

## RS Plastic Chain

### Standard Series

RS Plastic chain consists of polyacetal chain links and 304 stainless steel pins and operates with standard roller chain sprockets. Based on power transmission roller chain, U.S. Tsubaki RS-type has a flat top side for power transmission or conveying use.

### “E” Series (Electro-Conductive Series)

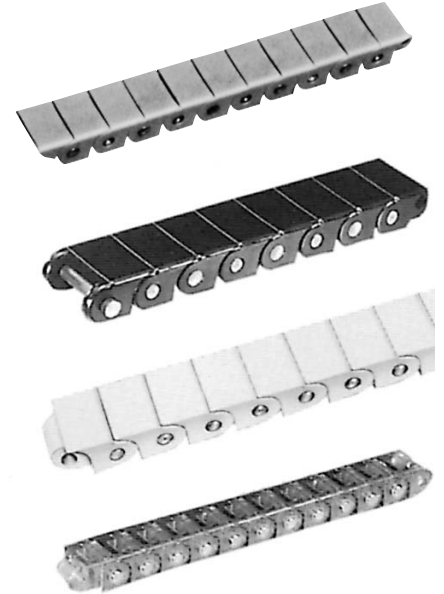
The special plastic used in the “E” series is electro conductive and permits electrical charge. These chains are suitable for applications where there is electric noise, electric sparks, or where dust collects due to static electricity. Volume resistivity:  $10^6 \Omega \cdot \text{cm}$

### “Y” & “SY” Series (Anti-Chemical Series)

The amazing “Y” & “SY” series utilizes an engineering plastic which permits the chain to perform well even where chloride, acid, alkaline, oxidizers and most organic solvents are present. “SY” series is a combination of “Y” series plastic block links and titanium pins and performs well even when exposed to sulfuric and hydrochloric acid.

### “K” Series (Heat Resistant Series)

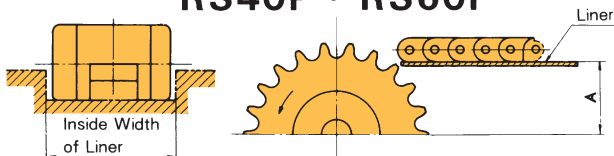
The U.S. Tsubaki “K” series is made of a resilient new engineering plastic which can withstand environments where temperatures reach 284°F. In contrast to plastic chains made of conventional plastic, this chain will not lose its valuable properties at high temperatures.



U.S. TSUBAKI Chain No.	Pitch	Maximum Allowable Tension (lbs.)				Ambient Temperature Range °F				Maximum Speed		Allowable Chain ft./min.	Coefficient of Sliding Friction
		Std.	“E”	“Y”	“SY”	“K”	Std.	“E”	“Y”	“SY”	“K”		
RS40P (E, SY, K)	.500	100	77	55	55	-4 ~ 176	-4 ~ 284	-4 ~ 284	200	164		.25	
RS60P (E, Y, SY, K)	.750	200	143	110	110	-4 ~ 176	-4 ~ 284	-4 ~ 284	200	164		.25	
RS2040P (E, Y, SY, K)	1.000	100	77	55	55	-4 ~ 176	-4 ~ 284	-4 ~ 284	200	164		.25	

### Location of guide rails and sprocket

#### RS40P • RS60P



RS40P: 0.906"  
RS60P: 1.299"

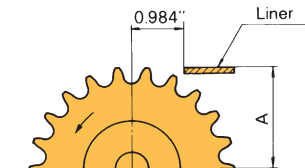
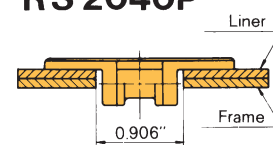
$$\text{“A” of RS40P} = \frac{\text{Sprocket Pitch Diameter}}{2} - 0.217\text{”}$$

$$\text{“A” of RS60P} = \frac{\text{Sprocket Pitch Diameter}}{2} - 0.315\text{”}$$

#### Note:

1. The Engineered Plastic Chain Catalog is also available upon request. For details consult U.S. Tsubaki.
2. “K” series chain is clip-type construction and has a slightly longer pin.

