ANSI CHAIN FOR CORROSIVE ENVIRONMENTS

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)

ANSI 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 ANSI standard roller chain) and lightweight chain (50% lighter than ANSI 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 as a basic guide.

ANSI 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, due to the cold-forging process. For details on corrosion resistance, please check out the table in the back of this catalogue as a basic guide.

ANSI AS Stainless Steel Chain

The pins and rollers of this roller chain are made of precipitation-hardened, tempered stainless steel. The link plates and the bushes are made of SUS304 equivalent stainless steel (spring clips are SUS301). The Maximum Allowable Load is 1.5 times that of ANSI SS chain. Corrosion resistance is slightly lower than standard SS chain. This chain is suitable where corrosion and heat resistance is required in a heavy duty drive application and where a smaller ANSI SS chain is preferred. Magnetism exists due to the use of precipitation-hardened stainless steel. The working temperature range: -20°C to +400°C.

Corrosion Protected Chain (Carbon Steel base)

ANSI NEPTUNE™ Surface Treated Chain

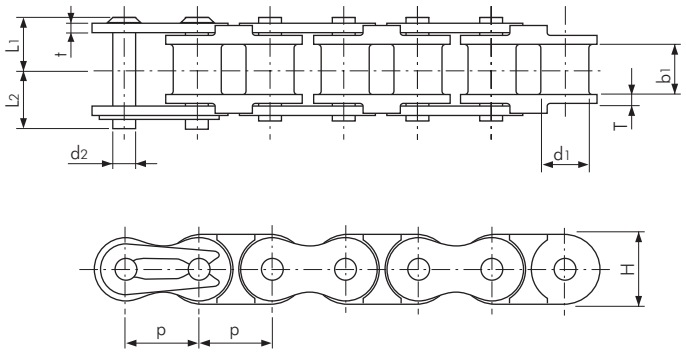
ANSI NEPTUNE™ Chain is a TSUBAKI ANSI G8 chain that has undergone a special surface treatment. The link plates, bushes and pins have a special three stage layer applied in order to provide the maximum protection from the operating or environmental conditions. (Spring clips are SUS301). NEPTUNE™ Rollers 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 seawater, 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 ANSI G8 chain. Working temperature range is: -10°C to +150°C. Above +60°C a special high-temperature lubrication is required. Of course, ANSI LAMBDA NEPTUNE™ chain is also available.

ANSI NP Nickel Plated Chain

ANSI NP Chain is a TSUBAKI ANSI G8 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 ANSI G8 chain, so please take this into account when making your chain selection. The working temperature range is: -10°C to +60°C. Of course, ANSI LAMBDA NP chain is also available.

