HIGH STRENGTH/LIFT CHAIN

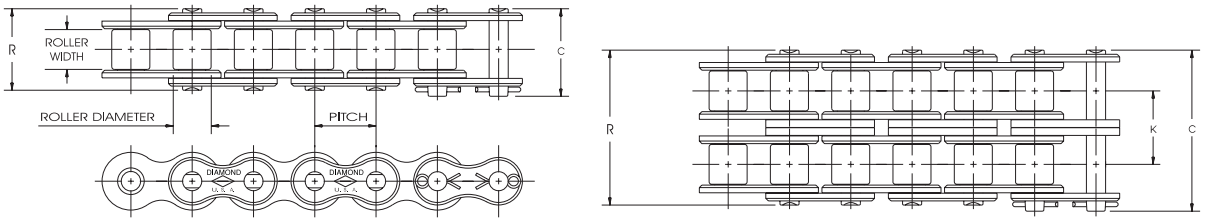
Chain Descriptions and Dimensions

Produced in accordance with ASME/ANSI B29.1, these chains are designed for the rigors of heavy loads and lifting. Depending on your specific application, Diamond offers three options from which to choose.

High Strength (HS) Drive Chains

HS Series Drive chains are built in accordance with ASME/ANSI B29.1 and are dimensionally identical to Heavy Series Drive chains, but are specially designed and incorporate pins produced from medium carbon alloy steel. These pins are through-hardened to give the chain a higher working load capacity and additional resistance to fatigue in high load and pulsating type applications. Users of these chains should remember that wear life may be slightly reduced due to the material and heat treatment of the chain pins. Slip-fit type connecting links and offset links are not available for these chains.

Note: Offset links and slip-fit connecting links are not recommended for any High Strength or Lift Chain.

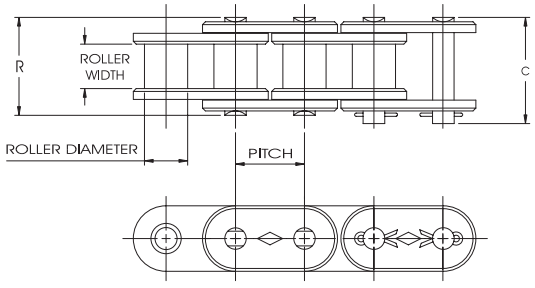


Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	Weight Per Foot	Average Tensile Strength
60HS	¾	½	.469	.234	.125	1.24	1.17	1.18	12000
80HS	1	⅝	.625	.312	.156	1.57	1.45	2.02	21000
100HS	1¼	¾	.750	.375	.187	1.86	1.74	2.82	30000
120HS	1½	1	.875	.437	.219	2.27	2.13	4.08	41000
140HS	1¾	1	1.000	.500	.250	2.44	2.28	5.40	56000
160HS	2	1¼	1.125	.562	.281	2.86	2.68	7.03	70000
180HS	2¼	1 13/32	1.406	.687	.312	3.28	3.01	9.59	95000
200HS	2½	1½	1.562	.781	.375	3.71	3.39	13.75	136000
200HS-2	2½	1½	1.562	.781	.375	6.79	6.48	26.38	270000
200HS-3	2½	1½	1.562	.781	.375	9.88	9.56	40.85	405000
240HS	3	1⅞	1.875	.937	.500	4.85	4.35	21.08	157600

For the ultimate in Diamond Chain High Strength performance, consider Diamond HS Oval Contour chains. Specially designed with pins produced from medium carbon alloy steel and FULL Oval Contour pin and roller link plates, providing the maximum link plate rigidity for high load fatigue applications.

Note: Offset links and slip-fit connecting links are not recommended for any High Strength or Lift Chain.



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
60HSOC	¾	½	.469	.234	.125	1.24	1.17	1.42	12000
80HSOC	1	⅝	.625	.312	.156	1.57	1.45	2.38	21000
100HSOC	1¼	¾	.750	.375	.187	1.86	1.74	3.29	30000

HIGH STRENGTH/LIFT CHAIN

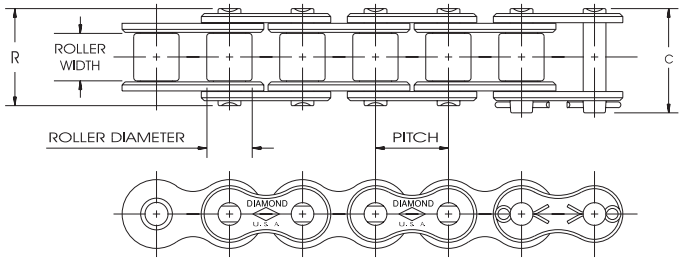
Chain Descriptions and Dimensions

DIAMOND CHAIN COMPANY
317-638-6431
1-800-US-CHAIN

Hoist Chain

These chains are built in accordance with ASME/ANSI B29.24 and are dimensionally identical to Standard Series Drive chains, but also incorporate pins produced from medium carbon alloy steel, through-hardened, to give the chains higher working load capacity and additional resistance to fatigue. Additionally, these chains are produced with solid rollers for increased performance when loading is high, but speeds are slow. Users of these chains should be aware that wear life may be slightly reduced due to the material and heat treatment of the chain pins.

Note: Slip-fit type connecting links and offset links are not available for these chains.



