

Whether your operation requires a sanitary environment, is exposed to corrosive chemicals, is heated to extreme temperatures, runs through a freezer, is exposed to the outdoors or is affected by excessive moisture: our specially designed and tested chains will outlast your current chains and contribute to a cost effective application.

Corrosion Resistant Chain (Stainless Steel base)

BS PC Engineering Plastic Combination Chain

The pins and pin link plates of these chains are made of SUS304 equivalent (spring clips SUS301). Engineering plastic (white) is used for the inner link. This combination makes it a lube-free, low noise (5 dB lower than BS standard roller chain) and light-weight chain (50% lighter than BS standard roller chain). Working temperature range: -20°C to +80°C.

For details on corrosion resistance, please check out the table in the back of this catalogue.

BS SS Stainless Steel Chain

All basic components of this chain are made of Stainless Steel SUS304 equivalent (except the spring clips, which are made of SUS301). This chain can be used in special environments such as underwater, acidic and alkaline applications. It can also be used in high and low temperatures (-20°C to +400°C). SUS304 equivalent is only marginally magnetic, which is the result of the cold-forging process. For details on corrosion resistance, please check out the table in the back of this catalogue.

Corrosion Protected Chain (Carbon Steel base)

BS NEPTUNE™ Surface Treated Chain

BS NEPTUNE™ Chain is a TSUBAKI BS chain that has undergone a special surface treatment.

The link plates, bushes and bearing pins have a special three stage layer applied in order to provide the maximum protection from the operating or environmental conditions. (Spring clips are SUS301). NEPTUNE™ Rollers have a special coating designed to resist the corrosive conditions as well as the severe dynamic contact between roller and sprocket.

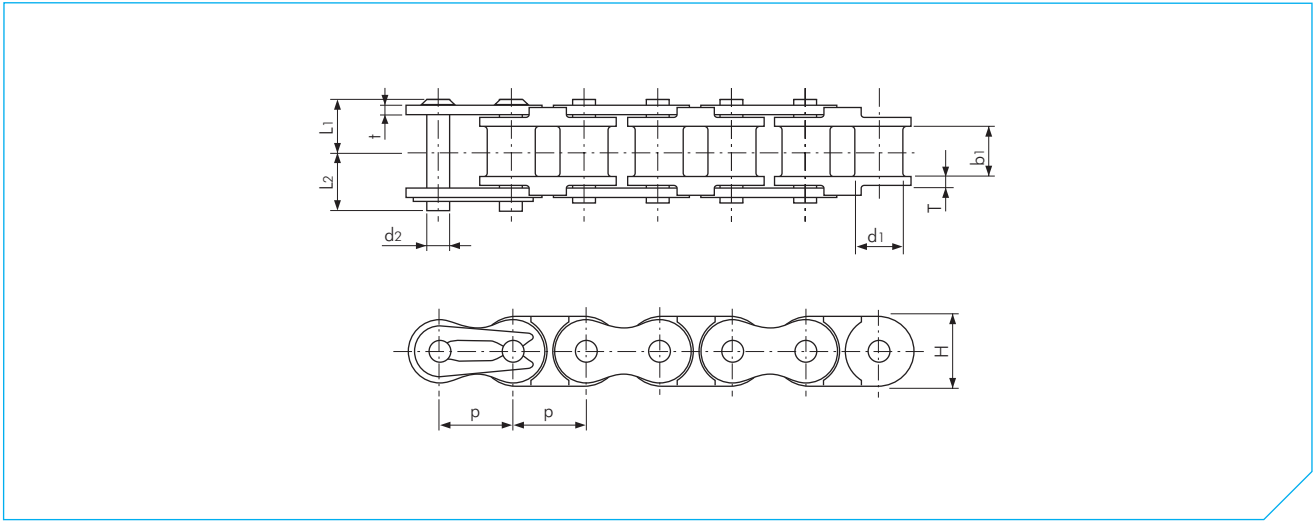
This chain is suitable for use in environments exposed to sea-water, acid-rain and other adverse weather conditions. This chain does not contain any chemically hazardous substances such as Hexavalent Chromium, Lead, Cadmium and Mercury as regulated by RoHS[∨]. The kilowatt ratings are the same as those of the corresponding BS chain with a working temperature range: -10°C to +150°C. Above +60°C a special high-temperature lubrication is required. Of course, BS LAMBDA NEPTUNE™ chain is also available.