[√]RoHS = Restriction of Hazardous Substances



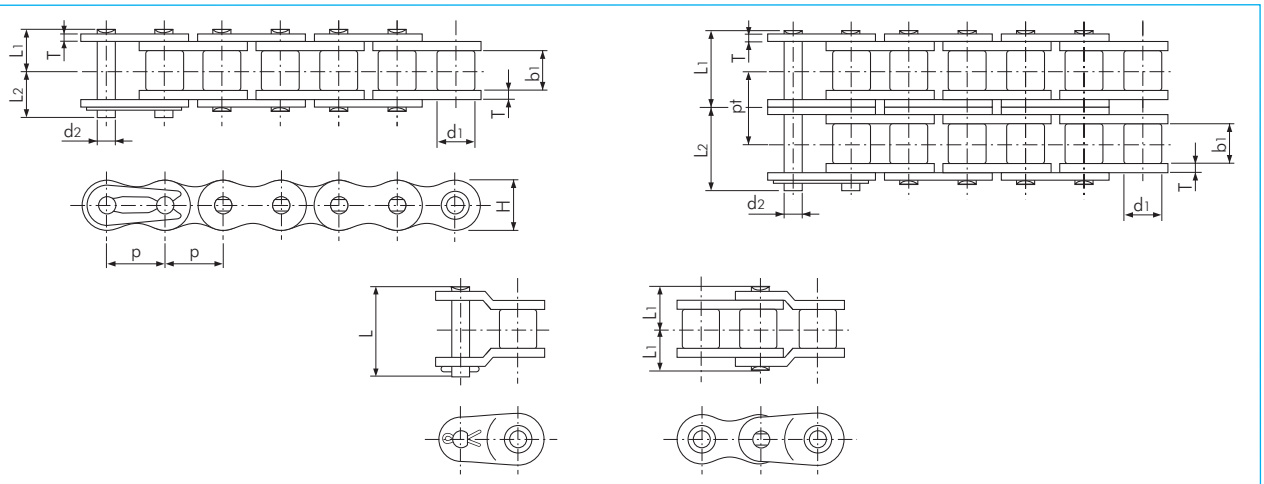
ANSI PC Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p		Bush Diameter d1	Inner Width b1	Pin Diameter d2	Pin Length L1	Pin Length L2	Link Plate Thickness T	Link Plate Thickness t	Link Plate Height H (max)	Max. Allowable Load acc. to Tsubaki kN	Approx. Mass kg/m
RS25-PC-1	6.35	(1/4")	3.30	3.18	2.31	4.50	5.50	1.30	0.75	6.00	0.08	0.095
RS35-PC-1	9.525	(3/8")	5.08	4.78	3.59	6.85	7.85	2.20	1.25	9.00	0.18	0.22
RS40-PC-1	12.70	(1/2")	7.92	7.95	3.97	8.25	9.95	1.50	1.50	12.00	0.44	0.39
RS50-PC-1	15.875	(5/8")	10.16	9.53	5.09	10.30	12.00	2.00	2.00	15.00	0.69	0.58
RS60-PC-1	19.05	(3/4")	11.91	12.70	5.96	12.85	14.75	2.40	2.40	18.10	0.88	0.82

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.



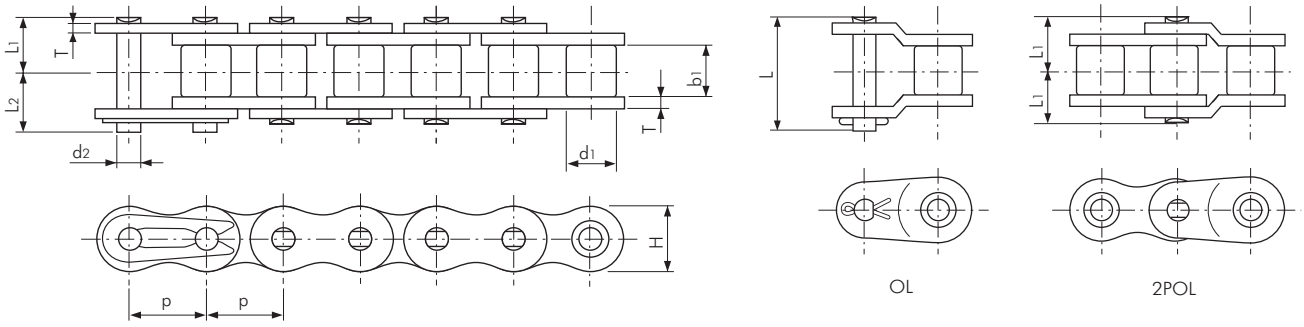
ANSI SS Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p		Roller Diameter d1	Inner Width b1	Pin Diameter d2	Pin Length L1	Pin Length L2	Pin Length L	Link Plate Thickness T	Link Plate Height H (max)	Transverse Pitch pt	Max. Allowable Load acc. to Tsubaki kN	Approx. Mass kg/m
RS11-SS-1	3.7465	(-)	2.285	1.83	1.57	2.275	3.165	-	0.38	3.50	-	0.05	0.052
RS25-SS-1	6.35	(1/4")	3.30	3.18	2.31	3.80	4.80	-	0.75	5.84	-	0.12	0.14
RS35-SS-1	9.525	(3/8")	5.08	4.78	3.59	6.05	6.85	14.70	1.25	9.00	-	0.26	0.33
RS35-SS-2						11.15	11.85	24.60			10.10	0.53	0.69
RS40-SS-1	12.70	(1/2")	7.92	7.95	3.97	8.25	9.65	18.60	1.50	12.00	-	0.44	0.64
RS40-SS-2						15.25	17.35	33.50			14.40	0.88	1.27
RS50-SS-1	15.875	(5/8")	10.16	9.53	5.09	10.30	12.00	23.90	2.00	15.00	-	0.69	1.04
RS50-SS-2						19.15	21.25	41.80			18.10	1.37	2.07
RS60-SS-1	19.05	(3/4")	11.91	12.70	5.96	12.85	14.75	29.40	2.40	18.10	-	1.03	1.53
RS60-SS-2						24.25	26.15	52.60			22.80	2.06	3.04
RS80-SS-1	25.40	(1")	15.88	15.88	7.94	16.25	19.45	39.00	3.20	24.10	-	1.77	2.66
RS80-SS-2						30.90	33.90	68.05			29.30	3.53	5.30
RS100-SS-1	31.75	(1 1/4")	19.05	19.05	9.54	19.75	22.85	45.70	4.00	30.10	-	2.55	4.01
RS100-SS-2						37.70	40.80	81.60			35.80	5.10	7.99

