DIAMOND®
BY TIMKEN



Diamond Series Product Catalog

From standard drive chains to specialty applications,
nothing outlasts a Diamond®

Diamond Chain Company

Dedicated To Producing The Worlds Best Roller Chain

Since its founding in 1890, the Diamond Chain Company has been singularly focused on producing the best roller chain. It's why the Wright Brothers chose Diamond Chain for their flying machine, why Henry Ford chose Diamond Chain for his automobile, and why thousands of companies choose Diamond Chain every day for their needs.

Diamond Chain Company offers two series of roller chains, Diamond Series and Sapphire Series. This catalog is focused on Diamond Series ASME/ANSI roller chains.

DIAMOND®
Industry-leading performance and innovation for demanding applications

SAPPHIRE®
Value chain offering for general applications



Diamond Chain Company is proud to have been based in Indianapolis, Indiana, since its founding in 1890. Shown is the headquarters and manufacturing facility located at 402 Kentucky Avenue.

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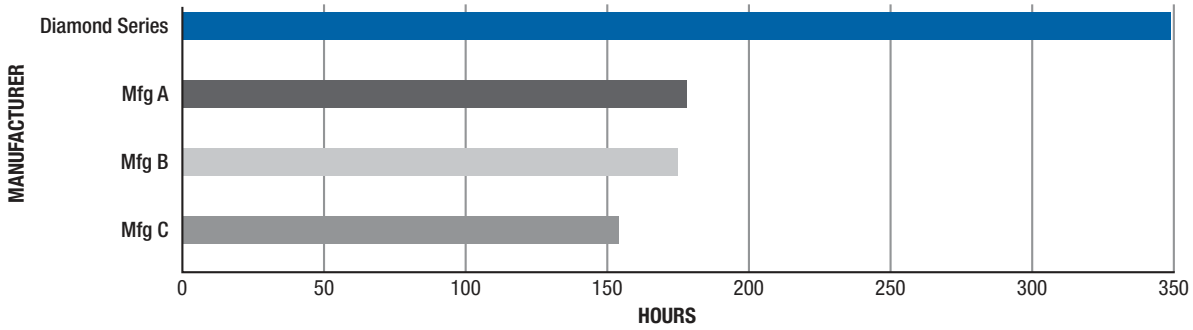
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Nothing Outlasts a Diamond®

Longer lasting chain results in less downtime and better return on investment

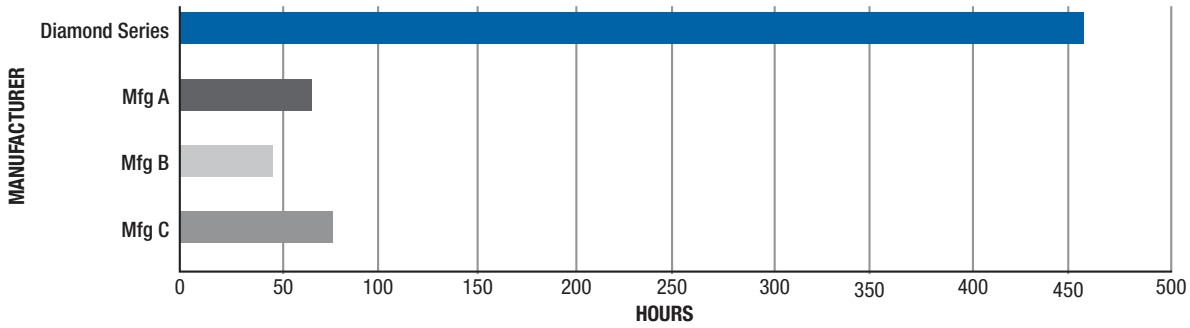
It is evident that a Diamond Series roller chain is different the moment it is removed from the box. The uniquely beveled linkplates (sizes 60-160) and proprietary lubrication are easily identified, but the real value of these features - and all the features that comprise "The Diamond Difference" (see pg. 4-5) - are not just seen but experienced. Diamond Series chain has been verified to deliver superior wear life vs. the competition. Comparative wear test data is listed below; our website also contains numerous Return on Investment (ROI) studies that demonstrate how long-lasting Diamond Series chain reduces downtime and saves money.

ASME/ANSI 50 Chain Accelerated Wear Testing



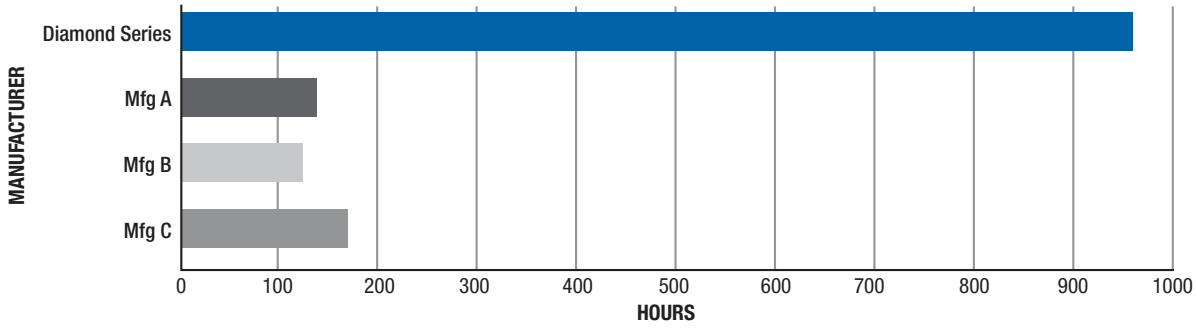
Test conditions: 1,172 RPM, 91 lbs tension, 3.5 chain horsepower, 21T x 21T sprockets

ASME/ANSI 60 Chain Accelerated Wear Testing



Test conditions: 1,200 RPM, 100 lbs tension, 5.2 chain horsepower, 23T x 23T sprockets

ASME/ANSI 80 Chain Accelerated Wear Testing



Test conditions: 668 RPM, 104 lbs tension, 2.8 chain horsepower, 16T x 16T sprockets

The Diamond Difference

More than a Catchphrase – the Diamond Difference is our Commitment to Quality

While a roller chain may initially appear to be a simple product, a ten foot section of ANSI #40 chain contains 1,200 parts – each one a potential point for failure. The Diamond Difference is our commitment to quality that ensures you only receive the highest quality chain for your application.

Materials

The Diamond Difference begins with raw materials that meet exacting standards for metal grade, mechanical properties, and carbon and alloy content to ensure minimization of impurities that impact tensile and fatigue strength.

Heat Treatment

Strict control of atmosphere, time, and temperature optimize the material properties – increasing strength, durability, and wear resistance.



Fabrication

Diamond Chain designs each component to exacting dimensional standards for optimal performance. Precision ground pins, seamless rollers, and extruded solid bushings work in concert with linkplates created using a proprietary multi-stage process to maximize the bearing area and thus enable the superior performance of Diamond Series roller chain.