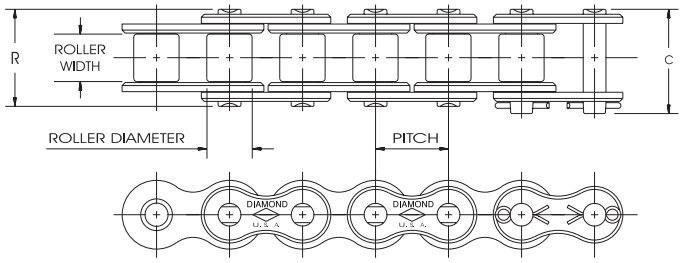
Dimensions in Inches and Pounds

Diamond Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	Weight Per Foot	Average Tensile Strength
625	5/8	3/8	.400	.200	.080	.89	.83	.68	8000
750	3/4	1/2	.469	.234	.094	1.11	1.04	.99	10500

Rollerless Lift Chain

These chains are specifically designed for tension linkages where frequent articulation requires the increased bearing area of a roller chain. Rollerless Lift chains are dimensionally identical to Standard Series Drive chains but are produced without rollers.

Note: Slip-fit type connecting links and offset links are not available for these 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
55S	5/8	3/8	*.280	.200	.080	.89	.83	.55	†8000
65S	3/4	1/2	*.332	.234	.094	1.11	1.04	.81	†10500
85	1	5/8	*.442	.312	.125	1.44	1.32	1.41	14500
105	1 1/4	3/4	*.532	.375	.156	1.73	1.61	2.08	24000
125	1 1/2	1	*.620	.437	.187	2.14	2.00	3.04	34000

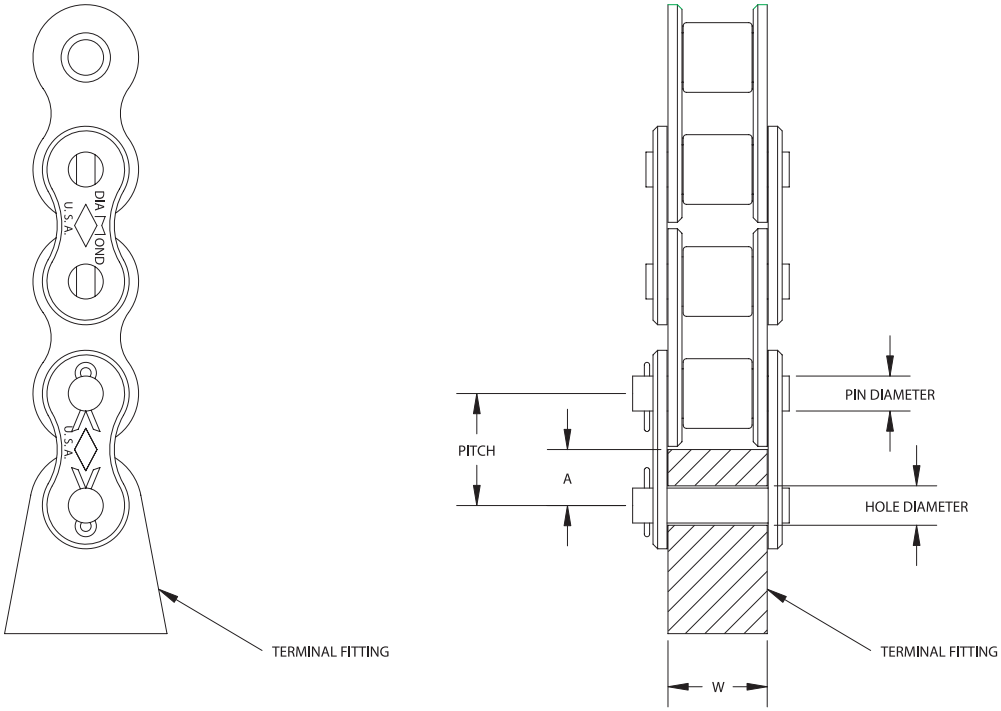
* Chains are rollerless — dimension shown is bushing diameter.
† Numbers 55S and 65S are assembled with medium carbon through-hardened pins.

HIGH STRENGTH/LIFT CHAIN

Chain Descriptions and Dimensions

Terminal Fittings

Diamond does not provide terminal fittings. We recommend that fittings be made of through-hardened steel, heat treated to RC 40-45. They should be machined accurately to ensure proper mating with chain link plates and to provide uniform loading across the width of the chain. Chains should always be attached to the terminal fittings using a press-fit style connecting link. Terminal fittings should be inspected regularly and the above conditions maintained. Worn, damaged or corroded chains and/or terminal fittings can lead to chain failure which may result in either personal injury or property damage.



Dimensions in Inches

Diamond Number	Pitch Inches	W +.000 -.031	Pin Diameter	Hole Diameter	A (max.)
60 H or HS	¾	.764	.234	.237	.375
80 H or HS	1	.955	.312	.315	.500
100 H or HS	1¼	1.141	.375	.378	.625
120 H or HS	1½	1.458	.437	.440	.750
140 H or HS	1¾	1.523	.500	.503	.875
160 H or HS	2	1.838	.562	.565	1.000
180 H ot HS	2¼	2.058	.687	.690	1.125
200 H or HS	2½	2.285	.781	.784	1.250
625	⅝	.542	.200	.203	.312
750	¾	.696	.234	.237	.375
55 S*	⅝	.542	.200	.203	.312
65 S*	¾	.696	.234	.237	.375
85*	1	.886	.312	.315	.500
105*	1¼	1.076	.375	.378	.625
125*	1½	1.390	.437	.440	.750

* Chains are roller less.