

# CORROSION/MOISTURE RESISTANT CHAIN

www.diamondchain.com

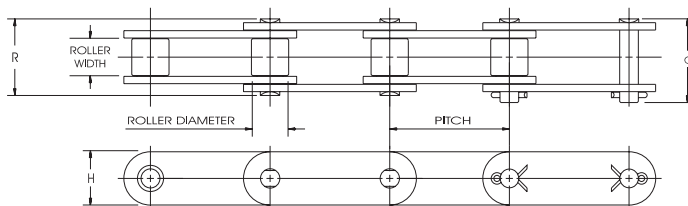
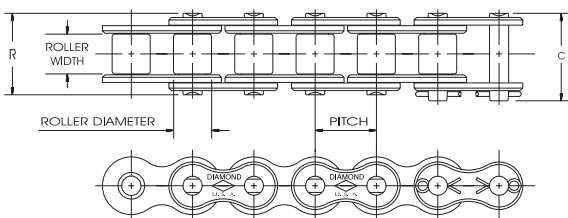
## Chain Descriptions and Dimensions

### Nickel-Plated Chain

Diamond Chain produces a full line of Nickel-Plated roller chains for a variety of uses in environments where the chains are exposed to moisture. Common uses include applications exposed to the weather, high humidity or those on machines that are frequently washed down with water.

Diamond Nickel-Plated chain is different from many rust-resistant chains, because Diamond electroless nickel plates all of the components before assembly, virtually eliminating the possibility of stress-corrosion cracking. Pre-assembly plating also ensures all components are plated, which prevents internal rust from seeping out and causing contamination. Standard attachments are available with quick delivery. See standard attachment chain section for dimensional information.

Note: These chains are not intended to resist corrosion from caustic chemicals or acids. For those types of applications, stainless steel chain is recommended.



Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	Weight Per Foot	Average Tensile Strength
25NP	1/4	1/8	*.130	.090	.030	.37	.34	.085	875
35NP	3/8	3/16	*.200	.141	.050	.56	.50	.220	2100
40NP	1/2	5/16	.312	.156	.060	.72	.67	.420	4000
50NP	5/8	3/8	.400	.200	.080	.89	.83	.680	6600
60NP	3/4	1/2	.469	.234	.094	1.11	1.04	.970	8500
80NP	1	5/8	.625	.312	.125	1.44	1.32	1.700	14500
100NP	1 1/4	3/4	.750	.375	.156	1.73	1.61	2.500	24000
120NP	1 1/2	1	.875	.437	.187	2.14	2.00	3.700	34000
C2040NP	1	5/16	.312	.156	.060	.76	.68	.320	3700
C2050NP	1 1/4	3/8	.400	.200	.080	.92	.84	.550	6100
C2060HNP	1 1/2	1/2	.469	.234	.125	1.25	1.18	.970	8500

\* Chains are rollerless — dimension shown is bushing diameter.

Standard attachments are available for above models.

# CORROSION/MOISTURE RESISTANT CHAIN

## Chain Descriptions and Dimensions

### Diamond ACE®

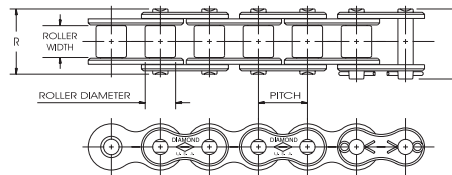
Diamond ACE (Anti-Corrosion Exterior) chain is uniquely designed and incorporates an electrochemically bonded, protected exterior coating that is applied to the component parts prior to assembly. Pre-assembly coating ensures all component parts are thoroughly treated, which prevents internal rust from seeping out and causing contamination.

The protective coating serves as an insulating barrier that actually oxidizes before the carbon steel base chain, thus protecting and preserving the chain's physical and structural integrity.

Common applications for Diamond ACE include exposure to weather, high humidity or on machinery that is routinely washed down with water. Standard attachments are available with quick delivery. See standard attachment chain section for dimensional program.

Note: These chains are not intended to resist corrosion from caustic chemicals or acids. Stainless steel chain is normally recommended for those types of applications. Contact Diamond's Application Engineers for assistance in selecting the proper chain for your application.