Shot Peening

Proprietary shot peening equipment was developed specifically to ensure consistent intensity and coverage of components. Shot peening adds a layer of compressive stress that helps components resist fatigue failure when exposed to repeated high loads.

Lubrication

Immediately noticeable as different but truly appreciated over time, Diamond chain uses a proprietary lubrication formula and “hot dip” process on all lubricated chains for enhanced corrosion protection and extended wear life.



ASME/ANSI #80 Carbon Steel Roller Chain

Preloading

Following assembly, all chains are preloaded or (aka “prestressed”) to firmly seat the pins and bushings to reduce initial run-in and extend the wear life of the chain.

THE BEVEL MATTERS

Diamond Chain Company roller chains are beveled for a simple reason - it allows the chain to be stronger. By orienting the linkplates, the bearing area of the pitch hole is maximized. The bevel allows automated chain assembly equipment to properly orient the linkplates. Larger size chains (>160 pitch) are manually assembled and have visual indicators other than the bevel to allow proper orientation.



Chain Selection Guide

Multiple considerations must be made when selecting the right roller chain. Fortunately a Diamond Chain is available for most every application.

Environment	General Applications	Wet or Corrosive Environments				
Application	**General Applications**	**Protection against humidity, water, salt water, caustic chemicals or acids**				
Material	Carbon Steel	Carbon Steel		Stainless Steel		
Nomenclature	Diamond Chain	Nickel Plated	Diamond ACE	AP Series	300 Series	400 Series
Overview	Far exceeding industry ANSI requirements, Diamond Series chain offers superior wear and fatigue performance in industrial applications. Includes: Standard Series Heavy Series High Strength Drive Chain Power Transmission Chain Conveyor Chain Non-standard Series Chain	Adds nickel plating to carbon steel Diamond Series Chain for protection in high humidity or washdown environments. Carbon steel substrate provides highest strength and wear performance.	Adds ACE (Anti-Corrosion Exterior) plating to carbon steel Diamond Series chain for superior protection in high humidity, salt water, or washdown environments. Carbon steel substrate provides highest strength and wear performance.	Our standard and recommended stainless steel chain for exposure to chemicals or acids, AP Series offers the best combination of corrosion resistance and wear performance.	300 Series stainless steel chain is intended for applications requiring superior corrosion performance, low magnetic permeability, or a "non sparking" chain. However, this series offers the lowest wear performance.	Application specific stainless steel chain; reference corrosion tables on pages 27-29 to determine if a better solution than AP series. Wear performance comparable to AP series but generally a reduction in corrosion resistance.
Typical Uses	Standard drive chains, industrial/agriculture equipment, high strength/ shock load applications	Washdown, food & beverage (non-contact applications)		Food & beverage, packaging, meat processing, baking, fertilizers, pharmaceuticals, medical		
Attachments Available	Yes	Yes		Yes		
Page #s	8-21	22-24		22, 25-29		

Difficult to Service Environments				Application Specific	Environment
Reduced maintenance chain where regular lubrication not practical				Specialty chain for specific tasks	Application
Carbon Steel				Application/Chain Dependent	Material
EHT Pin Option	Duralube® LIVE	Duralube LIVE Food Grade	RINGLEADER® "XLO" O-Ring	Application	Nomenclature
For high-speed, high-temperature, and abrasive environments, EHT (Enhanced Hardening Treatment) pins maintain their hardness across a wide operating temperature range and thus provide an enhanced wear life. EHT pins are an option on most carbon steel chains.	For moderate speed, moderate temperature, and clean environments, Duralube LIVE uses special bushings with integrated lubrication that is released during use.	Adds a food-grade lubricant rated for incidental contact and ACE plating to Duralube LIVE product.	For dirty, dusty, or abrasive applications that may cause buildup around the pin/bushing joint, RINGLEADER "XLO" chains have an o-ring design that seals in lubrication and seals out contaminants.	Pin Oven Chain Thermoforming Chain Serrated Top Chain Oil Field Chain Side-bow (POWER CURVE™) Chain TUF-FLEX® Chain "Snap-on Top Plate" Chain Coupling Chain Micropitch® Chain Powersports Chain	Overview
Abrasive environments including cardboard processing, sawmills, balers, thermoforming, cement, limestone, fiberboard, sugar	Fiberglass, cardboard, packaging, material handling	Food & beverage (non-contact applications)	Combines, hay balers, conveyors, sorters		Typical Uses
Yes				Attachments already integrated into chain, where applicable	Attachments Available
30-33				42-51	Page #s

Carbon Steel Chain



Standard Series Roller Chain

Carbon steel is the default material for most roller chain industrial applications due to having the highest tensile and fatigue strength along with wear performance. See the “Corrosion and Moisture Resistant” section for details on plated carbon steel chain or stainless steel chain that is suitable for wash downs or exposure to chemicals or acids.

This section will address the following carbon steel chain types, options and performance information:

Standard Series	The Standard Diamond Series chain exceeds ASME/ANSI requirements and offers superior wear and fatigue performance.
Heavy Series	Heavy Series chain takes the Standard Series and adds thicker linkplates for increased fatigue resistance in applications involving heavy shock loads, multiple start/stops, or reversing.
High Strength Series	Same as Heavy series but with medium carbon through-hardened pins for a higher tensile strength, working load, and fatigue strength (but lower wear performance) vs. Heavy Series chain. For use in high load, lifting, or pulsating applications.
Hoist and Lift Chain	Same as Standard series but with medium carbon through-hardened pins for a higher tensile strength, working load, and fatigue strength (but lower wear performance) vs. Standard Series chain. For use in hoist and lift applications with tight space requirements.
Double Pitch Transmission	Utilized primarily for low-speed/low load drives such as those found in agriculture. Double Pitch Transmission chain is easily identified by its use of figure eight style linkplates.
Double Pitch Conveyor Series	Designed specifically for low-speed/low load conveyor applications. Available with standard or oversized rollers, conveyor chain is easily recognized by its use of oval contour linkplates.
Non-Standard Chain	Details several Diamond Chain products introduced prior to ANSI standards.

- Standard lubrication rated for 32°F to 350°F (0°C to 177°C). See “Ordering Information” for high temperature or low temperature lubrication options.
- Reduced Maintenance carbon steel chains (RINGLEADER “XLO” O-Ring, Duralube LIVE, EHT) can be found in the “Reduced Maintenance” section of this catalog.
- Attachments for carbon steel chain can be found in the “Attachments” section of this catalog.
- Horsepower tables can be found in the “Horsepower Tables” section of this catalog.

