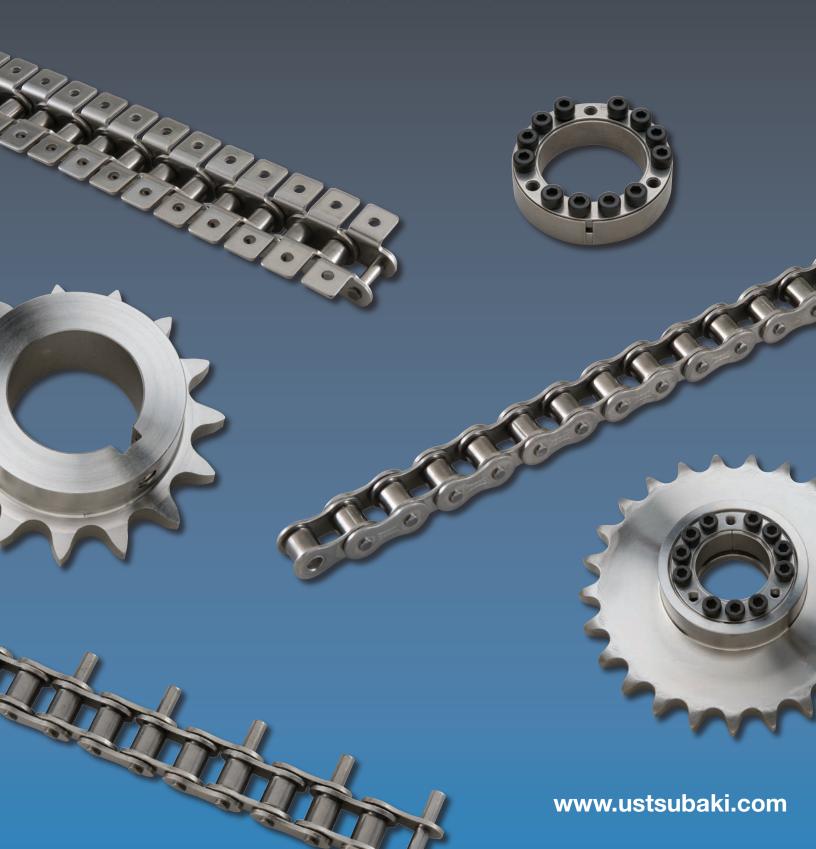
TEUBAKI Stainless Steel Products

A Complete Corrosion-Resistant System

ROLLER CHAINS • ATTACHMENTS • SPROCKETS • POWER-LOCK®



U.S. Tsubaki Stainless Steel Products

Superior On-Line Performance

Don't let corrosion eat away at your profits. Downtime is lost money. Put U.S. Tsubaki stainless steel to work in your challenging environment and start reaping major rewards. Our specially developed stainless steel products can outlast the competition and contribute to cost-effective operations and increased profitability.

U.S. Tsubaki stainless steel products—roller chains, attachments, sprockets, and POWER-LOCK®—stand up to the most demanding conditions. That means hour after uninterrupted hour of trouble-free performance for your applications.

- Corrosive chemicals
- Acids and alkalis
- Tap water
- Salt water
- High temperatures
- Freezing temperatures
- High levels of moisture

For maximum reliability and outstanding results, choose the name industry leaders turn to for solutions. Choose U.S. Tsubaki stainless steel products, and keep profits where they belong... in your company's pockets.

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Stainless Steel Roller Chain

U.S. Tsubaki offers the most complete line of stainless steel roller chain in the industry. In fact, with U.S. Tsubaki stainless steel roller chain, plus our stainless steel attachments, sprockets, and POWER-LOCK®, you can create a reliable stainless steel system that withstands extreme temperatures and corrosive conditions.

Three Kinds of Stainless Steel to Meet Every Application

U.S. Tsubaki has four different types of stainless steel roller chains in stock for immediate delivery. You get greater selection and improved performance. Each type has unique characteristics to address your specific needs.

304 SS Series

SS Series chains are made completely of 304 stainless steel. They offer excellent resistance to corrosion and extreme temperatures. The 304 SS Series is ideal for environments that require tougher resistance to acids and alkali.

316 NS Series

The 316 NS Series provides maximum corrosion resistance and temperature resistance, with virtually no magnetic permeability. These are critical factors in many applications involving electronics or the production of steel.

600 AS Series

AS Series chain was developed for the most demanding applications. With precipitation-hardened round parts, the 600 AS Series combines high load capacity and high corrosion resistance. Of all the stainless steel chains offered by U.S. Tsubaki, AS Series has the highest load capacity. Our standard attachment chains supplied from stock are manufactured to this specification.



RS Roller Chain



RS STAIN	LESS STEE	L ROLLER C	HAIN															
s	pecificatio	ons	· Pitch	Width Between Roller Plates	Roller Dia.		-Link Plat	te	Pin Dia	Approx. . Weight			I	Pin	AS		Maximu Allowal Load (lbs)	
SS	NS	AS	P	W	R	T	Н	h	D	(lbs/ft)	L ₁	L ₂	L	L ₁	L ₂	L	SS•NS	AS
RS11SS*	-	-	.148	.072	.090	.015	.138	.138	.062	.04	.089	.124	-				11	
RS25SS	RS25NS	-	.250	.125	.130	.030	.230	.199	.091	.09	.150	.189	.208				26	
RS35SS	RS35NS	RS35AS*	.375	.188	.200	.050	.354	.307	.141	.22	.238	.281	.579	.238	.281	.579	59	91
RS40SS	RS40NS	RS40AS	.500	.313	.312	.060	.472	.409	.156	.41	.325	.392	.732	.325	.392	.732	99	150
RS50SS	RS50NS	RS50AS	.625	.375	.400	.080	.590	.512	.200	.68	.406	.469	.941	.406	.469	.941	154	231
RS60SS	RS60NS	RS60AS	.750	.500	.469	.094	.712	.614	.234	.94	.506	.600	1.157	.506	.600	1.157	231	346
RS80SS	RS80NS	RS80AS	1.000	.625	.625	.125	.949	.819	.312	1.65	.638	.768	1.525	.638	.768	1.535	397	596
RS100SS	-	RS100AS	1.250	.750	.750	.156	1.185	1.023	.375	2.70	.791	.909	1.831				573	860
RS120SS	-	-	1.500	1.000	.875	.187	1.425	1.228	.437	4.11	1.014	1.173	2.350				858	
RS140SS	-	-	1.750	1.000	1.000	.219	1.661	1.433	.500	5.31	1.108	1.297	2.606				1,034	
RS160SS	-	-	2.000	1.250	1.125	.250	1.897	1.638	.562	7.28	1.321	1.533	3.043				1,452	
RS180SS	-		2.250	1.406	1.406	.281	2.059	1.709	.687	9.02	1.419	1.671	3.342				1,918	
RS200SS	-	-	2.500	1.500	1.562	.312	2.374	2.047	.781	11.09	1.555	1.783	3.575				2,420	
RS240SS		-	3.000	1.875	1.875	.375	2.850	2.457	.937	16.43	1.870	2.272	4.433				3,520	

Note:

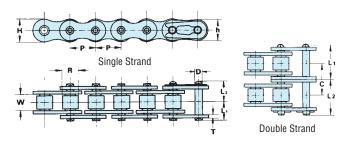
^{1.} Clip type connecting links are provided with RS11-RS60, cottered type connecting links with RS80-RS240. For NS Series chain, however, cottered type connecting links are provided with RS35-RS80.