### Single-Pitch Drive chains

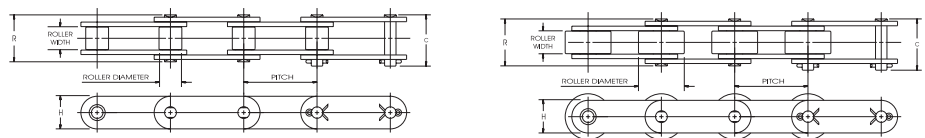


Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	Weight Per Foot	Average Tensile Strength
40 ACE	1/2	5/16	.312	.156	.060	.720	.670	.420	4000
50 ACE	5/8	3/8	.400	.200	.080	.890	.830	.680	6600
60 ACE	3/4	1/2	.469	.234	.094	1.110	1.040	.970	8500
80 ACE	1	5/8	.625	.312	.125	1.440	1.320	1.700	14500

\* For sizes not listed, contact Diamond for availability on a made-to-order basis.  
Standard attachments are available for above models

### Double-Pitch Drive chains



Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	Weight Per Foot	Average Tensile Strength
C-2040 ACE	1	5/16	.312	.156	.060	.760	.680	.340	3700
C-2042 ACE	1	5/16	.625	.156	.060	.760	.680	.340	3700
C-2050 ACE	1 1/4	3/8	.400	.200	.080	.920	.840	.580	6100
C-2052 ACE	1 1/4	3/8	.750	.200	.080	.920	.840	.580	6100
C-2060H ACE	1 1/2	1/2	.469	.234	.125	1.250	1.180	1.050	8500
C-2060H ACE	1 1/2	1/2	.875	.234	.125	1.250	1.180	1.050	8500
C-2080H ACE	2	5/8	.625	.312	.156	1.570	1.450	1.400	14500
C-2080H ACE	2	5/8	1.125	.312	.156	1.570	1.450	1.400	14500

\* For sizes not listed, contact Diamond for availability on a made-to-order basis.  
Standard attachments are available for above models.

# CORROSION/MOISTURE RESISTANT CHAIN

## Chain Descriptions and Dimensions

### Stainless Steel Chain

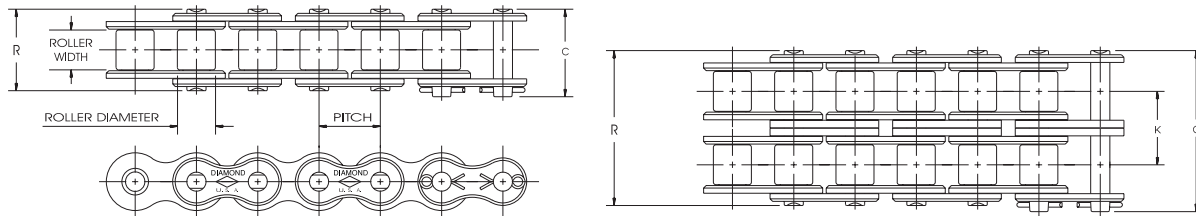
Diamond produces a wide range of Single-Pitch Drive and Double-Pitch Conveyor chains manufactured in four combinations of stainless steel depending upon the specific application.

**AP Stainless Chain:** This chain is assembled using 300 Series (austenitic stainless) link plates, bushings and rollers along with a precipitation-hardened stainless steel pin. This combination increases the wear life of this chain over those constructed entirely of 300 Series components. AP Stainless chains are well suited for food processing, and are approved by the Food and Drug Administration. AP Stainless will be supplied unless otherwise specified.

**300 Series Stainless Chain:** These chains are assembled entirely from 300 Series (austenitic) components. They have excellent corrosion resistance and very low magnetic permeability but cannot be expected to have the same wear resistance of our heat treated stainless chains. For industries that require it, 300 Series chains can be considered "non-sparking."

**400 Series Stainless Chain:** These chains are manufactured using 300 Series link plates but have pins, bushings and rollers that are produced from 400 Series (martensitic) heat treated stainless. This combination significantly increases wear resistance over those that are constructed using only 300 Series stainless chains. The properties of the 400 Series heat treated parts may, in some instances, cause them to discolor when in contact with certain chemicals.

**600 Series Stainless Chain:** These chains are assembled using 300 Series link plates, with pins, bushings and rollers made from 600 Series (17-4/17-7) precipitation-hardened stainless.



Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	LinkPlate Thickness	C	R	K	Weight Per Foot	Average Tensile Strength
47SS	.1475	.072	*.090	.062	.015	.25	.22	.....	.035	180
25SS	1/4	1/8	*.130	.090	.030	.37	.34	.....	.084	700
25-2SS	1/4	1/8	*.130	.090	.030	.63	.59	.252	.163	1400
35SS	3/8	3/16	*.200	.141	.050	.56	.50	.....	.210	1700
40SS	1/2	5/16	.312	.156	.060	.72	.67	.....	.410	3000
40-2SS	1/2	5/16	.312	.156	.060	1.29	1.24	.566	.800	6000
41SS	1/2	1/4	.306	.141	.050	.65	.57	.....	.280	1700
50SS	5/8	3/8	.400	.200	.080	.89	.83	.....	.680	4700
50-2SS	5/8	3/8	.400	.200	.080	1.60	1.55	.713	1.320	9400
60SS	3/4	1/2	.469	.234	.094	1.11	1.04	.....	1.000	6750
60-2SS	3/4	1/2	.469	.234	.094	2.01	1.94	.897	1.950	13500
80SS	1	5/8	.625	.312	.125	1.44	1.32	.....	1.690	12000

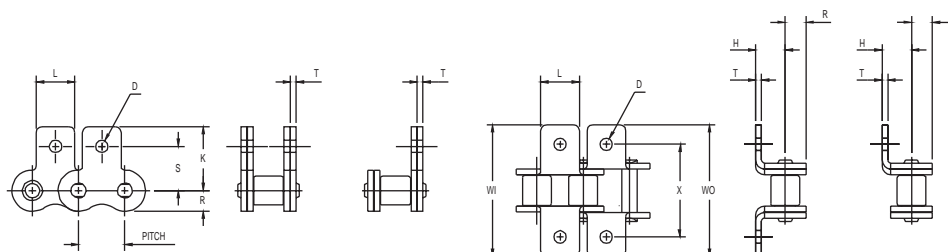
\* Chains are rollerless — dimension shown is bushing diameter.

# CORROSION/MOISTURE RESISTANT CHAIN



## Chain Descriptions and Dimensions

### Standard Straight and Bent Attachment Stainless Steel Chain



Others	Diamond
M-35, SA1	S1 (one hole)
M-1, SK1	S2 (one hole)

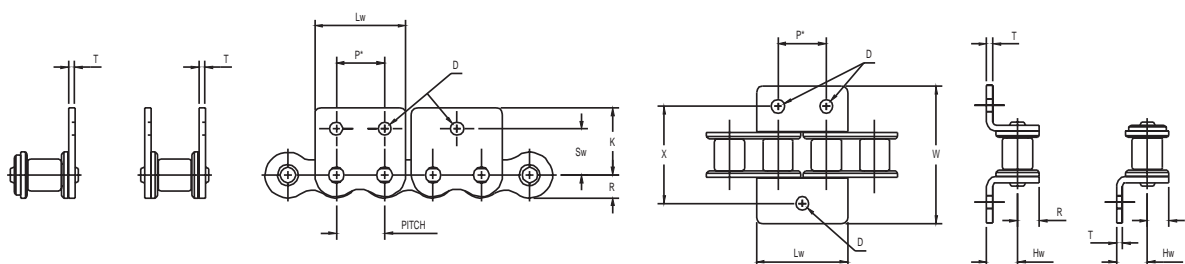
Others	Diamond
A1	B1 (one hole)
K1	B2 (one hole)

Dimensions in Inches

Diamond Number	Pitch Inches	D	H	K	L	R Max.	S	T	WI	WO	X
25SS	.250	.125	.180	.451	.218	.119	.308	.030	.781	.843	.562
35SS	.375	.102	.250	.577	.312	.178	.387	.050	1.125	1.125	.750
40SS	.500	.141	.312	.684	.375	.238	.489	.060	1.390	1.390	1.000
41SS	.500	.141	.282	.698	.375	.192	.482	.050	1.375	1.375	.937
50SS	.625	.203	.406	.895	.500	.297	.618	.080	1.812	1.812	1.250
60SS	.750	.203	.478	1.038	.625	.356	.716	.094	2.135	2.135	1.500
80SS	1.000	.266	.625	1.339	.750	.475	.968	.125	2.750	2.750	2.000

Above attachments available for multiple strand chain.