BS NP Nickel Plated Chain

BS NP Chain is a TSUBAKI BS chain that has been plated with Nickel. NP Chain has a light corrosion resistance and an attractive appearance. NP Chain is suitable for outdoor conditions exposed to water. There is a 15% reduction in Maximum Allowable Load compared to the corresponding BS chain, so please take this into account when making your chain selection. It has a working temperature range of: -10°C to +60°C. Of course, BS LAMBDA NP chain is also available.

[∨] RoHS = Restriction of Hazardous Substances





BS PC Chain

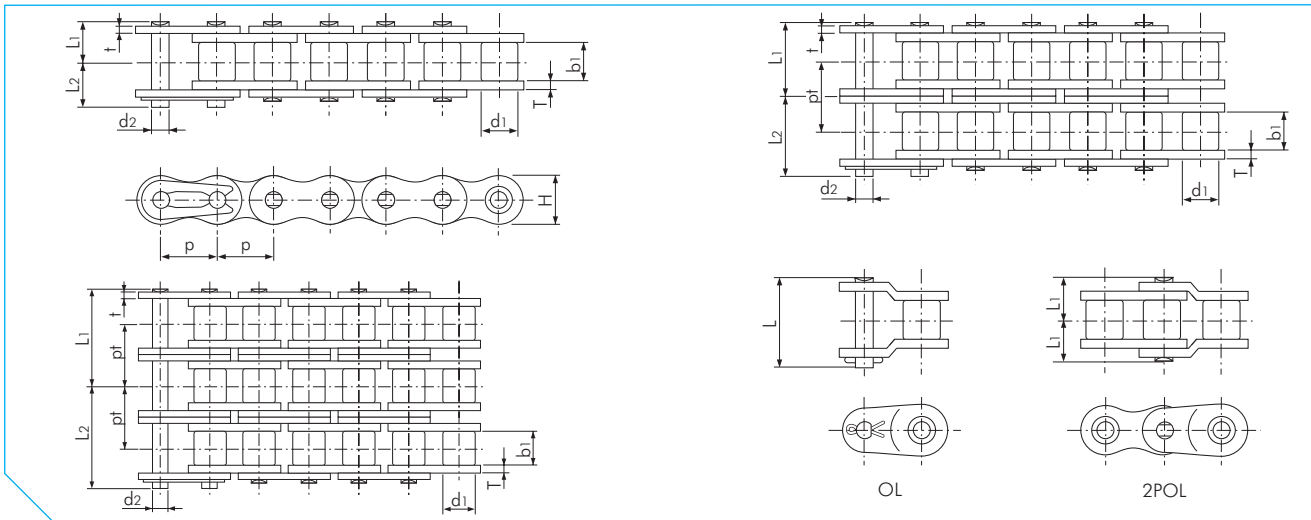
Dimensions in mm

TSUBAKI Chain No.	Pitch p	Bush Diameter d1	Inner Width b1	Pin			Link Plate			Max. Allowable Load acc. to Tsubaki kN	Approx. Mass kg/m
				Diameter d2	Length L1	Length L2	Thickness T	Thickness t	Height H (max)		
RF06B-PC-1	9.525 (3/8")	6.35	5.72	3.28	6.50	7.25	1.30	1.00	8.20	0.20	0.23
RS08B-PC-1	12.70 (1/2")	8.51	7.75	4.45	8.35	10.05	1.60	1.50	12.00	0.46	0.40
RS10B-PC-1	15.875 (5/8")	10.16	9.65	5.08	9.55	11.25	1.50	1.50	14.70	0.53	0.51
RS12B-PC-1	19.05 (3/4")	12.07	11.68	5.72	11.10	13.00	1.80	1.80	16.10	0.70	0.67

Note:

1. Make sure to check the chain load again when replacing Stainless Steel Chain with PC Chain.
2. Offset links are not available.
3. Use a chain tensioner with an idler sprocket to adjust chain tension.
4. Guide rails should support the underside of the inner links.
5. For details on corrosion resistance selection, please consult our Corrosion Resistance Guide in this catalogue.