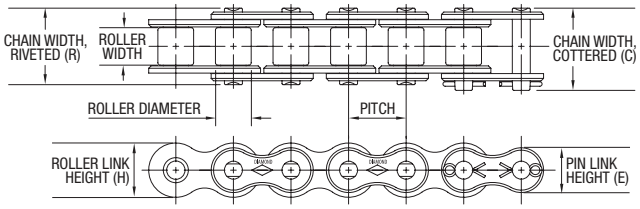
ASME/ANSI Standard Series Chain

#25-50 Pitch: Single and Multiple Strand

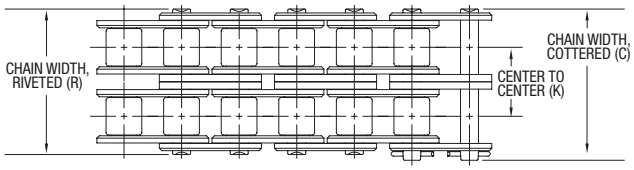
Diamond Standard Series chains are built to ASME/ANSI B29.1 standards.

All standard series chain size 40 and above (except 41) meet API (American Petroleum Institute) requirements.

Single Strand



Multiple Strand (-X suffix)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
25	0.250 6.35	0.125 3.18	*.130 3.30	0.090 2.29	0.030 0.76	0.370 9.40	0.340 8.64	- -	0.205 5.21	0.238 6.05	0.084 0.13	875 3.89	53
25-2	0.250 6.35	0.125 3.18	*.130 3.30	0.090 2.29	0.030 0.76	0.630 16.00	0.590 14.99	0.252 6.40	0.205 5.21	0.238 6.05	0.163 0.24	1,750 7.78	53
25-3	0.250 6.35	0.125 3.18	*.130 3.30	0.090 2.29	0.030 0.76	0.880 22.35	0.840 21.34	0.252 6.40	0.205 5.21	0.238 6.05	0.246 0.37	2625 11.68	53
35	0.375 9.53	0.188 4.76	*.200 5.08	0.141 3.58	0.050 1.27	0.560 14.22	0.500 12.70	- -	0.308 7.82	0.356 9.04	0.210 0.31	2,100 9.34	54
35-2	0.375 9.53	0.188 4.76	*.200 5.08	0.141 3.58	0.050 1.27	0.960 24.38	0.900 22.86	0.399 10.13	0.308 7.82	0.356 9.04	0.450 0.67	4,200 18.68	54
35-3	0.375 9.53	0.188 4.76	*.200 5.08	0.141 3.58	0.050 1.27	1.360 34.54	1.310 33.27	0.399 10.13	0.308 7.82	0.356 9.04	0.680 1.01	6,300 28.02	54
35-4	0.375 9.53	0.188 4.76	*.200 5.08	0.141 3.58	0.050 1.27	1.760 44.70	1.700 43.18	0.399 10.13	0.308 7.82	0.356 9.04	0.910 1.35	8,400 37.37	54
35-5	0.375 9.53	0.188 4.76	*.200 5.08	0.141 3.58	0.050 1.27	2.160 54.86	2.110 53.59	0.399 10.13	0.308 7.82	0.356 9.04	1.140 1.70	10,500 46.71	54
35-6	0.375 9.53	0.188 4.76	*.200 5.08	0.141 3.58	0.050 1.27	2.570 65.28	2.510 63.75	0.399 10.13	0.308 7.82	0.356 9.04	1.370 2.04	12,600 56.05	54
40	0.500 12.70	0.313 7.94	0.312 7.92	0.156 3.96	0.060 1.52	0.720 18.29	0.670 17.02	- -	0.410 10.41	0.475 12.07	0.410 0.61	4,000 17.79	55
40-2	0.500 12.70	0.313 7.94	0.312 7.92	0.156 3.96	0.060 1.52	1.290 32.77	1.240 31.50	0.566 14.38	0.410 10.41	0.475 12.07	0.800 1.19	8,000 35.59	55
40-3	0.500 12.70	0.313 7.94	0.312 7.92	0.156 3.96	0.060 1.52	1.850 46.99	1.800 45.72	0.566 14.38	0.410 10.41	0.475 12.07	1.200 1.79	12,000 53.38	55
40-4	0.500 12.70	0.313 7.94	0.312 7.92	0.156 3.96	0.060 1.52	2.420 61.47	2.370 60.20	0.566 14.38	0.410 10.41	0.475 12.07	1.600 2.38	16,000 71.17	55
40-6	0.500 12.70	0.313 7.94	0.312 7.92	0.156 3.96	0.060 1.52	3.560 90.42	3.510 89.15	0.566 14.38	0.410 10.41	0.475 12.07	2.420 3.60	24,000 106.76	55
41	0.500 12.70	0.250 6.35	0.306 7.77	0.141 3.58	0.050 1.27	0.650 16.51	0.570 14.48	- -	0.310 7.87	0.383 9.73	0.260 0.39	2,400 10.68	56
50	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	0.890 22.61	0.830 21.08	- -	0.512 13.00	0.594 15.09	0.680 1.01	6,600 29.36	57
50-2	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	1.600 40.64	1.550 39.37	0.713 18.11	0.512 13.00	0.594 15.09	1.320 1.96	13,200 58.72	57
50-3	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	2.310 58.67	2.260 57.40	0.713 18.11	0.512 13.00	0.594 15.09	1.980 2.95	19,800 88.07	57
50-4	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	3.030 76.96	2.970 75.44	0.713 18.11	0.512 13.00	0.594 15.09	2.640 3.93	26,400 117.43	57
50-5	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	3.750 95.25	3.690 93.73	0.713 18.11	0.512 13.00	0.594 15.09	3.300 4.91	33,000 146.79	57
50-6	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	4.460 113.28	4.400 111.76	0.713 18.11	0.512 13.00	0.594 15.09	3.960 5.89	39,600 176.15	57
50-8	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	5.890 149.61	5.830 148.08	0.713 18.11	0.512 13.00	0.594 15.09	5.300 7.89	52,800 234.87	57
50-10	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	7.320 185.93	7.260 184.40	0.713 18.11	0.512 13.00	0.594 15.09	6.620 9.85	66,000 293.58	57

** Chain is rollerless. Dimension shown is bushing diameter.*

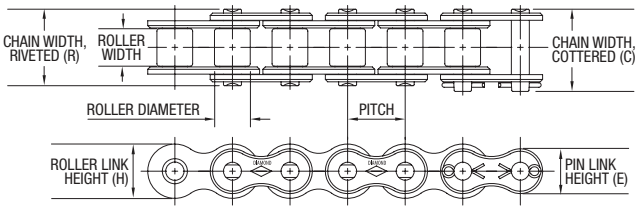
*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

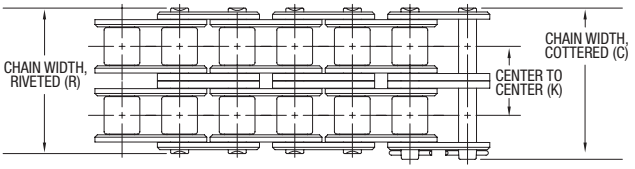
ASME/ANSI Standard Series Chain
#60-100 Pitch: Single and Multiple Strand