DOUBLE STR	AND STAINL	ESS STEEL ROLI	LER CHAIN								
Chain No.	Pitch P	Roller Dia. R	Width Between Roller Plates W	D	Pin L ₁			Link Plate H		Maximum Allowable Load (lbs)	Approx. Weight (lbs/ft)
RS25SS-2*	.250	.130	.125	.0905	.276	.315	.030	.230	.252	48	.18
n92399-2	.230	.130	.120	.0903	.210	.313	.030	.230	.232	40	.10
RS35SS-2*	.375	.200	.188	.141	.429	.469	.050	.354	.399	106	.46
RS40SS-2	.500	.312	.313	.156	.608	.675	.060	.472	.566	200	.85
RS50SS-2	.625	.400	.375	.200	.762	.833	.080	.591	.713	308	1.39
RS60SS-2	.750	.469	.500	.234	.955	1.053	.094	.713	.897	462	2.04
RS80SS-2	1.000	.625	.625	.312	1.217	1.335	.125	.949	1.153	794	3.54
RS100SS-2	1.250	.750	.750	.375	1.484	1.606	.156	1.185	1.408	1,150	5.26

Note:

*Rollerless

- AlSl316 stainless steel chains are also available.
 When completely nonmagnetic stainless steel (NS Series) is required, please consult U.S. Tsubaki. Double strand stainless steel chains and attachment chains are available.



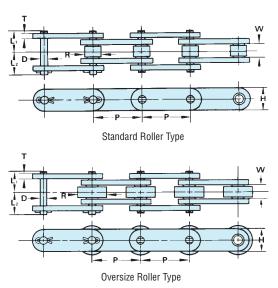
Conveyor Chain

			NS		-AS
Chain No.	Maximum Allowable Load (lbs)	Chain No.	Maximum Allowable Load (lbs)	Chain No.	Maximum Allowable Load (lbs)
C2040SS	99	C2040NS	99	C2040AS	150
C2050SS	154	C2050NS	154	C2050AS	231
C2060HSS	231	C2060HNS	231	C2060HAS	346
C2080HSS	397	C2080HNS	397	C2080HAS	596
C2100HSS	573				
C2120HSS	858				
C2160HSS	1,452				

 $^{1.\} C2040-C2060 H\ are\ provided\ with\ clip\ type\ connecting\ links,\ C2080 H-C2160 H\ with\ cottered\ type.\ All\ other\ links\ are\ riveted.$

BASE CHAIN	DIMENSIONS										
		Width Between Roller	Roller I	Dia.							
		Link	(S)	(R)		Pin-		— ——Li	nk Plate		
	Pitch	Plates	Roller	Roller			Dia.	Height	Thickness	Approximate	e Weight (lbs/ft)
Chain No.	P	W	R ₁	R ₂	L ₁	L ₂	D	Н	T	"S" Roller	"R" Roller
C2040	1.00	.312	.312	.625	.325	.392	.156	.472	.060	.34	.58
C2050	1.25	.375	.400	.750	.406	.472	.200	.591	.080.	.58	.87
C2060H	1.50	.500	.469	.875	.573	.652	.234	.677	.125	1.01	1.47
C2080H	2.00	.625	.625	1.125	.720	.823	.312	.906	.156	1.62	2.37
C2100H	2.50	.750	.750	1.563	.878	.980	.375	1.126	.187	2.45	3.97
C2120H	3.00	1.000	.875	1.750	1.104	1.254	.437	1.354	.219	3.01	5.65
C2160H	4.00	1.250	1.125	2.250	1.405	1.618	.563	1.701	.281	6.60	9.78

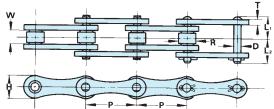




RS Double Pitch Roller Chain

RS DOUBLE	PITCH STAIN	LESS STEEL RO	LLER CHAIN								
	Pitch	Roller Dia.	Width Between Roller Plates		Pin-			Link Plate	Maximum Allowable — Load	Approx. Weight	No. of Links per
Chain No.	P	R	W	D	L ₁	L ₂	T	Н	(lbs)	(lbs/ft)	10 ft
A2040SS	1.00	.313	.312	.156	.325	.380	.060	.472	99	.26	120
A2050SS	1.25	.400	.375	.200	.406	.469	.080	.591	154	.42	96
A2060SS	1.50	.469	.500	.234	.506	.600	.094	.709	231	.63	80





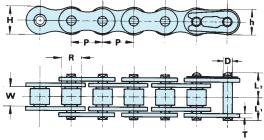
BS/DIN Chain

BS/DIN STAI	NLESS STEEL	CHAIN		Width							
Chain No.	ISO BS/DIN No.	Pitch P	Roller Dia. R	Between Roller Link Plates W	D	Pin	L ₂	Link Plate Height (Max.) H	Maximum Allowable Load (lbs)	Bearing Area (Nominal) Inch ²	Approx. Weight (lbs/ft)
RF06BSS*	06B	.375	.250	.225	.129	.255	.296	.325	57	.040	.26
RS08BSS	08B	.500	.335	.305	.175	.329	.395	.465	111	.078	.47
RS10BSS	10B	.625	.400	.380	.200	.370	.449	.579	148	.104	.64
RS12BSS	12B	.750	.475	.460	.225	.433	.520	.634	196	.138	.84
RS16BSS	16B	1.000	.625	.670	.326	.705	.783	.827	463	.326	1.82

Note

- *Flat shape link plate
- Stainless steel roller chains with over 1.00 inch pitch are available upon request.
- 2. Duplex and triplex are available.



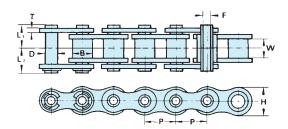


Hollow Pin Chain

HOLLOW PIN STAINLESS STEEL CHAIN

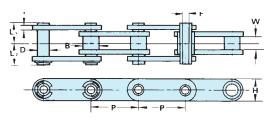
Standard attachments are available for Hollow Pin Chain in both single and double pitch types. Attachments or cross rods may be inserted into any link without disassembling the chain.



