

EK Environment Resistant Chain

Stainless Steel Roller Chain

EK Stainless Steel Roller Chains are designed and developed to resist corrosion, where chains are exposed to chemicals, water and/or seawater, and also resist heat, where chains are exposed to heat in applications such as heat treatment equipments and drying ovens.

EK stainless steel roller chain series offer 300SS, 600SS, 316SS and 400SS type to suit particular hostile corrosive environments.

300 SS Series

All components: 304SS

1. Most common corrosion resistant chain.
2. Corrosion Resistance: Water, general acid and alkali.
3. Temperature Resistance: -20°C to +400°C



Magnetic Property: Slightly magnetic due to cold rolling process of parts.

600 SS Series

Pin Bushing and Roller: Precipitation hardened 600SS Link Plate: 304SS

1. High Load Capacity: 1.5 times higher maximum allowable load than 300SS series.
2. Less corrosion resistance than 300SS series for certain environmental conditions.



Magnetic Property: Magnetic

316 SS Series

All components: 316SS

1. Withstanding long-time direct contact with corrosive substances.
2. Load capacity is equal to 300SS series.
3. Highest heat resistance.



Magnetic Property: No Magnetic

400 SS Series

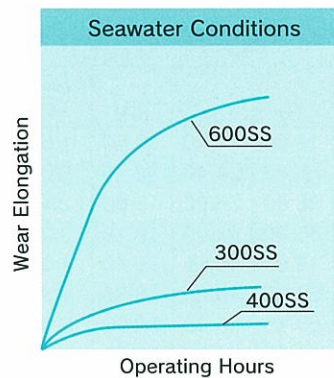
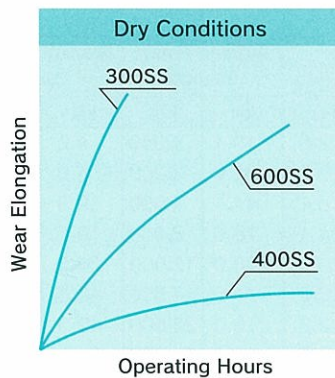
Bushing and Roller: 410SS Pin: 431SS Link Plate: 304SS

1. Excellent wear resistance in water, dry and humid environmental conditions.
2. Slightly less corrosion resistance than 300SS and 600SS series.



Magnetic property: Magnetic

Anti-Wear Performance



Non-magnetic 300SS stainless steel roller chain is available. Please refer to the EK Stainless Steel Roller Chain Catalog.

Stainless Steel Roller Chain

Table of Tensile Strength and Load Capacity

EK Chain No.	304SS		600SS		EK Chain No.		304SS		600SS	
	Average Tensile Strength kN	Maximum Allowable Load kN	Average Tensile Strength kN	Maximum Allowable Load kN	Standard Roller	Large Roller	Average Tensile Strength kN	Maximum Allowable Load kN	Average Tensile Strength kN	Maximum Allowable Load kN
EK 25	3.33	0.12	3.33	0.18	EK C2040	EK C2042	13.30	0.44	13.30	0.69
EK 35	7.50	0.26	7.50	0.39	EK C2050	EK C2052	20.80	0.69	20.80	1.03
EK 41	8.40	0.30	8.40	0.45	EK C2060H	EK C2062H	31.20	1.03	31.20	1.57
EK 40	13.30	0.44	13.30	0.64	EK C2080H	EK C2082H	55.90	1.77	55.90	2.65
EK 50	20.80	0.69	20.80	1.03	EK C2100H	EK C2102H	85.30	2.55	85.30	3.82
EK 60	30.00	1.03	30.00	1.52						
EK 80	53.40	1.77	53.40	2.65						
EK 100	82.20	2.55	82.20	3.82						
EK 120	120.00	3.82	120.00	5.88						

NOTE:

- 1) The large roller of 600SS series is made of 304SS.
- 2) Chain dimensions are identical to EK standard roller chain.

Plated Roller Chain · Coated Roller Chain

Table of EK Plated Roller Chain Series

Series	Tensile Strength	Corrosion Resistance		Cost	Note
		Rain	Seawater		
NP	◎	○	×	○	Used mostly indoors or outdoors in mildly corrosive environments.
ZS	○	◎	○	△	Alloy plating. Strong anti-corrosion. Good for where cosmetic appearance is important.
ZC	○	◎	◎	△	Excellent anti-corrosion performances. Very strong with seawater and salty environments.

EK plated roller chains NP, ZS series are assembled from chain components plated before assembly. This ensures that all components surfaces are fully plated, resulting in better anti-corrosion performance. ZC chains are coated after assembly. However corrosion resistance performance is superior to NP and ZS in water and salty environment.

Unless otherwise specified, these series chains are supplied with rust preventive oil.

The plated chain with translucent grease having rust-preventive and lubricant function is available if so specified. These chains are used for the area where requires better lubrication and rust prevention.

The chains with translucent grease are available upon request.

Chains with heat resistant coating and poly-seal coating are available to suit particular hostile corrosive environments.



The plating of ZS and ZC chain may peel off, and therefore these chains are not recommended for applications where the chains come in direct contact with food or the plating contamination comes in food.