BS CHAIN FOR CORROSIVE ENVIRONMENTS



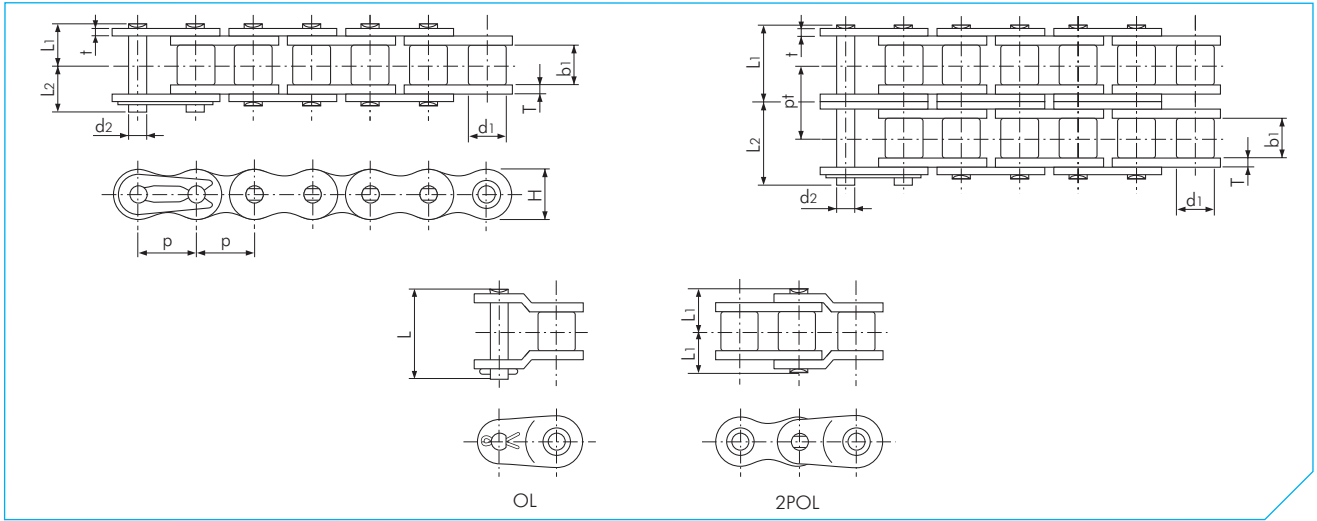
BS SS Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Pin			Link Plate			Transverse Pitch pt	Max. Allowable Load acc. to Tsubaki kN	Approx. Mass kg/m	
				Diameter d2	Length L1	Length L2	Length L	Thickness T	Thickness t				Height H (max)
RF06B-SS-1	9.525 (3/8")	6.35	5.72	3.28	6.50	7.25	15.45	1.30	1.00	8.20	-	0.27	0.39
RF06B-SS-2					11.60	12.30	25.85				10.24	0.53	0.75
RS08B-SS-1	12.70 (1/2")	8.51	7.75	4.45	8.35	10.05	20.05	1.50	1.50	11.80	-	0.48	0.70
RS08B-SS-2					15.30	17.00	34.60				13.92	0.96	1.35
RS08B-SS-3					22.25	23.95	48.60				13.92	1.44	2.00
RS10B-SS-1	15.875 (5/8")	10.16	9.65	5.08	9.55	11.25	22.90	1.50	1.50	14.70	-	0.66	0.95
RS10B-SS-2					17.85	19.55	39.40				16.59	1.32	1.85
RS10B-SS-3					26.20	27.80	56.00				16.59	1.97	2.80
RS12B-SS-1	19.05 (3/4")	12.07	11.68	5.72	11.10	13.00	26.70	1.80	1.80	16.10	-	0.87	1.25
RS12B-SS-2					20.90	22.70	46.10				19.46	1.74	2.50
RS12B-SS-3					30.65	32.55	65.60				19.46	2.62	3.80
RS16B-SS-1	25.40 (1")	15.88	17.02	8.28	17.75	19.95	43.70	4.00	3.20	21.00	-	2.06	2.70
RS16B-SS-2					33.55	35.75	75.50				31.88	4.12	5.40
RS20B-SS-1	31.75 (1 1/4")	19.05	19.56	10.19	20.10	23.20	48.40	4.50	3.50	26.00	-	2.84	3.85

Note:

1. Connecting links are clip type for sizes up to RS16B-SS, and cotter type for sizes RS12B-SS to RS20B-SS.
2. RF06B-SS chain has flat shaped link plates.
3. Center sink pins are not available. Double stake riveting is applied.
4. For details on corrosion resistance selection, please consult our Corrosion Resistance Guide in this catalogue.