American Petroleum Institute 7F-0003

Single Strand



Multiple Strand (-X suffix)



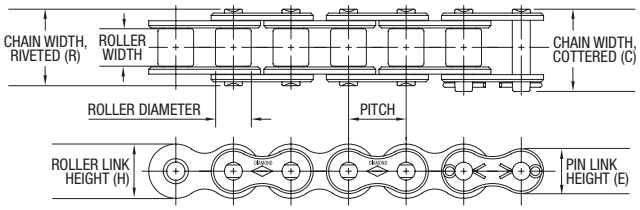
ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
60	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	1.110 28.19	1.040 26.41	- -	0.615 15.62	0.713 18.11	0.990 1.47	8,500 37.81	58
60-2	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	2.010 51.05	1.940 49.28	0.897 22.78	0.615 15.62	0.713 18.11	1.950 2.90	17,000 75.62	58
60-3	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	2.910 73.91	2.840 72.14	0.897 22.78	0.615 15.62	0.713 18.11	2.880 4.29	25,500 113.43	58
60-4	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	3.810 96.77	3.740 95.00	0.897 22.78	0.615 15.62	0.713 18.11	3.900 5.80	34,000 151.24	58
60-5	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	4.710 119.63	4.640 117.86	0.897 22.78	0.615 15.62	0.713 18.11	4.970 7.40	42,500 189.05	58
60-6	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	5.600 142.24	5.530 140.46	0.897 22.78	0.615 15.62	0.713 18.11	5.960 8.87	51,000 226.86	58
60-8	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	7.400 187.96	7.330 186.18	0.897 22.78	0.615 15.62	0.713 18.11	7.940 11.82	68,000 302.48	58
60-10	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	9.190 233.43	9.120 231.65	0.897 22.78	0.615 15.62	0.713 18.11	9.920 14.76	85,000 378.10	58
80	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	1.440 36.58	1.320 33.53	- -	0.820 20.83	0.950 24.13	1.730 2.57	14,500 64.50	59
80-2	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	2.590 65.79	2.470 62.74	1.153 29.29	0.820 20.83	0.950 24.13	3.370 5.02	29,000 129.00	59
80-3	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	3.740 95.00	3.620 91.95	1.153 29.29	0.820 20.83	0.950 24.13	5.020 7.47	43,500 193.50	59
80-4	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	4.900 124.46	4.790 121.67	1.153 29.29	0.820 20.83	0.950 24.13	6.730 10.02	58,000 258.00	59
80-5	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	6.060 153.92	5.940 150.88	1.153 29.29	0.820 20.83	0.950 24.13	8.400 12.50	72,500 322.50	59
80-6	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	7.220 183.39	7.100 180.34	1.153 29.29	0.820 20.83	0.950 24.13	10.070 14.99	87,000 387.00	59
80-8	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	9.530 242.06	9.400 238.76	1.153 29.29	0.820 20.83	0.950 24.13	13.410 19.96	116,000 515.99	59
100	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	1.730 43.94	1.610 40.89	- -	1.025 26.04	1.188 30.18	2.510 3.74	24,000 106.76	60
100-2	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	3.140 79.76	3.020 76.71	1.408 35.76	1.025 26.04	1.188 30.18	4.910 7.31	48,000 213.51	60
100-3	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	4.560 115.82	4.430 112.52	1.408 35.76	1.025 26.04	1.188 30.18	7.400 11.01	72,000 320.27	60
100-4	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	5.970 151.64	5.840 148.34	1.408 35.76	1.025 26.04	1.188 30.18	9.800 14.58	96,000 427.03	60
100-5	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	7.380 187.45	7.250 184.15	1.408 35.76	1.025 26.04	1.188 30.18	12.200 18.16	120,000 533.79	60
100-6	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	8.780 223.01	8.660 219.96	1.408 35.76	1.025 26.04	1.188 30.18	14.600 21.73	144,000 640.54	60
100-8	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	11.600 294.64	11.480 291.59	1.408 35.76	1.025 26.04	1.188 30.18	19.400 28.87	192,000 854.06	60

*** Maximum value listed.*

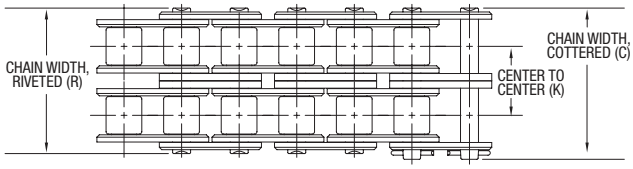
† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