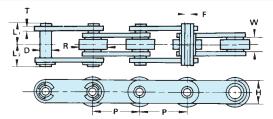


RS Type (single pitch type)

RS TYPE											
	Pitch	Width Between Inner Link Plates	Bushing Dia.		F	Pin		——Li	nk Plate	Maximum Allowable – Load	Approx. Weight
Chain No.	P	W	В	D	F	L ₁	L ₂	T	Н	(lbs)	(lbs/ft)
RS40HP	.500	.312	.312	.224	.157	.315	.374	.060	.472	99	.36
RS50HP	.625	.375	.400	.284	.202	.396	.459	.080	.591	154	.58
RS60HP	.750	F00	400	.330	.236	.494	.561	.094	.713	231	.85
กอบบทา	.730	.500	.469	.330	.230	.434	.001	.034	.110	201	.00



Double Pitch Type – standard "S" roller type



Double Pitch Type – oversize "R" roller type

DOUBLE PI	TCH TYPE											
	Pitch	Width Between Inner Link Plates	Bushing Dia.	Roller Dia.			— Pin ———		— ——Lir	ık Plate	Maximum Allowable - Load	Approx. Weight
Chain No.	P	W	В	R	D	F	L ₁	L ₂	T	Н	(lbs)	(lbs/ft)
STANDARD	ROLLER											
C2040HP	1.00	.312	.312	-	.224	.157	.315	.374	.059	.472	99	.31
C2050HP	1.25	.375	.400	-	.284	.202	.396	.459	.079	.591	154	.50
C2060HP	1.50	.500	.469	-	.330	.236	.494	.561	.094	.677	231	.93
C2080HP	2.00	.625	.625	-	.448	.316	.640	.701	.126	.906	397	1.21
OVERSIZED	ROLLER											
C2042HP	1.00	.312	-	.625	.224	.157	.315	.374	.059	.472	99	.55
C2052HP	1.25	.375	-	.750	.284	.202	.396	.459	.079	.591	154	.81
C2062HP	1.50	.500	-	.875	.330	.236	.494	.561	.094	.677	231	1.38
C2082HP	2.00	.625	-	1.125	.448	.316	.640	.701	.126	.906	397	1.88

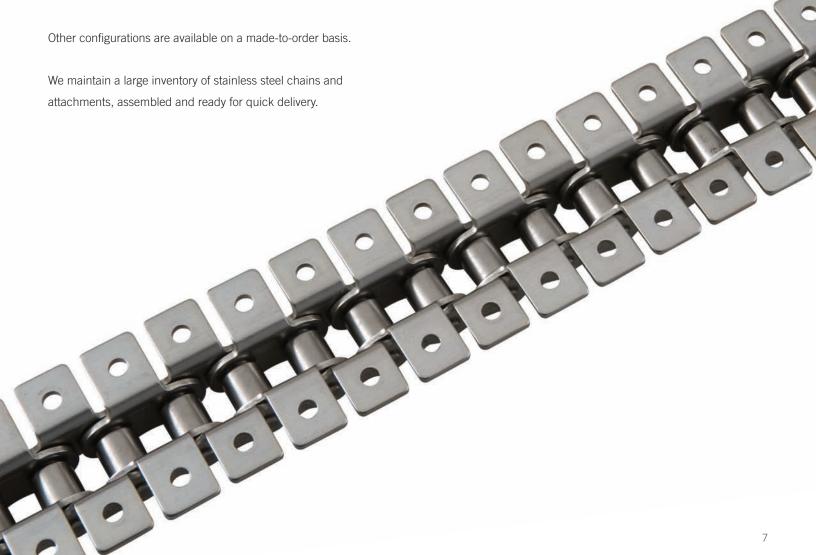
Stainless Steel Attachments

Engineered for Extended Wear Life

Stainless steel attachment chains from U.S. Tsubaki are made using high-strength AS 600 Series stainless steel with SS 304 attachments to keep your lines moving. AS Series has excellent resistance to corrosion from acid, alkali, and water, and works in temperatures from -40°F to 750°F.

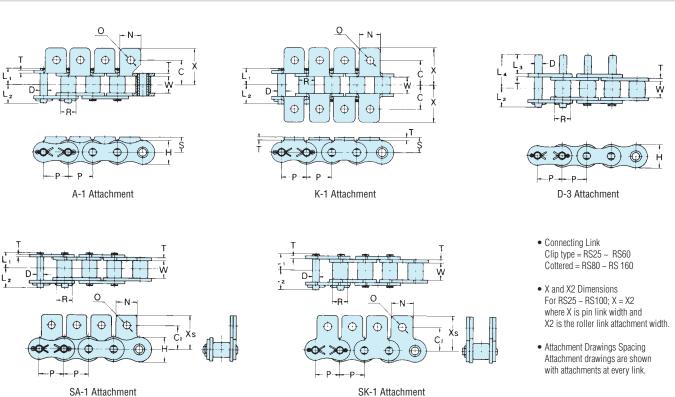
We offer a wide variety of standard attachments, including:

- bent, straight, or lug types
- on one or both sides
- with extended pins
- wide contour



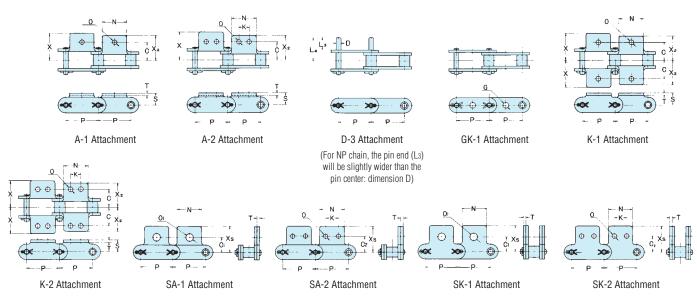
Stainless Steel Attachments

RS STAI	NLESS S	TEEL ATTA(CHMENT DI	MENSIONS												
															litional We tachment	•
Chain		Availabi	ility——					Attach	ment							
No.	SS	NS	AS	C	C ₁	N	0	S	X	X ₂	XS	L ₃	L ₄	A•SA Att	K•SK Att	D-3 Att
RS25	•	•		.281	.313	.220	.134	.187	.421	.421	.459	-	-	.0007	.001	-
RS35	•	•	•	.375	.374	.311	.134	.250	.563	.563	.572	.375	.579	.0018	.003	.002
RS40	•	•	•	.500	.500	.374	.142	.315	.701	.701	.685	.375	.661	.0044	.008	.002
RS50	•	•	•	.625	.625	.500	.205	.406	.921	.921	.907	.469	.827	.0066	.013	.004
RS60	•	•	•	.750	.720	.626	.205	.469	1.111	1.110	1.057	.563	1.018	.0154	.030	.006
RS80	•	•	•	1.000	.969	.752	.268	.626	1.441	1.441	1.396	.752	1.335	.0287	.572	.015
RS100	•		•	1.250	1.252	1.000	.343	.780	1.768	1.768	1.732	.937	1.644	.0572	.114	.026
RS120	•			1.500	1.437	1.126	.406	.906	2.197	2.016	2.081	1.126	2.024	.1012	.202	.044
RS140	•			1.750	1.750	1.375	.469	1.126	2.484	2.283	2.500	1.311	2.264	.1672	.334	.066
RS160	•			2.000	2.000	1.500	.563	1.252	2.827	2.598	2.750	1.500	2.653	.2332	.466	.099