BS LAMBDA NEPTUNE™ Chain

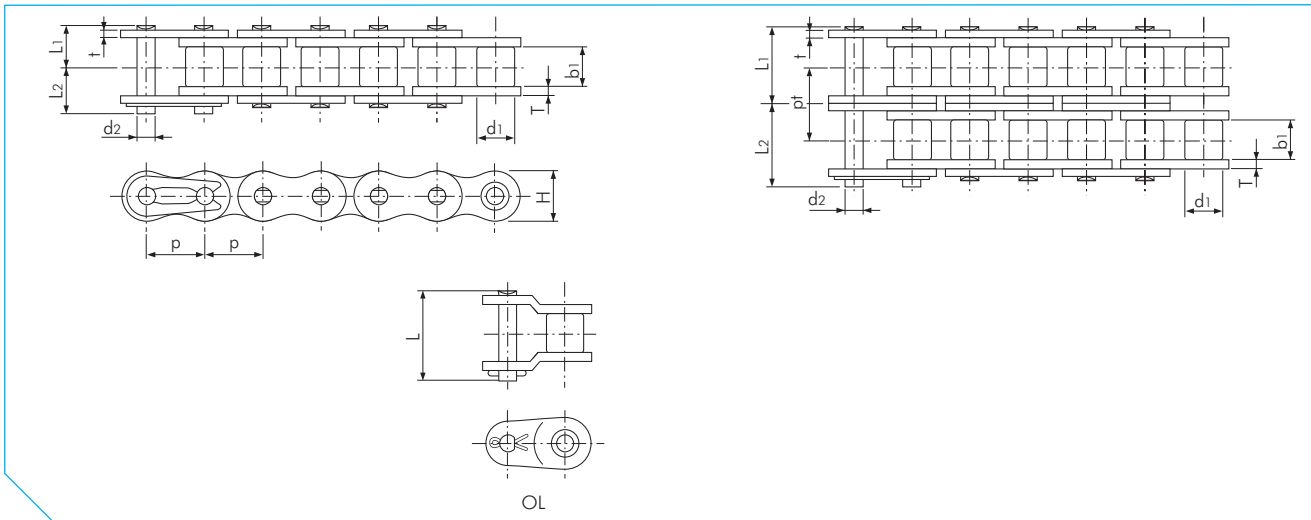
Dimensions in mm

TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Pin				Link Plate			Transverse Pitch pt	Min. Tensile Strength acc. to ISO 606 kN	Approx. Mass kg/m
				Diameter d2	Length L1	Length L2	Length L	Thickness T	Thickness t	Height H (max)			
RS08B-LM-NEP-1	12.70 (1/2")	8.51	7.75	4.45	8.40	10.00	18.60	1.60	1.60	11.80	-	17.8	0.70
RS08B-LM-NEP-2					15.30	16.90	34.50				13.92	31.1	1.35
RS10B-LM-NEP-1	15.875 (5/8")	10.16	9.65	5.08	9.55	11.25	20.80	1.50	1.50	14.70	-	22.2	0.95
RS10B-LM-NEP-2					17.85	19.55	39.40				16.59	44.5	1.85
RS12B-LM-NEP-1	19.05 (3/4")	12.07	11.68	5.72	11.10	13.00	24.40	1.80	1.80	16.10	-	28.9	1.25
RS12B-LM-NEP-2					20.85	22.75	45.90				19.46	57.8	2.50
RS16B-LM-NEP-1	25.40 (1")	15.88	17.02	8.28	17.75	19.95	41.10	4.00	3.20	21.00	-	60.0	2.70
RS16B-LM-NEP-2					33.55	35.75	75.20				31.88	106.0	5.40
RS20B-LM-NEP-1	31.75 (1 1/4")	19.05	19.56	10.19	19.90	23.10	46.60	4.40	3.40	26.40	-	95.0	3.85
RS24B-LM-NEP-1	38.10 (1 1/2")	25.40	25.40	14.63	26.65	31.85	61.70	6.00	5.60	33.40	-	160.0	7.45

Note:

1. Connecting links are clip type for sizes up to RS16B-LM-NEP, and cotter type for sizes RS20B-LM-NEP to RS24B-LM-NEP.
2. RF06B-LM-NEP chain has flat shaped link plates.
3. Intermediate plate of RF06B-LM-NEP-2 and RS08B-LM-NEP-2 is a solid plate.
4. Centre sink riveting is applied for RS08B-LM-NEP-1 to RS16B-LM-NEP-1. Double stake riveting is applied to all other sizes including multi-strand chain.
5. Warning: previous generations of Lambda chain can not be connected with the above chains due to different dimensions.
6. When a single pitch offset link is used, please calculate a 40% reduction of the fatigue strength.