ASME/ANSI Standard Series Chain
#120-180 Pitch: Single and Multiple Strand

Single Strand



Multiple Strand (-X suffix)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
120	1.500 38.10	1.000 25.40	0.875 22.23	0.437 11.10	0.187 4.75	2.140 54.36	2.000 50.80	- -	1.230 31.24	1.425 36.20	3.690 5.49	34,000 151.24	61
120-2	1.500 38.10	1.000 25.40	0.875 22.23	0.437 11.10	0.187 4.75	3.930 99.82	3.790 96.27	1.789 45.44	1.230 31.24	1.425 36.20	7.350 10.94	68,000 302.48	61
120-3	1.500 38.10	1.000 25.40	0.875 22.23	0.437 11.10	0.187 4.75	5.720 145.29	5.580 141.73	1.789 45.44	1.230 31.24	1.425 36.20	11.100 16.52	102,000 453.72	61
120-4	1.500 38.10	1.000 25.40	0.875 22.23	0.437 11.10	0.187 4.75	7.520 191.01	7.380 187.45	1.789 45.44	1.230 31.24	1.425 36.20	14.700 21.88	136,000 604.96	61
120-5	1.500 38.10	1.000 25.40	0.875 22.23	0.437 11.10	0.187 4.75	9.310 236.47	9.170 232.92	1.789 45.44	1.230 31.24	1.425 36.20	18.430 27.43	170,000 756.20	61
120-6	1.500 38.10	1.000 25.40	0.875 22.23	0.437 11.10	0.187 4.75	11.100 281.94	10.960 278.38	1.789 45.44	1.230 31.24	1.425 36.20	22.110 32.90	204,000 907.44	61
120-8	1.500 38.10	1.000 25.40	0.875 22.23	0.437 11.10	0.187 4.75	14.680 372.87	14.540 369.32	1.789 45.44	1.230 31.24	1.425 36.20	29.470 43.86	272,000 1,209.92	61
120-10	1.500 38.10	1.000 25.40	0.875 22.23	0.437 11.10	0.187 4.75	18.260 463.80	18.120 460.25	1.789 45.44	1.230 31.24	1.425 36.20	36.830 54.81	340,000 1,512.39	61
140	1.750 44.45	1.000 25.40	1.000 25.40	0.500 12.70	0.219 5.56	2.310 58.67	2.140 54.36	- -	1.435 36.45	1.663 42.24	5.000 7.44	46,000 204.62	62
140-2	1.750 44.45	1.000 25.40	1.000 25.40	0.500 12.70	0.219 5.56	4.240 107.70	4.070 103.38	1.924 48.87	1.435 36.45	1.663 42.24	9.650 14.36	92,000 409.24	62
140-3	1.750 44.45	1.000 25.40	1.000 25.40	0.500 12.70	0.219 5.56	6.160 156.46	6.000 152.40	1.924 48.87	1.435 36.45	1.663 42.24	14.300 21.28	138,000 613.85	62
140-4	1.750 44.45	1.000 25.40	1.000 25.40	0.500 12.70	0.219 5.56	8.090 205.49	7.930 201.42	1.924 48.87	1.435 36.45	1.663 42.24	18.950 28.20	184,000 818.47	62
140-6	1.750 44.45	1.000 25.40	1.000 25.40	0.500 12.70	0.219 5.56	11.940 303.28	11.780 299.21	1.924 48.87	1.435 36.45	1.663 42.24	28.250 42.04	276,000 1,227.71	62
160	2.000 50.80	1.250 31.75	1.125 28.58	0.562 14.27	0.250 6.35	2.730 69.34	2.540 64.52	- -	1.640 41.66	1.900 48.26	6.530 9.72	58,000 258.00	63
160-2	2.000 50.80	1.250 31.75	1.125 28.58	0.562 14.27	0.250 6.35	5.040 128.02	4.850 123.19	2.305 58.55	1.640 41.66	1.900 48.26	12.830 19.09	116,000 515.99	63
160-3	2.000 50.80	1.250 31.75	1.125 28.58	0.562 14.27	0.250 6.35	7.350 186.69	7.160 181.86	2.305 58.55	1.640 41.66	1.900 48.26	19.030 28.32	174,000 773.99	63
160-4	2.000 50.80	1.250 31.75	1.125 28.58	0.562 14.27	0.250 6.35	9.660 245.36	9.470 240.54	2.305 58.55	1.640 41.66	1.900 48.26	25.600 38.10	232,000 1,031.99	63
160-6	2.000 50.80	1.250 31.75	1.125 28.58	0.562 14.27	0.250 6.35	14.270 362.46	14.090 357.89	2.305 58.55	1.640 41.66	1.900 48.26	37.780 56.22	348,000 1,547.98	63
180	2.250 57.15	1.406 35.72	1.406 35.71	0.687 17.45	0.281 7.14	3.150 80.01	2.880 73.15	- -	1.845 46.86	2.138 54.31	9.060 13.48	76,000 338.06	64
180-2	2.250 57.15	1.406 35.72	1.406 35.71	0.687 17.45	0.281 7.14	5.750 146.05	5.480 139.19	2.592 65.84	1.845 46.86	2.138 54.31	17.670 26.30	152,000 676.13	64
180-3	2.250 57.15	1.406 35.72	1.406 35.71	0.687 17.45	0.281 7.14	8.340 211.84	8.070 204.98	2.592 65.84	1.845 46.86	2.138 54.31	26.200 38.99	228,000 1,014.19	64

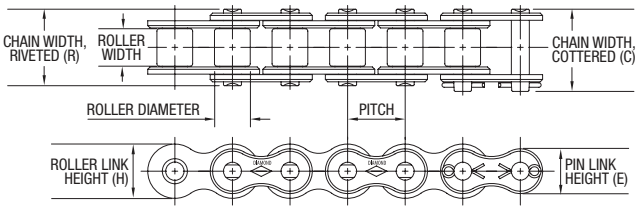
*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

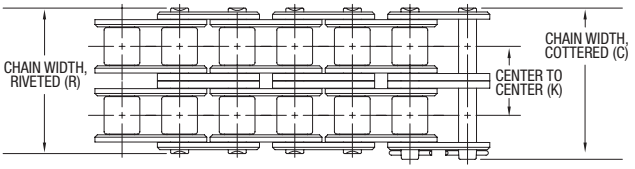
ASME/ANSI Standard Series Chain
#200-240 Pitch: Single and Multiple Strand

American Petroleum Institute 7F-0003

Single Strand



Multiple Strand (-X suffix)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
200	2.500 63.50	1.500 38.10	1.562 39.67	0.781 19.84	0.312 7.92	3.440 87.38	3.120 79.25	- -	2.050 52.07	2.375 60.33	10.650 15.85	95,000 422.58	65
200-2	2.500 63.50	1.500 38.10	1.562 39.67	0.781 19.84	0.312 7.92	6.260 159.00	5.940 150.88	2.817 71.55	2.050 52.07	2.375 60.33	21.500 32.00	190,000 845.16	65
200-3	2.500 63.50	1.500 38.10	1.562 39.67	0.781 19.84	0.312 7.92	9.080 230.63	8.760 222.50	2.817 71.55	2.050 52.07	2.375 60.33	32.300 48.07	285,000 1,267.74	65
200-4	2.500 63.50	1.500 38.10	1.562 39.67	0.781 19.84	0.312 7.92	11.900 302.26	11.580 294.13	2.817 71.55	2.050 52.07	2.375 60.33	42.900 63.84	380,000 1,690.32	65
200-6	2.500 63.50	1.500 38.10	1.562 39.67	0.781 19.84	0.312 7.92	17.520 445.01	17.210 437.13	2.817 71.55	2.050 52.07	2.375 60.33	64.500 95.99	570,000 2,535.49	65
240	3.000 76.20	1.875 47.63	1.875 47.63	0.937 23.80	0.375 9.53	4.320 109.73	3.830 97.28	- -	2.422 61.52	2.806 71.27	17.030 25.34	157,600 701.04	66
240-2	3.000 76.20	1.875 47.63	1.875 47.63	0.937 23.80	0.375 9.53	7.770 197.36	7.270 184.66	3.458 87.83	2.422 61.52	2.806 71.27	33.440 49.76	315,200 1,402.08	66
240-3	3.000 76.20	1.875 47.63	1.875 47.63	0.937 23.80	0.375 9.53	11.230 197.36	10.730 184.66	3.458 87.83	2.422 61.52	2.806 71.27	49.770 49.76	472,800 2,103.12	66

*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

ASME/ANSI Heavy Series Chain

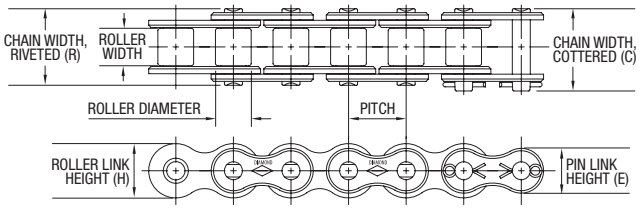
#60H-120H Pitch: Single and Multiple Strand

Heavy series chain utilize linkplates with the thickness of the next larger size chain. The thicker linkplate material provides an increase in fatigue resistance for drives subject to heavy shock loads, multiple stops/starts, or reversing.