TSUBAKI

Chain		Availab	ility	— Pitch					-Attachmen	i———			
No.	SS	NS	AS	P	C	C ₁	C ₂	K	N	0	01	S	T
2040	•	•	•	1.00	.500	.437	.535	.374	.752	.142	.205	.358	.060
C2050	•	•	•	1.25	.626	.563	.626	.469	.937	.205	.268	.437	.080
2060H	•	•	•	1.50	.844	.689	.752	.563	1.126	.205	.343	.579	.125
C2080H	•	•	•	2.00	1.094	.874	1.000	.752	1.500	.268	.406	.752	.156
C2100H	•			2.50	1.313	1.126	1.252	.937	1.874	.343	.563	.921	.197
C2120H	•			3.00	1.563	1.311	1.469	1.126	2.252	.386	.579	1.094	.236
C2160H	•			4.00	2.063	1.752	2.000	1.500	3.000	.709	.866	1.437	.315
Chain		Availab	ility				— Attachm	ent ———				dditional We Attachment (
.naın	SS	NS	AS	Х	X ₂	Xs	D	L ₃	L	G	A•SA Att	K•SK Att	D-3 At
				.760	.693	.780	.156	.374	.663	.161	.007	.013	.002
lo.	•	•	•						.833	.201	.013	.026	.004
lo. 2040	•	•	•	.953	.866	.969	.200	.469	.000	.201	.013	.020	
lo. 22040 22050					.866 1.110	.969 1.205	.200 .234	.469	1.083	.240	.037	.075	.007
2040 2050 2060H	•	•	•	.953									
C2040 C2050 C2060H C2080H	•	•	•	.953 1.240	1.110	1.205	.234	.563	1.083	.240	.037	.075	.007
No. C2040 C2050 C2060H C2080H C2100H C2120H	•	•	•	.953 1.240 1.602	1.110 1.441	1.205 1.594	.234 .312	.563 .752	1.083 1.401	.240 .319	.037 .070	.075 .141	.00



- Chain diagrams are drawn with S-rollers although R-rollers are also available with the same attachment dimensions. Attachments are shown at every link.
 C2040–C2060H connecting links are clip type; C2080H–C2160H are cottered type, GK-1 attachment connecting links are cottered type.
 All links other than connecting links, with or without attachments, are riveted type.

Stainless Steel Compatibility

MATERIAL OF COMPONENT PARTS

Chain Series	Link Plate	Pin	Bushing	Roller
304 (SS)	AISI304	AISI304	AISI304	AISI304
316 (NS)	AISI316	AISI316	AISI316	AISI316
600 (AS)	AISI304	600 Series HT*	600 Series HT*	600 Series HT*

^{*}PH: Precipitation-Hardened

600 Series includes 17-4PH, 17-7PH, 17-8PH and 13-7PH. Each has comparable corrosion resistance.

†On double pitch oversized rollers, the roller material will be AISI304.

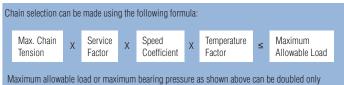
STAINLESS STEEL CHAIN SELECTION

General selection is based on bearing pressure between the pin and bushing. Anti-corrosive roller chains are normally intended to be used at slow speeds without lubrication. Chain selection should be made based on the bearing pressure shown below.

Chain Series	Maximum Allowable Bearing Pressure between Pin and Bushing	Maximum Suggested Operating Speed
304 (SS)	1,420 psi	230 ft/min
316 (NS)	1,420 psi	230 ft/min
600 (AS)	2,130 psi	230 ft/min

PERFORMANCE OF ANTI-CORROSIVE CHAINS

Chain Series	Corrosion Resistance	Temperature Resistance	Magnetism	Wear Resistance
304 (SS)	Good for general acid, alkali and water	-40°F to 750°F (Never use below -270°F or over 1300°F)	Slightly magnetic due to cold forming of parts	Fair
316 (NS)	Superior to SS and AS	-40°F to 750°F (Never use below -420°F or over 1500°F)	Non-magnetic	Fair
600 (AS)	Slightly less than above	-40°F to 750°F (Never use below -40°F or over 930°F)	Magnetic	Very good



Maximum allowable load or maximum bearing pressure as shown above can be doubled only when chain is used in group 1 of the "Corrosion Resistance Guide" and properly lubricated. Vibrations arising from ultrasonic waves, etc., must also be taken into consideration.



SERVICE FACTOR

Type of Impact	Service Factor
Smooth transmission	1.0
Transmission with some impact	1.3
Transmission with large impact	1.5

SPEED COEFFICIENT

Chain Speed	Speed Coefficient
0 to 50 ft/min	1.0
50 to 100 ft/min	1.2
100 to 160 ft/min	1.4
160 to 230 ft/min	1.6

TEMPERATURE FACTOR

Temperature	SS Series	NS Series	AS Series
~-270°F	Χ	Χ	Χ
-270°F ~ -40°F	1.0	1.0	Χ
-40°F ~ -750°F	1.0	1.0	1.0
750°F ~ 930°F	1.2	1.0	1.8
930°F ~ 1,100°F	1.5	1.2	Χ
1,100°F ~ 1,300°F	1.8	1.5	Χ
1,300°F ~ 1,500°F	Χ	2.0	Χ
1,500°F ~	Χ	Χ	Χ

X means not suggested. Consult with U.S. Tsubaki. *CS Series temperature range -4°F $\sim750^\circ\text{F}$

MAXIMUM ALLOWABLE LOAD

Max. allowable X Bearing area between X Maximum	Calculate the chain's maximum allowable load with this formula:										
bearing pressure pin and bushing allowable load		Max. allowable bearing pressure	Х	Bearing area between pin and bushing	X	Maximum allowable load					

Chain No.	SS Series	NS Series	AS Series
RS25	26	-	-
RS35	59	59	91
RS40	99	100	150
RS50	154	154	231
RS60	231	231	346
RS80	397	397	596
RS100	573	573	858

Note: All units are in pounds.



Stainless Steel Sprockets

Long-Wearing Sprockets for Special Environments

When ordering stainless steel chains and attachments, \consider stainless steel sprockets. Make your entire operation corrosion resistant.

Keep your lines running at peak performance with a complete stainless steel system—roller chains, attachments, sprockets, and POWER-LOCK®—from U.S. Tsubaki.

All stainless steel sprockets from U.S. Tsubaki are made using high-quality 304 SS stainless steel. This provides excellent resistance to food and chemicals, including acids and alkali, as well as to extreme temperatures.

Stainless steel sprockets from U.S. Tsubaki are available for food grade and nonfood grade applications.

Our standard stainless steel sprockets are specially constructed for food applications but can be used in any corrosive environment. We start with a thicker plate and weld on the hub. Then we lathe the sprocket, machining all sides to remove pits and marks. The smooth finish means food and bacteria won't gather.

For corrosive environments that do not involve food, we offer made-to-order stainless steel sprockets without the lathing step. That reduces your cost and yet maintains high-quality corrosion resistance for your operation.

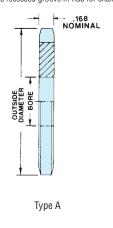
Consult with U.S. Tsubaki about your application, and we'll suggest the most cost-effective sprockets to keep your lines running.