Note:

1. RS11-SS to RS35-SS are rollerless chain (only bush). The figure shown is the bush diameter.
2. Connecting links are clip type for sizes RS11-SS to RS60-SS, and cotter type for sizes RS80-SS to RS100-SS.
3. For details on corrosion resistance selection, please consult our Corrosion Resistance Guide in this catalogue.



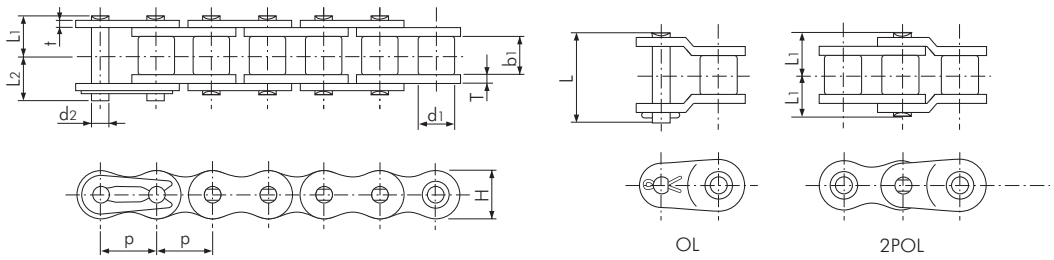
ANSI AS Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p		Roller Diameter d1	Inner Width b1	Pin Diameter d2	Pin Length L1	Pin Length L2	Pin Length L	Link Plate Thickness T	Link Plate Height H (max)	Max. Allowable Load acc. to Tsubaki kN	Approx. Mass kg/m
RS35-AS-1	9.525	(3/8")	5.08	4.78	3.59	5.85	6.85	14.70	1.25	9.00	0.39	0.33
RS40-AS-1	12.70	(1/2")	7.92	7.95	3.97	8.25	9.95	18.60	1.50	12.00	0.69	0.64
RS50-AS-1	15.875	(5/8")	10.16	9.53	5.09	10.30	12.00	23.90	2.00	15.00	1.03	1.04
RS60-AS-1	19.05	(3/4")	11.91	12.70	5.96	12.85	14.75	29.40	2.40	18.10	1.57	1.53
RS80-AS-1	25.40	(1")	15.88	15.88	7.94	16.25	19.45	39.00	3.20	24.10	2.65	2.66

Note:

1. Connecting links are clip type for sizes RS35-AS to RS60-AS, and cotter type for size RS80-AS.
2. RS35-AS is rollerless chain (only bush). The figure shown is the bush diameter.
3. For details on corrosion resistance selection, please consult our Corrosion Resistance Guide in this catalogue.