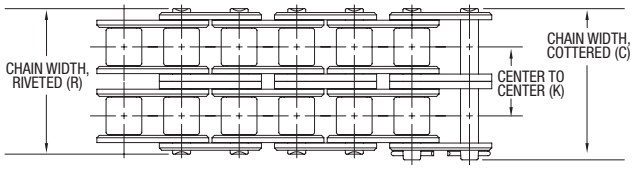
Diamond Heavy Series chains are built to ASME/ANSI B29.1 standards.

All Heavy Series chain meets API (American Petroleum Institute) requirements.

Single Strand



Multiple Strand (-X suffix)



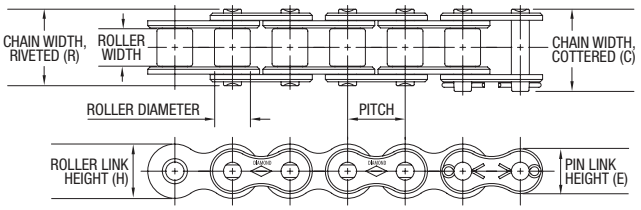
ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
60H	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**1.240** 31.50	**1.170** 29.72	**-** -	**0.615** 15.62	**0.713** 18.11	**1.180** 1.76	**8,500** 37.81	**67**
60H-2	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**2.270** 57.66	**2.200** 55.88	**1.028** 26.11	**0.615** 15.62	**0.713** 18.11	**2.330** 3.47	**17,000** 75.62	**67**
60H-3	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**3.310** 84.07	**3.240** 82.30	**1.028** 26.11	**0.615** 15.62	**0.713** 18.11	**3.470** 5.16	**25,500** 113.43	**67**
60H-4	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**4.340** 110.24	**4.260** 108.20	**1.028** 26.11	**0.615** 15.62	**0.713** 18.11	**4.610** 6.86	**34,000** 151.24	**67**
80H	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**-** -	**0.820** 20.83	**0.950** 24.13	**2.020** 3.01	**14,500** 64.50	**68**
80H-2	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.156** 3.96	**2.840** 72.14	**2.720** 69.09	**1.283** 32.59	**0.820** 20.83	**0.950** 24.13	**3.930** 5.85	**29,000** 129.00	**68**
80H-3	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.156** 3.96	**4.140** 105.16	**4.020** 102.11	**1.283** 32.59	**0.820** 20.83	**0.950** 24.13	**5.920** 8.81	**43,500** 193.50	**68**
80H-4	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.156** 3.96	**5.420** 137.67	**5.300** 134.62	**1.283** 32.59	**0.820** 20.83	**0.950** 24.13	**7.870** 11.71	**58,000** 258.00	**68**
100H	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.187** 4.75	**1.860** 47.24	**1.740** 44.20	**-** -	**1.025** 26.04	**1.188** 30.18	**2.820** 4.20	**24,000** 106.76	**69**
100H-2	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.187** 4.75	**3.410** 86.61	**3.280** 83.31	**1.539** 39.09	**1.025** 26.04	**1.188** 30.18	**5.580** 8.30	**48,000** 213.51	**69**
100H-3	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.187** 4.75	**4.950** 125.73	**4.820** 122.43	**1.539** 39.09	**1.025** 26.04	**1.188** 30.18	**8.320** 12.38	**72,000** 320.27	**69**
100H-4	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.187** 4.75	**6.490** 164.85	**6.370** 161.80	**1.539** 39.09	**1.025** 26.04	**1.188** 30.18	**11.040** 16.43	**96,000** 427.03	**69**
120H	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.219** 5.56	**2.270** 57.66	**2.130** 54.10	**-** -	**1.230** 31.24	**1.425** 36.20	**4.080** 6.07	**34,000** 151.24	**70**
120H-2	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.219** 5.56	**4.200** 106.68	**4.060** 103.12	**1.924** 48.87	**1.230** 31.24	**1.425** 36.20	**8.040** 11.96	**68,000** 302.48	**70**
120H-3	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.219** 5.56	**6.130** 155.70	**5.990** 152.15	**1.924** 48.87	**1.230** 31.24	**1.425** 36.20	**11.990** 17.84	**102,000** 453.72	**70**
120H-4	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.219** 5.56	**8.060** 204.72	**7.920** 201.17	**1.924** 48.87	**1.230** 31.24	**1.425** 36.20	**15.940** 23.72	**136,000** 604.96	**70**
120H-6	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.219** 5.56	**11.910** 302.51	**11.770** 298.96	**1.924** 48.87	**1.230** 31.24	**1.425** 36.20	**23.840** 35.48	**204,000** 907.44	**70**

*** Maximum value listed.*

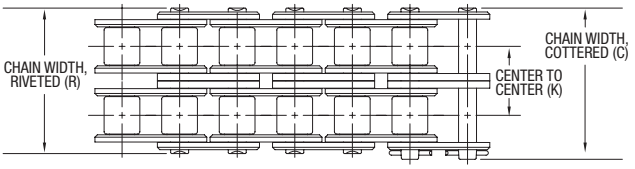
† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