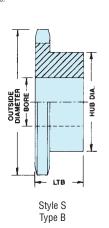


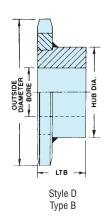
No. 35 Sprocket — 3/8" Pitch

NO. 35 ST 3/8" PITC	AINLESS STEEL S	SPROCKETS									
		Single — T	ype A		Single — T	уре В					
No. Teeth	Outside Diameter	Catalog Number	Stock Bore	Approx. Weight (lbs)	Catalog Number	Stock Bore	Max. Bore	Hub Dia.	LTB	Sty	Approx. Weight (lbs)
9	1.260				35B9SS	3/8	3/8	27/32*	3/4	S	.10
10	1.380				35B10SS	3/8	9/16	31/32*	3/4	S	.15
11	1.500				35B11SS	3/8	9/16	1 1/18*	3/4	S	.20
12	1.630				35B12SS	1/2	5/8	1 7/32*	3/4	S	.22
13	1.750				35B13SS	1/2	3/4	1 1/4*	3/4	S	.25
14	1.870				35B14SS	1/2	7/8	1 1/4	3/4	S	.26
15	1.990				35B15SS	1/2	7/8	1 11/32	3/4	S	.30
16	2.110				35B16SS	1/2	15/16	1 15/32	3/4	S	.40
17	2.230				35B17SS	1/2	1 1/16	1 19/32	3/4	S	.43
18	2.350				35B18SS	1/2	1 3/16	1 23/32	3/4	S	.50
19	2.470				35B19SS	1/2	1 1/4	1 27/32	3/4	S	.56
20	2.590				35B20SS	1/2	1 5/16	1 12/16	3/4	S	.68
21	2.710				35B21SS	1/2	1 3/8	2	7/8	S	.80
22	2.830				35B22SS	1/2	1 3/8	2	7/8	S	.82
23	2.950				35B23SS	1/2	1 3/8	2	7/8	S	.87
24	3.070				35B24SS	1/2	1 3/8	2	7/8	S	.89
25	3.190				35B25SS	1/2	1 3/8	2	7/8	S	.91
26	3.310				35B26SS	1/2	1 3/8	2	7/8	S	.93
28	3.550	35A28SS	15/32	.38	35B28SS	1/2	1 1/2	2 1/4	1	D	1.00
30	3.790	35A30SS	15/32	.44	35B30SS	1/2	1 1/2	2 1/4	1	D	1.06
32	4.032	35A32SS	15/32	.50	35B32SS	1/2	1 1/2	2 1/4	1	D	1.13
35	4.390	35A35SS	15/32	.61	35B35SS	1/2	1 1/2	2 1/4	1	D	1.56
40	4.990	35A40SS	15/32	1.0	35B40SS	1/2	1 1/2	2 1/4	1	D	1.70
45	5.590	35A45SS	15/32	1.2	35B45SS	1/2	1 1/2	2 1/4	1	D	2.18
60	7.380	35A60SS	15/32	2.1	35B60SS	1/2	1 1/2	2 1/4	1	D	3.00

^{*}Has recessed groove in hub for chain clearance.





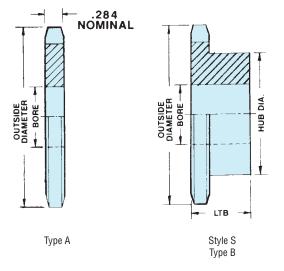


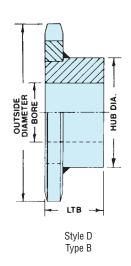


No. 40 Sprocket — 1/2" Pitch

NO. 40 STA 1/2" PITC	AINLESS STEEL S	SPROCKETS									
		Single — T	уре А		Single — T	уре В					
No. Teeth	Outside Diameter	Catalog Number	Stock Bore	Approx. Weight (lbs)	Catalog Number	Stock Bore	Max. Bore	Hub Dia.	LTB	Sty	Approx. Weight (lbs)
10	1.840				40B10SS	1/2	3/4	1 1/4*	7/8	S	.28
11	2.000				40B11SS	1/2	13/16	1 3/8*	7/8	S	.36
12	2.170				40B12SS	1/2	15/16	1 9/16*	7/8	S	.44
13	2.330				40B13SS	1/2	1 1/16	1 9/16	7/8	S	.50
14	2.490				40B14SS	1/2	1 1/8	1 11/16	7/8	S	.60
15	2.650				40B15SS	1/2	1 1/4	1 13/16	7/8	S	.68
16	2.810				40B16SS	5/8	1 3/8	2	7/8	S	.82
17	2.980				40B17SS	5/8	1 7/16	2 1/8	1	S	1.20
18	3.140				40B18SS	5/8	1 1/2	2 5/16	1	S	1.24
19	3.300				40B19SS	5/8	1 3/4	2 1/2	1	S	1.42
20	3.460				40B20SS	5/8	1 7/8	2 5/8	1	S	1.60
21	3.620				40B21SS	5/8	1 7/8	2 3/4	1	S	1.68
22	3.780				40B22SS	5/8	1 7/8	2 7/8	1	S	1.81
23	3.940				40B23SS	5/8	2	3	1	S	2.18
24	4.100	40A24SS	19/32	.8	40B24SS	5/8	2	3	1	D	2.20
25	4.260	40A25SS	19/32	.9	40B25SS	5/8	2	3	1	D	2.39
26	4.420	40A26SS	19/32	1.3	40B26SS	5/8	2	3	1	D	2.40
28	4.740	40A28SS	19/32	1.3	40B28SS	5/8	2	3	1	D	2.75
30	5.060	40A30SS	19/32	1.3	40B30SS	5/8	2	3	1	D	2.88
35	5.860	40A35SS	19/32	1.9	40B35SS	5/8	2	3	1	D	3.32
40	6.650	40A40SS	19/32	2.3	40B40SS	5/8	2	3	1	D	4.28
45	7.450	40A45SS	19/32	3.1	40B45SS	5/8	2	3	1	D	4.68
60	9.840	40A60SS	19/32	5.5	40B60SS	5/8	2	3	1	D	7.00

^{*}Has recessed groove in hub for chain clearance.



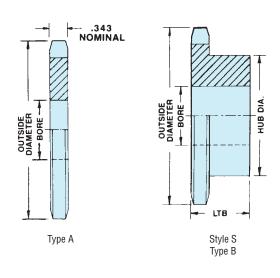


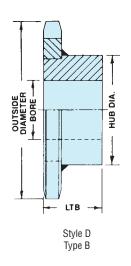


No. 50 Sprocket — 5/8" Pitch

		Oimula T									
		Single — T	ype A		Single — Ty	уре В					
No. Teeth	Outside Diameter	Catalog Number	Stock Bore	Approx. Weight (lbs)	Catalog Number	Stock Bore	Max. Bore	Hub Dia.	LTB	Sty	Approx. Weight (lbs)
10	2.300				50B10SS	5/8	7/8	1 5/16*	1	S	.5
11	2.500				50B11SS	5/8	1	1 3/4*	1	S	.6
12	2.710				50B12SS	5/8	1 1/4	1 63/64*	1	S	.7
13	2.910				50B13SS	5/8	1 5/16	1 7/8	1	S	.8
14	3.110				50B14SS	5/8	1 7/16	2 1/8	1	S	1.0
15	3.320				50B15SS	5/8	1 1/2	2 2/8	1	S	1.3
16	3.520				50B16SS	5/8	1 3/4	2 1/2	1	S	1.5
17	3.720				50B17SS	5/8	1 7/8	2 11/16	1	S	1.8
18	3.920				50B18SS	5/8	1 7/8	2 7/8	1	S	2.0
19	4.120				50B19SS	5/8	1 3/4	2 1/2	1	S	2.3
20	4.320				50B20SS	3/4	1 3/4	2 1/2	1	S	2.5
21	4.520	50A21SS	23/32	1.4	50B21SS	3/4	2	3	1	D	2.7
22	4.720	50A22SS	23/32	1.6	50B22SS	3/4	2	3	1	D	3.3
23	4.920	50A23SS	23/32	1.7	50B23SS	3/4	2	3	1	D	3.8
24	5.120	50A24SS	23/32	1.8	50B24SS	3/4	2	3	1 1/4	D	4.1
25	5.320	50A25SS	23/32	1.9	50B25SS	3/4	2	3	1 1/4	D	4.3
26	5.520	50A26SS	23/32	1.7	50B26SS	3/4	2	3	1 1/4	D	4.6
28	5.920	50A28SS	23/32	2.5	50B28SS	3/4	2	3	1 1/4	D	5.0
30	6.320	50A30SS	23/32	2.7	50B30SS	3/4	2	3	1 1/4	D	5.2
35	7.320	50A35SS	23/32	3.7	50B35SS	3/4	2	3	1 1/4	D	6.5
40	8.320	50A40SS	23/32	4.7	50B40SS	3/4	2	3	1 1/4	D	7.8
45	9.310	50A45SS	23/32	6.0	50B45SS	3/4	2	3	1 1/4	D	8.5
60	12.300	50A60SS	23/32	10.8	50B60SS	3/4	2	3	1 1/4	D	14.0

