

Stainless Steel X-Ring Chain

Roller Chains for Power Transmission

Environment Resistant Chain Series



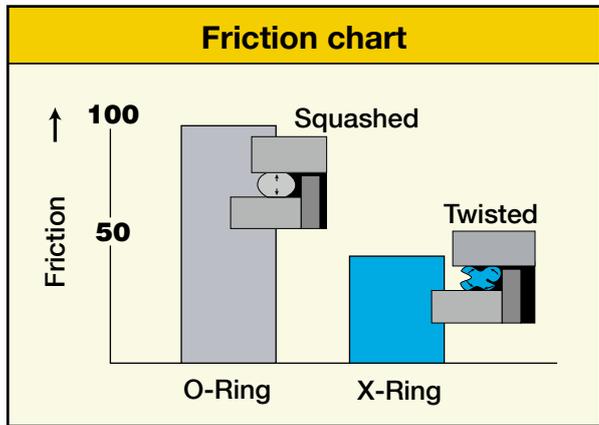
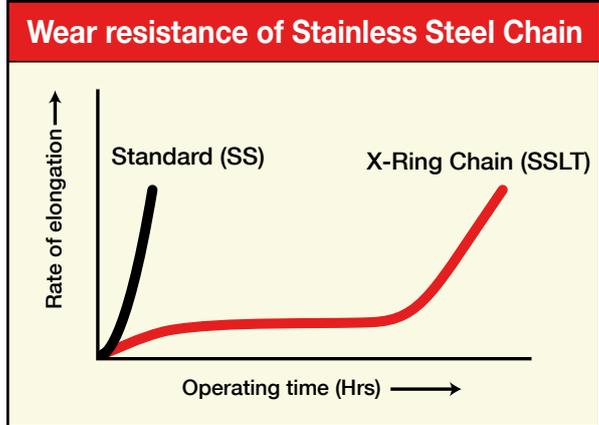
Stainless Steel Chains with the features of environment resistant and wear resistant chain series. With the use of X-rings, durability improved remarkably.

X rings were added to the Stainless Steel Chain (SS) that has the best resistance to corrosion and heat. Compared to the conventional Stainless Steel Chain, this chain has about 5~10 times resistance to abrasion. This improvement makes possible a large reduction in the running and maintenance costs.

Recommended uses

- Conditions continuously exposed to chemical agents, sea water and wastewater.
Various chemical plants, water treatment plants
- Conditions of high temperature
Heat-treating furnaces, dry furnaces, incinerators

The grease and seal rings meet the standards of the Food Sanitation Law. Consult us about the environmental conditions and chain selection.





Selection of chains

The average tensile strength and maximum allowable load of the Stainless Steel Chain are both lower than a standard roller chain. Refer to the maximum allowable load for the selection of chains.

Connecting links

RJ type connecting links are used for Stainless Steel Chains #60 or smaller and CJ type connecting links for #80 or larger.

Sprockets

The pins for the X-Ring chains are longer than those of standard roller chains, and thus standard sprockets for multiplex chain cannot be used for the X-Ring chains when using this chain in multiplex.

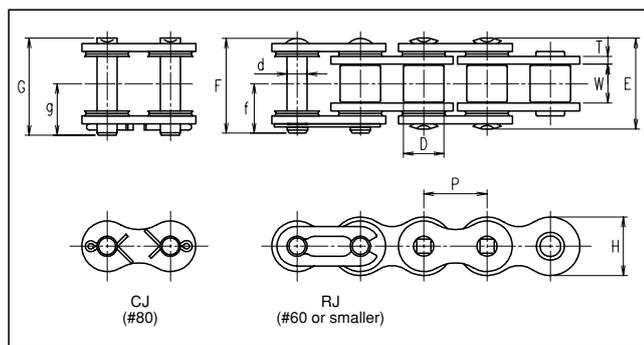
Caution

- ① As a general property of stainless steel, stress corrosion cracking and pitting corrosion can be caused by chlorine and chlorine ion (Cl⁻).
- ② The chart on right shows the data of tests on the level of corrosion resistance for each medium and does not guarantee the performance of the chains. Please take into consideration the conditions, temperature, level and other overall situation when using.

Corrosion resistance

Medium	Standard	Stainless steel
Aceton	×	○
Sulfurous gas (wet)	×	○
Sulfurous gas (dry)	—	○
Ammonia gas (cool)	—	○
Ammonia gas (hot)	×	×
Ammonia water	△	○
Ethanol	○	○
Sodium chloride, salt	×	△
Hydrochloric acid	×	×
Chlorine gas (wet)	×	×
Sea water	×	△
Hydrogen peroxide	×	△
Caustic soda (20%)	×	○
Gasoline	○	○
Potassium permanganate	△	○
Formic acid	×	×
Milk	○	○
Citric acid	×	○
Glycerin	△	○
Acetic acid (10%)	×	○
Bleaching powder, sodium hypochlorite	×	×
Carbon tetrachloride (dry)	△	△
Alcoholic soap	×	△
Oxalic acid (5%)	×	△
Oxalic acid (10%, boiled)	×	×
Nitric acid	×	○
Vinegar	×	△
Calcium hypochlorite	×	×
Baking soda	○	○
Water	×	○
Calcium hydroxide	△	○
Phenic acid, Phenol	×	△
Petroleum	○	○
Soapwater	△	○
Carbonic water	○	○
Sodium carbonate	○	○
Kerosene	○	○
Lactic acid (5%)	×	○
Lactic acid (10%, 65°C)	×	△
Paraffin	○	○
Beer	○	○
Benzene, benzol	○	○
Boric acid (5%)	×	○
Pottassium alum	×	△
Methanol	○	○
Iodine	×	×
Butyric acid	×	△
Sulfuric acid	×	×
Phosphoric acid (10%)	×	△
Sodium sulfate (5%)	△	○
Wine	○	○

Note: 1. ○:Corrosion resistant
 △:Corrosion resistant depending on conditions
 ×: No resistance
 2. Unless specified, tests were conducted at 20°C.



Dimensions

Chain No.	Pitch P	Roller link width W	Roller (Bush) dia. D	Pin						Plate		Avg. tensile strength		Max. allowable load		Approx. weight (kg/m)	
				d	E	F	G	f	g	T	H	kN	kgf	kN	kgf		
				Unit (mm)													
Single Pitch Chain	DID 40SSLT	12.70	7.95	7.92	3.96	20	20.3	—	10.7	—	1.5	11.7	13.3	1,350	0.44	45	0.68
	DID 50SSLT	15.875	9.53	10.16	5.08	23.4	24.3	—	12.8	—	2.0	14.6	20.9	2,120	0.69	70	1.1
	DID 60SSLT	19.05	12.70	11.91	5.95	29.2	29.9	—	15.6	—	2.4	17.5	30	3,050	1.03	105	1.6
	DID 80SSLT	25.40	15.88	15.88	7.93	36.5	—	39.0	—	20.7	3.2	23.0	53.4	5,420	1.77	180	2.7

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