### Wide Contour Straight and Bent Attachment Stainless Steel Chain



Others	Diamond	Others	Diamond
WM-35	WCS1 (one hole)	WM-1	WCS2 (one hole)
WM-35-2	WCS1 (two holes)	WM-2	WCS2 (two holes)

Others	Diamond	Others	Diamond
WA-1	WCB1 (one hole)	WK-1	WCB2 (one hole)
WA-2, A2	WCB1 (two holes)	WK-2, K2	WCB2 (two holes)

Dimensions in Inches

Diamond Number	Pitch Inches	D	Hw	K	Lw	P	R Max.	Sw	T	W	X
35SS	.375	.125	.262	.577	.727	.375	.178	.399	.050	1.105	.750
40SS	.500	.141	.326	.684	.946	.500	.238	.503	.060	1.366	1.000
50SS	.625	.203	.406	.895	1.211	.625	.297	.618	.080	1.807	1.250
60SS	.750	.203	.478	1.038	1.420	.750	.356	.716	.094	2.135	1.500
80SS	1.000	.266	.625	1.339	1.885	1.000	.475	.967	.125	2.750	2.000

Contact Diamond Chain for available attachments on roller links (wide contour).

Above attachments available for multiple strand chain.

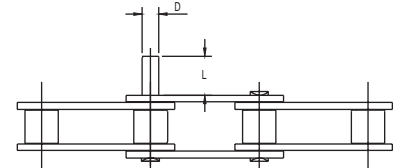
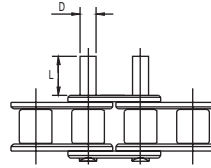
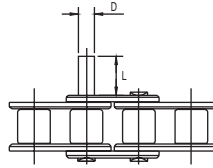
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## Chain Descriptions and Dimensions

### Standard Extended Pin Stainless Steel Chain

Others	Diamond
D1	E1 (one extended pin)
D3	E2 (two extended pins)

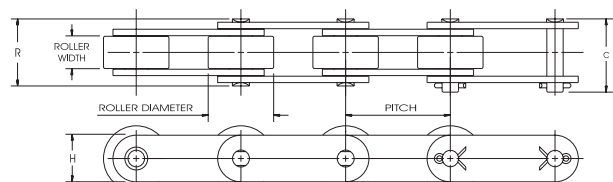
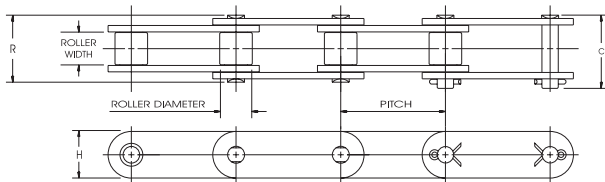


Dimensions in Inches

Diamond Number	Pitch Inches	D ± .0005"	L ± .010"
35SS	.375	.141	.375
40SS	.500	.156	.383
41SS	.500	.141	.375
50SS	.625	.200	.469
60SS	.750	.234	.562
80SS	1.000	.312	.750

Dimensions in Inches

Diamond Number	Pitch Inches	D ± .0005"	L ± .010"
C2040SS	1.00	.156	.375
C2042SS	1.00	.156	.375
C2050SS	1.25	.200	.469
C2052SS	1.25	.200	.469
C2060SS	1.50	.234	.562
C2062SS	1.50	.234	.562
C2080SS	2.00	.312	.750
C2082SS	2.00	.312	.750



### Double-Pitch Oval Contour Stainless Steel Conveyor Chain - Standard Diameter Roller

Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	Weight Per Foot	Average Tensile Strength
C-2040SS	1	5/16	.312	.156	.060	.76	.68	.34	3000
C-2050SS	1 1/4	3/8	.400	.200	.080	.92	.84	.56	4700
C-2060SS	1 1/2	1/2	.469	.234	.094	1.11	1.05	.81	6750
C-2080SS	2	5/8	.625	.312	.125	1.44	1.32	1.40	12000