ASME/ANSI Heavy Series Chain
#140H-240H Pitch: Single and Multiple Strand

Single Strand



Multiple Strand (-X suffix)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
140H	**1.750** 44.45	**1.000** 25.40	**1.000** 25.40	**0.500** 12.70	**0.250** 6.35	**2.440** 61.98	**2.280** 57.91	**-** -	**1.435** 36.45	**1.663** 42.24	**5.400** 8.04	**46,000** 204.62	**71**
140H-2	**1.750** 44.45	**1.000** 25.40	**1.000** 25.40	**0.500** 12.70	**0.250** 6.35	**4.500** 114.30	**4.340** 110.24	**2.055** 52.20	**1.435** 36.45	**1.663** 42.24	**10.650** 15.85	**92,000** 409.24	**71**
140H-3	**1.750** 44.45	**1.000** 25.40	**1.000** 25.40	**0.500** 12.70	**0.250** 6.35	**6.560** 166.62	**6.39** 162.31	**2.055** 52.20	**1.435** 36.45	**1.663** 42.24	**15.900** 23.66	**138,000** 613.85	**71**
140H-4	**1.750** 44.45	**1.000** 25.40	**1.000** 25.40	**0.500** 12.70	**0.250** 6.35	**8.620** 218.95	**8.450** 214.63	**2.055** 52.20	**1.435** 36.45	**1.663** 42.24	**21.100** 31.40	**184,000** 818.47	**71**
160H	**2.000** 50.80	**1.250** 31.75	**1.125** 28.58	**0.562** 14.27	**0.281** 7.14	**2.860** 72.64	**2.680** 68.07	**-** -	**1.640** 41.66	**1.900** 48.26	**7.030** 10.46	**58,000** 258.00	**72**
160H-2	**2.000** 50.80	**1.250** 31.75	**1.125** 28.58	**0.562** 14.27	**0.281** 7.14	**5.300** 134.62	**5.120** 130.05	**2.436** 61.87	**1.640** 41.66	**1.900** 48.26	**13.880** 20.66	**116,000** 515.99	**72**
160H-3	**2.000** 50.80	**1.250** 31.75	**1.125** 28.58	**0.562** 14.27	**0.281** 7.14	**7.750** 196.85	**7.560** 192.02	**2.436** 61.87	**1.640** 41.66	**1.900** 48.26	**20.680** 30.78	**174,000** 773.99	**72**
160H-4	**2.000** 50.80	**1.250** 31.75	**1.125** 28.58	**0.562** 14.27	**0.281** 7.14	**10.170** 258.32	**10.000** 254.00	**2.436** 61.87	**1.640** 41.66	**1.900** 48.26	**27.620** 41.10	**232,000** 1,031.99	**72**
180H	**2.250** 57.15	**1.406** 35.72	**1.406** 35.71	**0.687** 17.45	**0.312** 7.92	**3.280** 83.31	**3.010** 76.45	**-** -	**1.845** 46.86	**2.138** 54.31	**9.590** 14.27	**76,000** 338.06	**73**
180H-2	**2.250** 57.15	**1.406** 35.72	**1.406** 35.71	**0.687** 17.45	**0.312** 7.92	**6.000** 152.40	**5.730** 145.54	**2.723** 69.16	**1.845** 46.86	**2.138** 54.31	**18.860** 28.07	**152,000** 676.13	**73**
180H-3	**2.250** 57.15	**1.406** 35.72	**1.406** 35.71	**0.687** 17.45	**0.312** 7.92	**8.730** 221.74	**8.460** 214.88	**2.723** 69.16	**1.845** 46.86	**2.138** 54.31	**28.140** 41.88	**228,000** 1,014.19	**73**
200H	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.781** 19.84	**0.375** 9.53	**3.710** 94.23	**3.390** 86.11	**-** -	**2.050** 52.07	**2.375** 60.33	**13.380** 19.91	**110,000** 489.30	**74**
200H-2	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.781** 19.84	**0.375** 9.53	**6.790** 172.47	**6.480** 164.59	**3.083** 78.31	**2.050** 52.07	**2.375** 60.33	**26.380** 39.26	**220,000** 978.61	**74**
200H-3	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.781** 19.84	**0.375** 9.53	**9.880** 250.95	**9.560** 242.82	**3.083** 78.31	**2.050** 52.07	**2.375** 60.33	**40.850** 60.79	**330,000** 1,467.91	**74**
240H	**3.000** 76.20	**1.875** 47.63	**1.875** 47.63	**0.937** 23.80	**0.500** 12.70	**4.850** 123.19	**4.350** 110.49	**-** -	**2.422** 61.52	**2.806** 71.27	**21.080** 31.37	**157,600** 701.04	**75**

*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

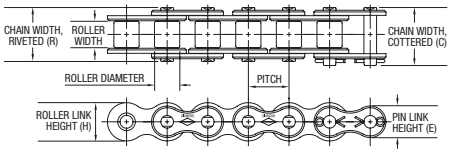
ASME/ANSI High Strength Drive Chain
#60HS-240HS Pitch: Single and Multiple Strand

Diamond High Strength drive chain is dimensionally identical to the Heavy Series drive chain but built with medium carbon through-hardened pins for a higher tensile strength, working load, and fatigue strength (when compared to a Heavy Series chain) in high load, lifting, or pulsating applications.

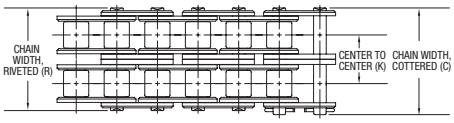
For added performance in high load fatigue applications, Diamond HS Oval Contour chain (identifiable by an “OC” suffix in the part number) utilizes full oval contour linkplates for greater linkplate rigidity.

Note: Offset links and slip fit connecting links are not recommended for any high strength drive chain.

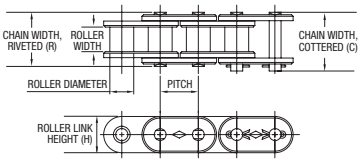
Single Strand



Multiple Strand (-X suffix)



Oval Contour (OC suffix)



Diamond Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength†
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
60HS	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**1.240** 31.50	**1.170** 29.72	**-** -	**0.615** 15.62	**0.713** 18.11	**1.180** 1.76	**12,000** 53.38
60HSOC	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**1.240** 31.50	**1.170** 29.72	**-** -	**0.713** 18.11	**0.713** 18.11	**1.420** 2.11	**12,000** 53.38
80HS	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**-** -	**0.820** 20.83	**0.950** 24.13	**2.020** 3.01	**21,000** 93.41
80HSOC	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**-** -	**0.950** 24.13	**0.950** 24.13	**2.380** 3.54	**21,000** 93.41
100HS	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.187** 4.75	**1.860** 47.24	**1.740** 44.20	**-** -	**1.025** 26.04	**1.188** 30.18	**2.820** 4.20	**30,000** 133.45
100HSOC	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.187** 4.75	**1.860** 47.24	**1.740** 44.20	**-** -	**1.188** 30.18	**1.188** 30.18	**3.290** 4.90	**30,000** 133.45
120HS	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.219** 5.56	**2.270** 57.66	**2.130** 54.10	**-** -	**1.230** 31.24	**1.425** 36.20	**4.080** 6.07	**41,000** 182.38
140HS	**1.750** 44.45	**1.000** 25.40	**1.000** 25.40	**0.500** 12.70	**0.250** 6.35	**2.440** 61.98	**2.280** 57.91	**-** -	**1.435** 36.45	**1.663** 42.24	**5.400** 8.04	**56,000** 249.10
160HS	**2.000** 50.80	**1.250** 31.75	**1.125** 28.58	**0.562** 14.27	**0.281** 7.14	**2.860** 72.64	**2.680** 68.07	**-** -	**1.640** 41.66	**1.900** 48.26	**7.030** 10.46	**70,000** 311.38
180HS	**2.250** 57.15	**1.406** 35.72	**1.406** 35.71	**0.687** 17.45	**0.312** 7.92	**3.280** 83.31	**3.010** 76.45	**-** -	**1.845** 46.86	**2.138** 54.31	**9.590** 14.27	**95,000** 422.58
200HS	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.781** 19.84	**0.375** 9.53	**3.710** 94.23	**3.390** 86.11	**-** -	**2.050** 52.07	**2.375** 60.33	**13.750** 20.46	**136,000** 604.96
200HS-2	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.781** 19.84	**0.375** 9.53	**6.790** 172.47	**6.480** 164.59	**3.083** 78.31	**2.050** 52.07	**2.375** 60.33	**26.380** 39.26	**270,000** 1,201.02
200HS-3	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.781** 19.84	**0.375** 9.53	**9.880** 250.95	**9.560** 242.82	**3.083** 78.31	**2.050** 52.07	**2.375** 60.33	**40.850** 60.79	**405,000** 1,801.53
240HS	**3.000** 76.20	**1.875** 47.63	**1.875** 47.63	**0.937** 23.80	**0.500** 12.70	**4.850** 123.19	**4.350** 110.49	**-** -	**2.422** 61.52	**2.806** 71.27	**21.080** 31.37	**157,600** 701.04