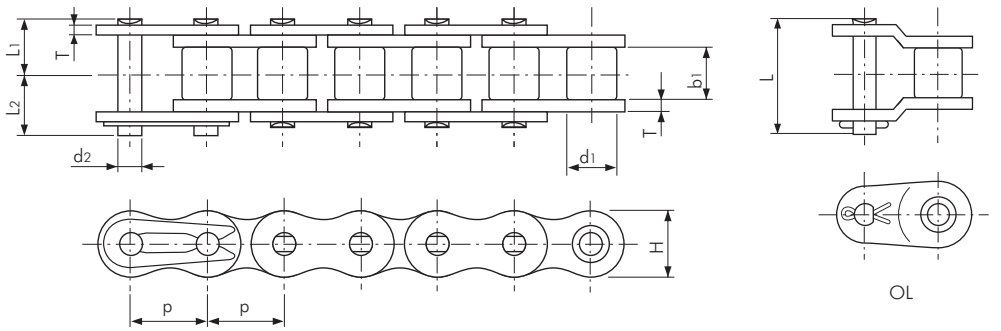
ANSI LAMBDA NEPTUNE™ Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p		Roller Diameter d1	Inner Width b1	Pin Diameter d2	Pin Length L1	Pin Length L2	Pin Length L	Link Plate Thickness T	Link Plate Thickness t	Link Plate Height H (max)	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m
RS40-LMD-NEP-1	12.70	(1/2")	7.92	7.55	3.97	8.75	10.45	20.00	2.00	1.50	12.00	17.7	0.70
RS50-LMD-NEP-1	15.875	(5/8")	10.16	9.26	5.09	10.75	12.45	24.00	2.40	2.00	15.00	28.4	1.11
RS60-LMD-NEP-1	19.05	(3/4")	11.91	12.28	5.96	13.70	15.70	32.00	3.20	2.40	18.10	40.2	1.72
RS80-LMD-NEP-1	25.40	(1")	15.88	15.48	7.94	17.15	20.25	39.90	4.00	3.20	24.10	71.6	2.77
RS100-LMD-NEP-1	31.75	(1 1/4")	19.05	18.70	9.54	20.65	23.85	47.50	4.80	4.00	30.10	107.0	4.30
RS120-LMD-NEP-1	38.10	(1 1/2")	22.23	24.75	11.11	25.75	29.95	59.00	5.60	4.80	36.20	148.0	6.40
RS140-LMD-NEP-1	44.45	(1 3/4")	25.40	24.75	12.71	27.70	32.20	63.70	6.40	5.60	42.20	193.0	8.10

Note:

1. Connecting links are clip type for sizes RS40-LMD-NEP to RS60-LMD-NEP, and cotter type for sizes RS80-LMD-NEP to RS140-LMD-NEP.
2. Drive and Conveyor series LAMBDA chain cannot be intercoupled or interchanged.
3. Due to increased roller link plate thickness, Drive LAMBDA connecting links are required.
4. Due to increased roller link plate thickness, the pins are longer. Check for machine interference.
5. When a single pitch offset link is used, please calculate a 35% reduction in fatigue strength.



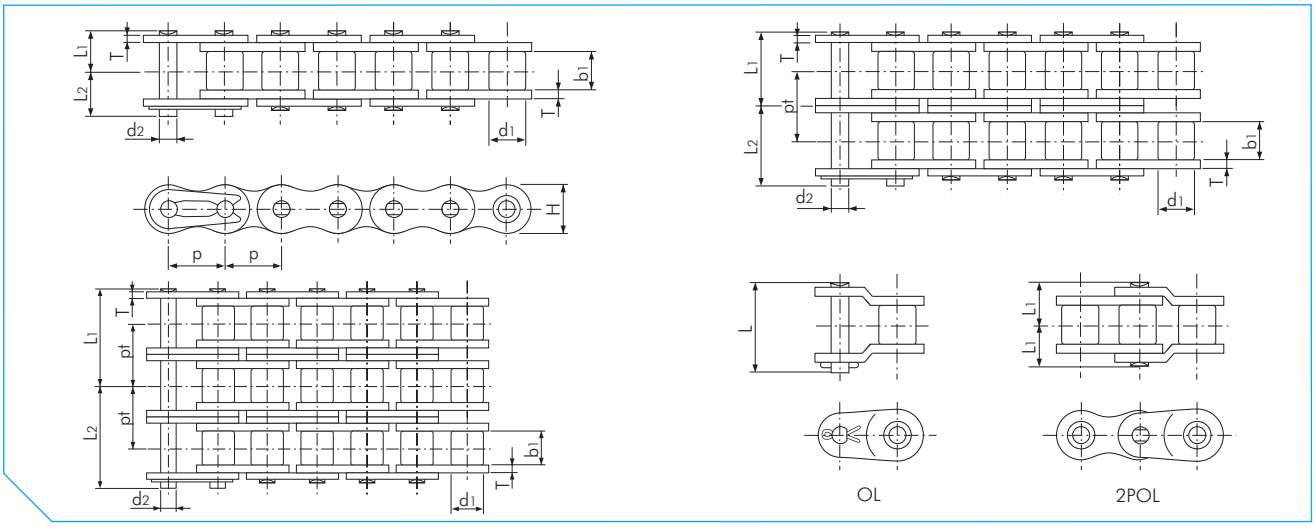
ANSI NEPTUNE™ Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p		Roller Diameter d1	Inner Width b1	Pin				Link Plate		Min. Tensile Strength acc. to ANSI kN	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m
					Diameter d2	Length L1	Length L2	Length L	Thickness T	Height H (max)			
RS35-NEP-1	9.525	(3/8")	5.08	4.78	3.59	5.85	6.85	13.50	1.25	9.00	7.9	9.81	0.33
RS40-NEP-1	12.70	(1/2")	7.92	7.95	3.97	8.25	9.95	18.20	1.50	12.00	13.9	17.7	0.64
RS50-NEP-1	15.875	(5/8")	10.16	9.53	5.09	10.30	11.90	22.60	2.00	15.00	21.8	28.4	1.04
RS60-NEP-1	19.05	(3/4")	11.91	12.70	5.96	12.85	14.75	28.20	2.40	18.10	31.3	40.2	1.53
RS80-NEP-1	25.40	(1")	15.88	15.88	7.94	16.25	19.25	38.20	3.20	24.10	55.6	71.6	2.66