### Double-Pitch Oval Contour Stainless Steel Conveyor Chain - Large Diameter Roller

Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	Weight Per Foot	Average Tensile Strength
C-2042SS	1	5/16	.625	.156	.060	.76	.68	.55	3000
C-2052SS	1 1/4	3/8	.750	.200	.080	.92	.84	.86	4700
C-2062SS	1 1/2	1/2	.875	.234	.094	1.11	1.05	1.27	6750
C-2082SS	2	5/8	1.125	.312	.125	1.44	1.32	2.06	12000

# CORROSION/MOISTURE RESISTANT CHAIN

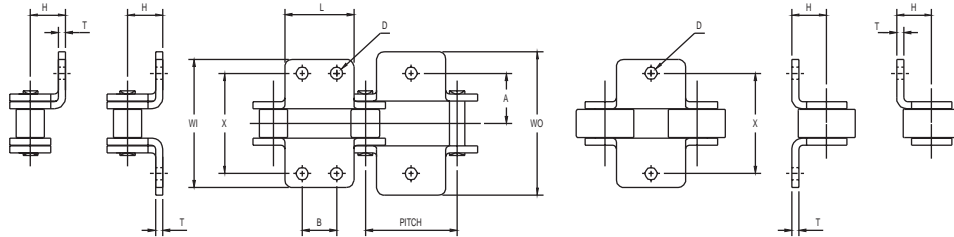


## Chain Descriptions and Dimensions

### Double-Pitch Oval Contour Stainless Steel Conveyor Chain Bent Attachments

Oval Contour Link Plates

Standard and Oversized Roller



Others	Diamond
A1	B1 (one hole)
A2	B1 (two holes)

Others	Diamond
K1	B2 (one hole)
K2	B2 (two holes)

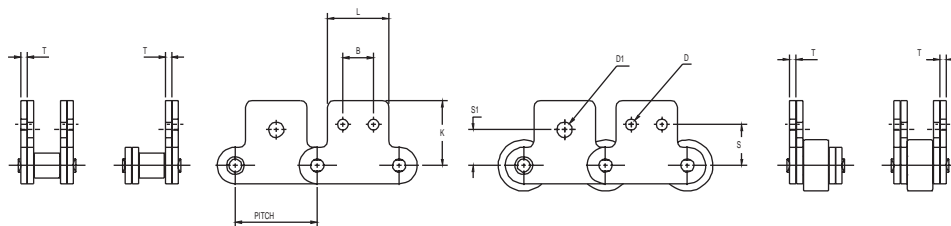
Dimensions in Inches

Standard Roller		Pitch Inches	A	B	D	H	L	T	WI	WO	X	Large Roller	
Diamond Number	Roller Diameter											Diamond Number	Roller Diameter
C2040SS	.312	1.00	.500	.375	.141	.355	.750	.060	1.350	1.488	1.000	C2042SS	.625
C2050SS	.400	1.25	.625	.469	.203	.453	.937	.080	1.692	1.863	1.250	C2052SS	.750
C2060SS	.469	1.50	.844	.562	.203	.561	1.125	.094	2.115	2.317	1.688	C2062SS	.875
C2080SS	.625	2.00	1.094	.750	.266	.739	1.500	.125	2.760	3.028	2.188	C2082SS	1.125

### Double-Pitch Oval Contour Stainless Steel Conveyor Chain Straight Attachments

Oval Contour Link Plates

Standard and Oversized Roller



Others	Diamond
M-35, SA1	S1 (one hole)
M-35-2, SA2	S1 (two holes)

Others	Diamond
M-1, SK1	S2 (one hole)
M-2, SK2	S2 (two holes)

Dimensions in Inches

Standard Roller		Pitch Inches	2 Attachment Holes			K	L	T	1 Attachment Hole		Large Roller	
Diamond Number	Roller Diameter		B	D	S				D1	S1	Diamond Number	Roller Diameter
C2040SS	.312	1.00	.375	.141	.531	.773	.750	.060	.188	.438	C2042SS	.625
C2050SS	.400	1.25	.469	.203	.625	.971	.937	.080	.250	.563	C2052SS	.750
C2060SS	.469	1.50	.562	.203	.750	1.203	1.125	.094	.329	.688	C2062SS	.875
C2080SS	.625	2.00	.750	.266	1.000	1.590	1.500	.125	.375	.875	C2082SS	1.125