^{*}Has recessed groove in hub for chain clearance.



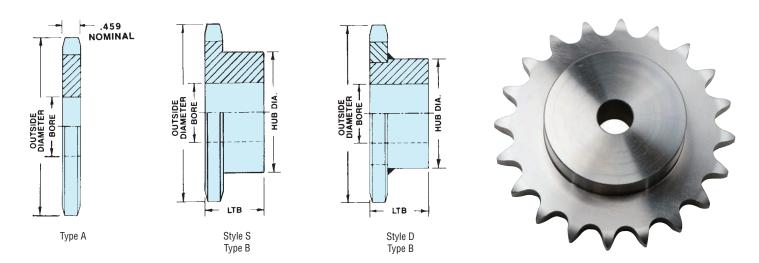




No. 60 Sprocket — 3/4" Pitch

	NO. 60 STAINLESS STEEL SPROCKETS 3/4" PITCH										
		Single — T	ype A		Single — T	/ре B					
No. Teeth	Outside Diameter	Catalog Number	Stock Bore	Approx. Weight (lbs)	Catalog Number	Stock Bore	Max. Bore	Hub Dia.	LTB	Sty	Approx. Weight (lbs)
12	3.250				60B12SS	3/4	1 3/8	2 3/8*	1 1/4	S	1.5
13	3.490				60B13SS	3/4	1 3/8	2 11/32	1 1/4	S	1.8
14	3.740				60B14SS	3/4	1 3/8	2 5/16	1 1/4	S	2.0
15	3.980				60B15SS	3/4	1 7/8	2 7/8	1 1/4	S	2.4
16	4.220				60B16SS	3/4	2	3 1/16	1 1/4	S	2.8
17	4.466				60B17SS	3/4	2 1/2	3 1/4	1 1/4	S	3.3
18	4.700	60A18SS	23/32	1.9	60B18SS	3/4	2	3	1 1/4	D	3.6
19	4.950	60A19SS	23/32	2.1	60B19SS	3/4	2	3	1 1/4	D	4.0
20	5.190	60A20SS	23/32	2.4	60B20SS	3/4	2	3	1 1/4	D	4.6
21	5.430	60A21SS	23/32	2.5	60B21SS	3/4	2	3	1 1/4	D	5.0
22	5.670	60A22SS	23/32	2.7	60B22SS	3/4	2	3	1 1/4	D	5.3
23	5.910	60A23SS	23/32	3.0	60B23SS	3/4	2	3	1 1/4	D	5.7
24	6.150	60A24SS	23/32	3.1	60B24SS	3/4	2	3	1 1/4	D	5.9
25	6.390	60A25SS	23/32	3.3	60B25SS	3/4	2	3	1 1/4	D	6.1
26	6.630	60A26SS	23/32	3.8	60B26SS	3/4	2	3	1 1/4	D	6.3
28	7.110	60A28SS	23/32	4.2	60B28SS	3/4	2 3/8	3 1/2	1 1/4	D	6.7
30	7.590	60A30SS	23/32	4.7	60B30SS	3/4	2 3/8	3 1/2	1 1/4	D	7.0
35	8.780	60A35SS	23/32	6.9	60B35SS	3/4	2 3/8	3 1/2	1 1/4	D	9.0
40	9.980	60A40SS	23/32	8.3	60B40SS	3/4	2 3/8	3 1/2	1 1/4	D	11.7
45	11.180	60A45SS	23/32	10.6	60B45SS	3/4	2 3/8	3 1/2	1 1/4	D	14.5
60	14.760	60A60SS	23/32	18.0	60B60SS	3/4	2 3/8	3 1/2	1 1/4	D	25.0

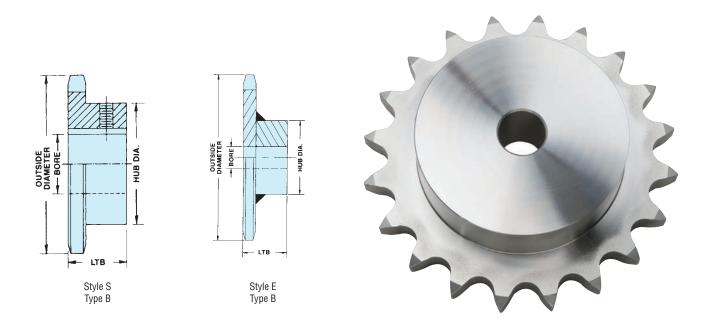
 $^{{}^\}star Has$ recessed groove in hub for chain clearance.



No. 80 Sprocket — 1" Pitch

NO. 80 STAINLESS STEEL SPROCKETS 1" PITCH										
		Single—Type E	1							
No. Teeth	Outside Diameter	Catalog Number	Stock Bore	Approx. Max. Bore	Hub Dia.	LTB	Sty	Approx. Weight (lbs)		
10	3.678	80B10SS	1	1 1/2	2 9/16*	1 9/16	S	2.40		
11	4.006	80B11SS	1	1 5/8	2 13/16*	1 9/16	S	2.90		
12	4.332	80B12SS	1	1 7/8	3 1/8*	1 9/16	S	3.60		
13	4.657	80B13SS	1	1 31/32	3 1/32	1 9/16	S	3.80		
14	4.981	80B14SS	1	2 1/4	3 1/4	1 9/16	S	4.40		
15	5.305	80B15SS	1	2 1/4	3 13/16	1 9/16	S	5.60		
16	5.627	80B16SS	1	2 7/16	3 3/4	1 5/8	S	6.10		
18	6.271	80B18SS	1	2 7/16	3 3/4	1 5/8	S	6.90		
19	6.593	80B19SS	1	2 7/16	3 3/4	1 5/8	S	7.40		
20	6.914	80B20SS	1	2 15/16	4 1/2	1 7/8	S	10.40		
22	7.555	80B22SS	1	2 15/16	4 1/2	1 7/8	E	11.40		
23	7.876	80B23SS	1	2 15/16	4 1/2	1 7/8	Е	12.00		
24	8.196	80B24SS	1	2 15/16	4 1/2	1 7/8	Е	12.50		

^{*}Has recessed groove in hub for chain clearance.