Note:

1. RS35-NEP is a rollerless chain (only bush). The figure shown is the bush diameter.
2. Connecting links are clip type for sizes RS35-NEP to RS60-NEP, and cotter type for size RS80-NEP.
3. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.



ANSI NP Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p		Roller Diameter d1	Inner Width b1	Pin Diameter d2	Pin Length L1	Pin Length L2	Pin Length L	Link Plate Thickness T	Link Plate Height H (max)	Transverse Pitch pt	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m
RS25-NP-1	6.35	(1/4")	3.30	3.18	2.31	3.80	4.50	7.60	0.75	5.84	-	4.12	0.14
RS35-NP-1	9.525	(3/8")	5.08	4.78	3.59	5.85	6.85	13.50	1.25	9.00	-	9.81	0.33
RS35-NP-2						10.90	11.90	24.50			10.10	19.6	0.69
RS35-NP-3						16.00	16.90	34.60			10.10	29.4	1.05
RS40-NP-1	12.70	(1/2")	7.92	7.95	3.97	8.25	9.95	18.00	1.50	12.00	-	17.7	0.64
RS40-NP-2						15.45	17.15	33.50			14.40	35.3	1.27
RS40-NP-3						22.65	24.15	47.90			14.40	53.0	1.90
RS50-NP-1	15.875	(5/8")	10.16	9.53	5.09	10.30	11.90	22.60	2.00	15.00	-	28.4	1.04
RS50-NP-2						19.35	21.15	41.80			18.10	56.9	2.07
RS50-NP-3						28.40	30.20	59.90			18.10	85.3	3.09
RS60-NP-1	19.05	(3/4")	11.91	12.70	5.96	12.85	14.75	28.20	2.40	18.10	-	40.2	1.53
RS60-NP-2						24.25	26.25	52.60			22.80	80.4	3.04
RS60-NP-3						35.65	38.15	75.50			22.80	121.0	4.54
RS80-NP-1	25.40	(1")	15.88	15.88	7.94	16.25	19.25	36.00	3.20	24.10	-	71.6	2.66
RS80-NP-2						30.90	33.90	67.50			29.30	143.0	5.27
RS80-NP-3						45.60	48.50	96.90			29.30	215.0	7.89
RS100-NP-1	31.75	(1 1/4")	19.05	19.05	9.54	19.75	22.85	44.40	4.00	30.10	-	107.0	3.99

Note:

1. RS25-NP to RS35-NP are rollerless chains (only bush). The figure shown is the bush diameter.
2. Connecting links are clip type for sizes RS25-NP to RS60-NP, and cotter type for size RS80-NP to RS100-NP.
3. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.