48.7	42.0	35.9	31.1	27.3	21.7	17.7	14.9	12.7	11.0	9.65	8.09		
21	1.31	3.02	5.64	10.5	15.2	19.6	28.3	36.6	44.8	51.3	51.3	51.3	45.2	38.6	33.5	29.4	23.3	19.1	16.0	13.6	11.8	10.4	8.70		
22	1.37	3.18	5.93	11.1	15.9	20.6	29.7	38.5	47.1	53.9	53.9	53.9	48.5	41.4	35.9	31.5	25.0	20.4	17.1	14.6	12.7	11.1	9.33		
23	1.43	3.33	6.22	11.6	16.7	21.7	31.2	40.4	49.4	56.6	56.6	56.6	51.8	44.2	38.3	33.7	26.7	21.9	18.3	15.6	13.6	11.9	9.97		
24	1.49	3.49	6.51	12.2	17.5	22.7	32.7	42.3	51.7	59.3	59.3	59.3	55.2	47.2	40.9	35.9	28.5	23.3	19.5	16.7	14.5	12.7	10.6		
25	1.56	3.65	6.81	12.7	18.3	23.7	34.1	44.2	54.1	61.9	61.9	61.9	58.7	50.1	43.5	38.1	30.3	24.8	20.8	17.7	15.4	13.5	11.3		
26	1.62	3.80	7.10	13.2	19.1	24.7	35.6	46.1	56.4	64.6	64.6	64.6	62.3	53.2	46.1	40.5	32.1	26.3	22.0	18.8	16.3	14.3	12.0		
28	1.74	4.12	7.69	14.4	20.7	26.8	38.6	50.0	61.1	70.0	70.0	70.0	69.6	59.4	51.5	45.2	35.9	29.4	24.6	21.0	18.2	16.0			
30	1.87	4.44	8.29	15.5	22.3	28.9	41.6	53.8	65.8	77.2	77.2	77.2	77.2	65.9	57.1	50.1	39.8	32.6	27.3	23.3	20.2	17.7			
32	1.99	4.76	8.88	16.6	23.9	30.9	44.6	57.7	70.6	83.2	85.0	85.0	85.0	72.6	62.9	55.2	43.8	35.9	30.1	25.7	22.2	19.5			
35	2.18	5.24	9.79	18.3	26.3	34.1	49.1	63.6	77.7	91.6	97.3	97.3	97.3	83.0	72.0	63.2	50.1	41.0	34.4	29.4	25.5				
40	2.49	6.06	11.3	21.1	30.4	39.4	56.7	73.5	89.8	106	114	114	114	101	87.9	77.2	61.3	50.1	42.0	35.9	14.9				
45	2.80	6.88	12.8	24.0	34.5	44.7	64.4	83.4	102	120	130	130	130	121	105	92.1	73.1	59.8	50.1	40.4					

Note: 1. kW ratings when using one-pitch offset links are 65% of the above.
2. Please contact a Tsubaki representative prior to use of kW ratings in the shaded area of the table.

Multi-strand factors

Number of chain strands	Two strands	Three strands	Four strands	Five strands	Six strands
Multi-strand factor	1.7	2.5	3.3	3.9	4.6

Lubrication systems and methods

Lubrication system	AI	AII	B	C
Method	Manual lubrication	Drip lubrication	Oil bath or slinger disc lubrication	Forced pump lubrication

Details on pg. 218

Model numbering example **RS80 -1 -RP + 110L -MWJR**

RS80: Size
-1: Number of strands
-RP: Pin type
110L: Number of links
-MWJR: End link

Note: Standard roller chains do not require series selection.