Stainless Steel Power-Lock®

Enter the "Keyless" Society

Stainless steel POWER-LOCK solves your problems.

- Eliminate backlash damage to keyways from heavy loads.
 POWER-LOCK fits tightly without backlash around the shaft/hub and is not affected by load reversals.
- End your high machining expenses for long shaft keyways, splined shafts, threads, grooves, and steps. POWER-LOCK provides exact, slip-free location.
- Stop shrink and press fits. POWER-LOCK simplifies installation and removal.

Easy-to-install POWER-LOCK slides into position and offers a keyless, shaft-hub lock that will simultaneously handle both high torque and thrust while increasing shaft strength.

POWER-LOCK requires only one tool for easy assembly. It is ideal for locking in large or small sprockets, gears, pulleys, timing cams, and rollers. Best of all, POWER-LOCK is in stock for immediate shipment.

Features and Applications

■ Resistance to Corrosion and Extreme Temperature

All component parts are made of high-quality stainless steel. The inner and outer ring are SUS304, all other parts are SUS630. You get outstanding resistance to corrosive chemicals, including acids and alkalis, as well as excellent performance in extreme temperatures.

■ High Durability Against Reversing or Impacting Loads

The POWER-LOCK connection is not affected by tortional load reversal or impact, which damages the key and keyway connection. The U.S. Tsubaki POWER-LOCK fits tightly around the shaft/hub and is free of backlash.

■ Easy and Precise Positioning

POWER-LOCK offers 360° angular adjustment and is excellent for indexing tables, cam mechanisms, gear drives, and double strand conveyor sprockets.

Easy Assembly and Disassembly

POWER-LOCK can be assembled and disassembled frequently, so maintenance or replacement of worn parts is simple and easy as compared to other methods (key and keyway), spline, shrink or press fits, and welding).

■ Increased Shaft Strength

By using the POWER-LOCK, no metal needs to be removed from the shaft (such as cutting of a keyway). The strength of the shaft can be kept as its original diameter. This saving is especially applicable on hollow-shaft applications.

■ Eliminates Costly Machining

There is no need for time-consuming machining of keyways. The POWER-LOCK offers substantial savings on long, heavy shafts.





POWER-LOCK® SPECIFICATIONS															
			Hub Counter		Dimensions (inch)				Contact Pressure (psi)		Locking Bolts				
Model Number	Shaft O.D. d	Tolerance t ₁	I.D.	Tolerance	;	l		Transmissible Torque Mt. (ft-lbs)	Transmissible Thrust Pax (lbs)	Shaft P	Hub Bore	Quanity	Size	Tightening Torque (ft-lbs)	Approx. Weight (lbs)
PL 3/4 SS	.7500	'1	1.850	٠2	.787	.709	1.024	152	4,870	25,400	10,300	6	M 6 X 18	10.1	.462
PL 7/8 SS	.8750	-0.0013"	1.850	+0.0013"	.787	.709	1.024	178	4,870	21,770	10,300	6	M 6 X 18	10.1	.396
PL1 SS	1.0000	+0	1.969	-0	.787	.709	1.024	271	6,490	25,400	12,900	8	M 6 X 18	10.1	.484
PL1 1/8 SS	1.1250	10	2.165	U	.787	.709	1.024	305	6,490	22,580	11,730	8	M 6 X 18	10.1	.550
PL1 3/16 SS	1.1875		2.159		.819	.709	1.055	322	6,490s	21,390	11,760	8	M 6 X 18	10.1	.528
PL1 1/4 SS	1.2500		2.362		.787	.709	1.024	423	8.120	25,400	13,440	10	M 6 X 18	10.1	.660
PL1 3/8 SS	1.3750		2.365		.773	.709	1.009	465	8.120	23,090	13,420	10	M 6 X 18	10.1	.594
PL1 7/16 SS	1.4375		2.559		.787	.709	1.024	535	8.930	24,300	13.650	11	M 6 X 18	10.1	.748
PL1 1/2 SS	1.5000	-0.0015"	2.559	+0.0015"	.787	.709	1.024	559	8.930	23,280	13.650	11	M 6 X 18	10.1	.704
PL1 5/8 SS	1.6250	+0	2.953	-0	.945	.827	1.260	901	13,300	27,440	15,100	9	M 8 X 22	24.6	1.232
PL1 3/4 SS	1.7500		2.953		.945	.827	1.260	970	13,300	25,480	15,100	9	M 8 X 22	24.6	1.227
PL1 7/8 SS	1.8750		3.150		.945	.827	1.260	1,040	13,300	23,780	14,150	9	M 8 X 22	24.6	1.298
PL1 15/16 SS	1.9375		3.150		.945	.827	1.260	1,074	13,300	23,010	14,150	9	M 8 X 22	24.6	1.232
PL2 SS	2.0000		3.346		.945	.827	1.260	1,355	16,260	27,250	16,290	11	M 8 X 22	24.6	1.474
PL2 1/8 SS	2.1250		3.346		.945	.827	1.260	1,440	16,260	25,650	16,290	11	M 8 X 22	24.6	1.364
PL2 3/16 SS	2.1875		3.543		.945	.827	1.260	1,482	16,260	24,910	15,380	11	M 8 X 22	24.6	1.584
PL2 1/4 SS	2.2500		3.543		.945	.827	1.260	1,525	16,260	24,200	15,380	11	M 8 X 22	24.6	1.496
PL2 3/8 SS	2.3750		3.531		1.008	.827	1.323	1,610	16,260	22,950	15,430	11	M 8 X 22	24.6	1.408
PL2 7/16 SS	2.4375	-0.0018"	3.740	+0.0018"	.945	.827	1.260	1,802	17,740	24,390	15,890	12	M 8 X 22	24.6	1.650
PL2 1/2 SS	2.5000	+0	3.740	-0	.945	.827	1.260	1,848	17,740	23,780	15,890	12	M 8 X 22	24.6	1.584
PL2 9/16 SS	2.5625		3.737		.962	.827	1.277	1,894	17,740	23,200	15,910	12	M 8 X 22	24.6	1.518
PL2 3/4 SS	2.7500		4.337		1.073	.984	1.467	3,011	26,270	26,910	17,060	11	M 10 X 25	50.0	2.662
PL2 7/8 SS	2.8750		4.528		1.102	.984	1.496	3,147	26,270	25,740	16,340	11	M 10 X 25	50.0	2.926
PL2 15/16 SS	2.9375		4.528		1.102	.984	1.496	3,216	26,270	25,190	16,340	11	M 10 X 25	50.0	2.816
PL3 SS	3.0000		4.724		1.102	.984	1.496	3,284	26,270	24,660	15,660	11	M 10 X 25	50.0	3.190
PL3 3/8 SS	3.3750		4.921		1.102	.984	1.496	4,031	28,660	23,920	16,400	12	M 10 X 25	50.0	3.058
PL3 7/16 SS	3.4375		5.118		1.102	.984	1.496	4,105	28,660	23,480	15,770	12	M 10 X 25	50.0	3.432
PL3 1/2 SS	3.5000	-0.0021"	5.118	+0.0021"	1.102	.984	1.496	4,180	28,660	23,060	15,770	12	M 10 X 25	50.0	3.322
PL3 3/4 SS	3.7500	+0	5.350	-0	1.151	.984	1.544	4,852	31,050	23,320	16,480	13	M 10 X 25	50.0	3.388
PL3 15/16 SS	3.9375		5.708		1.302	1.142	1.774	6,275	38,240	23,570	16,260	11	M 12 X 30	86.9	4.598
PL4 SS	4.0000		5.843		1.299	1.142	1.772	6,375	38,240	23,200	15,880	11	M 12 X 30	86.9	4.796

The POWER-LOCK® is composed of five parts: taper ring (A), taper ring (B), outer ring, inner ring, and locking bolts. Locking is achieved by tightening the bolts.