#### RS 2040P



$$\text{“A”} = \frac{\text{Sprocket Pitch Diameter}}{2} + 0.157\text{”}$$

# ENGINEERING INFORMATION

## Corrosion Resistance Guide

The corrosion resistance guide given below should be referred to when selecting chains. The table presents U.S. Tsubaki laboratory test results at 68°F. Humidity and other conditions should also be considered.

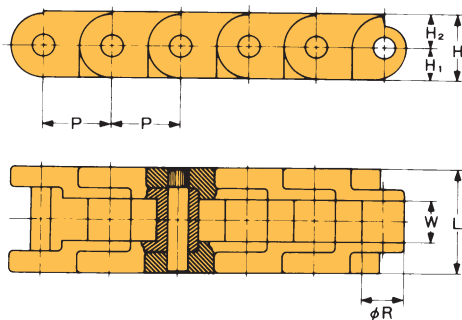
“E”: electro-conductive series, “Y”: anti-chemical series, “K”: heat resistant series, “N”: low noise series

Fluid	Series	“E”, “N”, “K” and Standard	“Y”	“SY”	Fluid	Series	“E”, “N”, “K” and Standard	“Y”	“SY”
Acetone		○	×	×	Carbon Tetrachloride		△	△	○
Oil (Vegetable)		○	○	○	Nitric Acid (5%)		×	○	○
Vegetable		○	○	○	Vinegar		△	△	△~○
Ammonia		○	△	△	Hypochloride		×	△	○
Sodium Chloride		△	△	○	Potassium Hydroxide		×		○
Hydrochloric Acid		×	×	○	Sodium Hydroxide (20%)		×	○	○
Sea Water		△	○	○	Soapy Water		○	○	○
Hydrogen Peroxide		×	○	○	Paraffin		○	○	○
Caustic Soda (25%)		×	○	○	Beer		○	○	○
Gasoline		○	○	○	Fruit Juice		○	○	○
Chloric Acid (10%)		×	△	△	Wine		○	○	○
Formic Acid		×	×	○	Whiskey		○	○	○
Aldehyde Formate		○	○	○	Vegetable Juice		○	○	○
Milk		○	○	○	Iodine		×	×	○
Lactic Acid		○	○	○	Sulfuric Acid		×	×	○
Citric Acid		△	○	○	Phosphoric Acid (10%)		×	△	○
Acetic Acid (5%)		×	○	○	Soda Pop		○	○	○

○: Totally resistant    △: Partially resistant    ×: Not suggested

- Note: 1. With pins made of titanium, the “SY” Series has greater corrosion resistance than the “Y” Series.  
 2. This table is intended only as a guide and U.S. Tsubaki does not take responsibility for mishaps arising from its use.

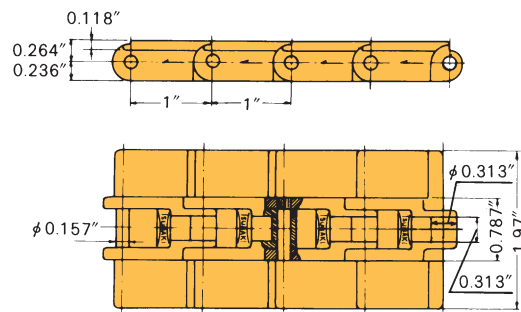
### RS Type



■ **RS TYPE** Chain links are made of polyacetal.  
 Pins are made of 304 stainless steel.

U.S. TSUBAKI Chain No.	P	R	W	L	H <sub>1</sub>	H <sub>2</sub>	H	Approx. Weight lbs./ft.	Color
RS40P	.50	.313	.313	.787	.236	.264	.500	.24	brown
RS60P	.75	.469	.500	1.181	.335	.346	.681	.48	brown

### RS Double Pitch Type



■ **RS DOUBLE PITCH TYPE** Chain links are made of polyacetal.  
 Pins are made of 304 stainless steel.

U.S. TSUBAKI Chain No.	Chain Pitch	Slat Width	Approx. Weight lbs./ft.	Color
RS2040P	1.00	1.97	.28	brown