BS CHAIN FOR CORROSIVE ENVIRONMENTS



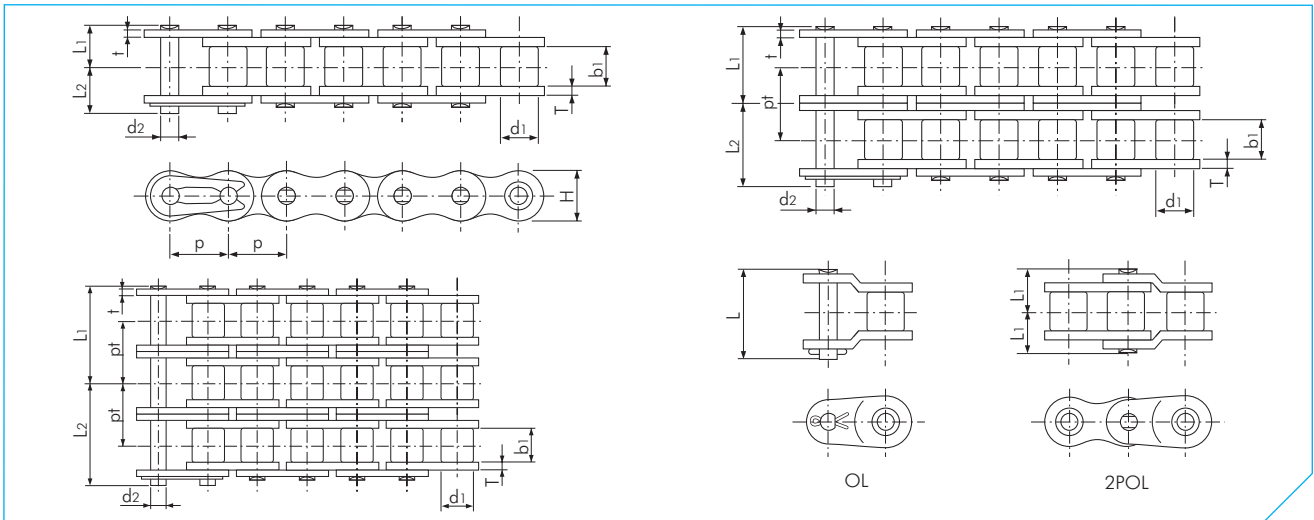
BS NEPTUNE™ Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch		Roller Diameter d1	Inner Width b1	Diameter d2	Pin			Link Plate			Transverse Pitch pt	Min. Tensile Strength acc. to ISO 606 kN	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m
	p	(inches)				Length L1	Length L2	Length L	Thickness T	Thickness t	Height H (max)				
RF06B-NEP-1	9.525 (3/8")		6.35	5.72	3.27	6.10	7.70	15.10	1.30	1.00	8.20	-	8.9	9.0	0.39
RF06B-NEP-2						11.20	12.80	25.90				10.24	16.9	17.0	0.75
RS08B-NEP-1	12.70 (1/2")		8.51	7.75	4.45	8.40	10.00	18.60	1.60	1.60	11.80	-	17.8	19.0	0.70
RS08B-NEP-2						15.30	16.90	34.50				13.92	31.1	32.0	1.35
RS10B-NEP-1	15.875 (5/8")		10.16	9.65	5.08	9.55	11.25	20.80	1.50	1.50	14.70	-	22.2	23.0	0.95
RS10B-NEP-2						17.85	19.55	39.40				16.59	44.5	44.5	1.85
RS12B-NEP-1	19.05 (3/4")		12.07	11.68	5.72	11.10	13.00	24.40	1.80	1.80	16.10	-	28.9	31.0	1.25
RS12B-NEP-2						20.85	22.75	45.90				19.46	57.8	61.0	2.50
RS16B-NEP-1	25.40 (1")		15.88	17.02	8.28	17.75	19.95	43.30	4.00	3.20	21.00	-	60.0	70.0	2.70
RS16B-NEP-2						33.55	35.75	75.20				31.88	106.0	128.0	5.40
RS20B-NEP-1	31.75 (1 1/4")		19.05	19.56	10.19	19.90	23.10	48.20	4.40	3.40	26.00	-	95.0	98.1	3.85
RS20B-NEP-2						38.25	41.45	84.60				36.45	170.0	197.0	7.65
RS24B-NEP-1	38.10 (1 1/2")		25.40	25.40	14.63	26.65	31.85	64.30	6.00	5.60	33.40	-	160.0	167.0	7.45