CONNECTING PRINCIPLE

Taper rings (A) and (B) fit perfectly with the tapered inner and outer rings. By tightening the locking bolts, taper rings (A) and (B) generate clamping pressures (P' and P) against the outer and inner rings to produce the frictional force to join the shaft and hub. A slit is provided on the circumference of the outer and inner rings to prevent reduction of the clamping force.



Corrosion Resistance Guide

3. NOT CORROSION RESISTANT		Temperature						
Substance	Concentration	°F	SS	AS	NS	TI	PC	PC-SY
Acetic Acid	10%	68	1	1	1	1	1	1
Acetone		68	1	1	1	1	1	3
Alcohol			1	1	1	1	1	1
Aluminum Sulfate	Saturation	68	1	3	1	1	_	_
Ammonia Water		68	1	1	1	1	1	1
Ammonium Chloride	50%	Boiling	2	3	1	1	_	_
Ammonium Nitrate		Boiling	1	1	1	1	2	1
Ammonium Sulfate	Saturation	Boiling	1	2	1	1	_	_
Beer		68	1	1	1	1	1	1
Benzene		68	1	1	1	1	1	1
Boric Acid	50%	Boiling	1	1	1	1	_	_
Butyric Acid		68	1	1	1	1	1	_
Calcium Chloride	Saturation	68	2	3	1	1	2	1
Calcium Hydroxide	20%	Boiling	1	1	1	1	1	1
Calcium Hypochlorite	11–14%	68	1	3	1	1	3	1
Carbolic Acid			1	1	1	1	3	1
Carbon Tetrachloride (dry)		68	1	1	1	1	1	1
Chlorinated Water			3	3	1	1	3	_
Chlorine Gas (dry)		68	2	3	2	1	_	1
Chlorine Gas (moist)		68	3	3	2	1		1
Chromic Acid	5%	68	1	2	1	1	3	1
Citric Acid	50%	68	1	1	1	1	_	1
Coffee	0070	Boiling	1	1	1	1	1	1
Creosote		68	1	1	1	1	·	
Developing Solution		68	1	2	1	1	1	1
Ethyl Ether		68	1	1	1	1	1	1
erric Acid	50%	68	1	1	1	1	3	1
erric Chloride	5%	68	2	3	2	1	_	
Formalin	40%	68	1	1	1	1	_	_
Formic Acid	50%	68	1	1	1	1	3	1
ruit Juice	0070	68	1	2	1	1	1	1
Gasoline		68	1	1	1	1	1	1
Glycerol		68	1	1	1	1	1	1
loney		- 00	1	1	1	1	1	1
lydrochloric Acid	2%	68	3	3	3	1	3	1
lydrogen Peroxide	30%	68	ა 1	2	ა 1	1	3	1
lydrogen Sulfide (dry)	0070		1	1	1	1	1	1
lydrogen Sulfide (wet)			3	3	3	1	3	_
lydroxybenzene		68	1	1	1	1	3	
(erosene		68	1	1	1	1	_	_
(etchup		68	1	1	1	1	1	1
actic Acid	10%	68	1	2	1	1	1	1
ard.	10 /0	00	1	1	1	1		_
.aro .inseed Oil	100%	60	1		1	1		
	100%	68	1	2		1	1	1
Malic Acid	50%	Boiling			1	•		1
Mayonnaise		68	1	2	1	1	1	1
Milk		68	1	1 2	1	1	3	1
Date Actal				,			- 3	1
Nitric Acid Nitric Acid	5% 65%	68 68	1	3	1	1	3	1



		Temperature							
bstance	Concentration	°F	SS	AS	NS	TI	PC	PC-SY	
l (Plant, Mineral)		68	1	1	1	1	1	1	
eic Acid		68	1	1	1	1	1	_	
alic Acid	10%	68	1	2	1	1	_	1	
raffin		68	1	1	1	1	1	_	
troleum		68	1	1	1	1	1	1	
osphate			1	1	1	1	_	_	
osphoric Acid	5%	68	1	2	1	1	3	1	
osphoric Acid	10%	68	2	2	2	1	3	1	
cric Acid	Saturation	68	1	1	1	1	_	_	
tassium	Saturation	68	1	2	1	1	_	_	
tassium Bichromate	10%	68	1	1	1	1	1	_	
tassium Chloride	Saturation	68	1	2	1	1	_	_	
tassium Hydroxide	20%	68	1	1	1	1	1	1	
tassium Nitrate	25%	68	1	1	1	1	1		
tassium Nitrate	25%	Boiling	1	3	1	1	_	_	
tassium Permanganate	Saturation	68	1	1	1	1	_	1	
l Ammoniac	50%	Boiling	2	3	1	1	_	_	
a-Water		68	2	3	1	1	2	1	
ap-and-Water-Solution		68	1	1	1	1	1	_	
dium Carbonate	Saturation	Boiling	1	1	1	1	_	_	
dium Chloride	5%	68	1	2	1	1	1	1	
dium Cyanide		68	1	_	1	1	_	_	
dium Hydrocarbonate		68	1	1	1	1	1	1	
dium Hydroxide	25%	68	1	1	1	1	1	_	
dium Hypochlorite	10%	68	3	3	1	1	3	1	
dium Perchlorate	10%	Boiling	1	3	1	1	_	_	
dium Sulfate	Saturation	68	1	1	1	1	_	_	
dium Thiosulfate	25%	Boiling	1	1	1	1			
ft Drink	23 /0	68	1	1	1	1	1	1	
earic Acid	100%	Boiling	3	3	1	1	3		
gar Solution	100 /0	68	ა 1	ა 1	1	1	ა 1	1	
gar Solution Ifuric Acid	5%	68	3	3	1	1	3	1	
	370	68	პ 1		1	1	3		
Ifur Dioxide		00	1	3	1	1	1	1	
nthetic Detergent			1	1	1	1	· ·	1	
rup	100/	00	1	1	1	1	1	1	
rtaric Acid	10%	68	1	1	1	1	I	1	
rpentine 		95	1	1	1	1	_	1	
rnish			1	1	1	1	_	1	
getable Juice		68	1	1	1	1	1	1	
negar		68	2	3	1	1	2	1	
ater			1	1	1	1	1	1	
hiskey		68	1	1	1	1	1	1	
ine		68	1	1	1	1	1	1	
ıc Chloride	50%	68	2	3	2	1	2	1	
ıc Sulfate	25%	68	1	1	1	1	_	1	

Key: SS: 304 SS Series NS: 316 NS Series AS: 600 AS Series

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