Note:

1. Connecting links are clip type for sizes up to RS16B-NEP, and cotter type for sizes RS20B-NEP to RS24B-NEP.
2. RF06B-NEP chain has flat-shaped link plates.
3. Intermediate plate of multi strand RF06B-NEP-2 and RS08B-NEP-2 chain is a solid plate.
4. Center sink riveting is applied to RS08B-NEP-1 to RS16B-NEP-1 single strand chain.
5. Double stake riveting is applied to all other sizes including multi-strand chain.
6. When a single pitch offset link is used, please calculate a 40% reduction of the fatigue strength.



BS NP Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Diameter d2	Pin			Link Plate			Transverse Pitch pt	Min. Tensile Strength acc. to ISO 606 kN	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mas kg/m
					Length L1	Length L2	Length L	Thickness T	Thickness t	Height H (max)				
RF06B-NP-1					6.10	7.70	15.10				-	8.9	9.0	0.39
RF06B-NP-2	9.525 (3/8")	6.35	5.72	3.27	11.20	12.80	25.90	1.30	1.00	8.20	10.24	16.9	17.0	0.75
RF06B-NP-3					16.40	17.90	36.10				10.24	24.9	24.9	1.11
RS08B-NP-1					8.40	10.00	18.60				-	17.8	19.0	0.70
RS08B-NP-2	12.70 (1/2")	8.51	7.75	4.45	15.30	16.90	34.50	1.60	1.60	11.80	13.92	31.1	32.0	1.35
RS08B-NP-3					22.25	23.85	48.40				13.92	44.5	47.5	2.00
RS10B-NP-1					9.55	11.25	20.80				-	22.2	23.0	0.95
RS10B-NP-2	15.875 (5/8")	10.16	9.65	5.08	17.85	19.55	39.40	1.50	1.50	14.70	16.59	44.5	44.5	1.85
RS10B-NP-3					26.15	27.85	56.00				16.59	66.7	66.8	2.80
RS12B-NP-1					11.10	13.00	24.40				-	28.9	31.0	1.25
RS12B-NP-2	19.05 (3/4")	12.07	11.68	5.72	20.85	22.75	45.90	1.80	1.80	16.10	19.46	57.8	61.0	2.50
RS12B-NP-3					30.60	32.50	65.40				19.46	86.7	92.0	3.80
RS16B-NP-1					17.75	19.95	41.10				-	60.0	70.0	2.70
RS16B-NP-2	25.40 (1")	15.88	17.02	8.28	33.55	35.75	75.20	4.00	3.20	21.00	31.88	106.0	128.0	5.40
RS20B-NP-1					19.90	23.10	46.60				-	95.0	98.1	3.85
RS20B-NP-2	31.75 (1 1/4")	19.05	19.56	10.19	38.25	41.45	84.60	4.40	3.40	26.00	36.45	170.0	197.0	7.65
RS24B-NP-1					26.65	31.85	61.70				-	160.0	167.0	7.45
RS24B-NP-2	38.10 (1 1/2")	25.40	25.40	14.63	50.80	56.00	112.80	6.00	5.60	33.40	48.36	280.0	335.0	14.65
RS28B-NP-1					32.45	37.45	74.40				-	200.0	200.0	9.45
RS28B-NP-2	44.45 (1 3/4")	27.94	30.99	15.90	62.15	67.15	136.60	7.50	6.30	36.40	59.56	360.0	374.0	18.80
RS32B-NP-1					32.10	37.70	73.30				-	250.0	255.0	10.25
RS32B-NP-2	50.80 (2")	29.21	30.99	17.81	61.25	66.85	134.50	7.00	6.30	42.20	58.55	450.0	485.0	20.10

Note:

1. Connecting links are clip type for sizes up to RS16B-NP, and cotter type for sizes RS16B-NP to RS32B-NP.
2. RF06B-NP chain has flat-shaped link plates.
3. Intermediate plate of multi strand RF06B-NP-2 and RS08B-NP-2 chain is a solid plate.
4. Center sink riveting is applied to RS08B-NP-1 to RS16B-NP-1 single strand chain.
5. Double stake riveting is applied to all other sizes including multi-strand chain.
6. When a single pitch offset link is used, please calculate a 40% reduction of the fatigue strength.