*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

Hoist and Lift Chain
#60-120 Pitch

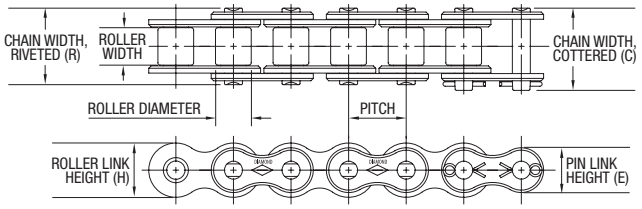
Hoist Chain is dimensionally identical to the Standard Series chain but built with medium carbon through-hardened pins for higher working load capacity and resistance to fatigue. Wear life may be slightly reduced due to the material and heat treatment of the chain pins.

Rollerless Lift Chain is designed for tension linkages where frequent articulation requires the bearing area of the chain to be increased. These chains are dimensionally identical to the Standard Series chain except without rollers.

See the following page for Hoist and Lift Chain terminal fitting information.

Note: Offset links and slip fit connecting links are not available for hoist or lift chains.

Single Strand



Diamond Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	E**	H**	Avg. Weight	Avg. Tensile Strength
	in mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**lbs/ft** kg/m	**lbf** kN
Hoist Chain											
625	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**0.512** 13.00	**0.594** 15.09	**0.680** 1.01	**8,000** 35.59
750	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**1.110** 28.19	**1.040** 26.42	**0.615** 15.62	**0.713** 18.11	**0.990** 1.47	**10,500** 46.71
Rollerless Lift Chain											
55S	**0.625** 15.88	**0.375** 9.53	***.280** 7.11	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**0.512** 13.00	**0.594** 15.09	**0.550** 0.82	**8,000** 35.59
65S	**0.750** 19.05	**0.500** 12.70	***.332** 8.43	**0.234** 5.94	**0.094** 2.39	**1.110** 28.19	**1.040** 26.42	**0.615** 15.62	**0.713** 18.11	**0.810** 1.21	**10,500** 46.71
85	**1.000** 25.40	**0.625** 15.88	***.442** 11.23	**0.312** 7.92	**0.125** 3.18	**1.440** 36.58	**1.320** 33.53	**0.820** 20.83	**0.950** 24.13	**1.410** 2.10	**14,500** 64.50
105	**1.250** 31.75	**0.750** 19.05	***.532** 13.51	**0.375** 9.53	**0.156** 3.96	**1.730** 43.94	**1.610** 40.89	**1.025** 26.04	**1.188** 30.18	**2.080** 3.10	**24,000** 106.76

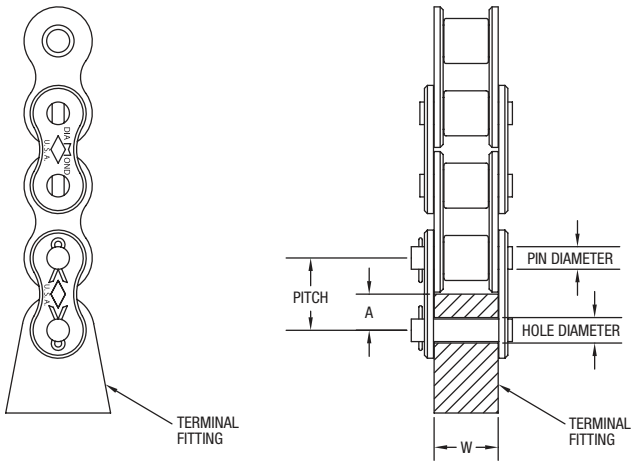
** Chain is rollerless. Dimension shown is bushing diameter.*

*** Maximum value listed.*

Note: 55S, 65S assembled with medium carbon through-hardened pins

Hoist and Lift Chain
Terminal Fittings

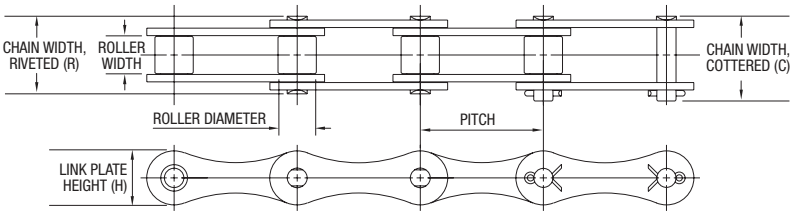
Diamond Chain does not provide terminal fittings. We recommend that fittings be made of through-hardened steel, heat treated to HRC 40-45. They should be machined accurately to ensure proper mating with chain linkplates and to provide uniform loading across the width of the chain. Chains should always 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.



Diamond Number	Pitch	Block Width (W)	Pin Diameter	Hole Diameter	A (max)
	in mm	in mm	in mm	in mm	in mm
60H or HS	**0.750** 19.05	**0.764** 19.41	**0.234** 7.11	**0.237** 6.02	**0.375** 9.53
80H or HS	**1.000** 25.40	**0.955** 24.26	**0.312** 8.43	**0.315** 8.00	**0.500** 12.70
100H or HS	**1.250** 31.75	**1.141** 28.98	**0.375** 11.23	**0.378** 9.60	**0.625** 15.88
120H or HS	**1.500** 38.10	**1.458** 37.03	**0.437** 13.51	**0.440** 11.18	**0.750** 19.05
140H or HS	**1.750** 44.45	**1.523** 38.68	**0.500** 15.75	**0.503** 12.78	**0.875** 22.23
160H or HS	**2.000** 50.80	**1.838** 46.69	**0.562** 8.43	**0.565** 14.35	**1.000** 25.40
180H or HS	**2.250** 57.15	**2.058** 52.27	**0.687** 11.23	**0.690** 17.53	**1.125** 28.58
200H or HS	**2.500** 63.50	**2.285** 58.04	**0.781** 13.51	**0.784** 19.91	**1.250** 31.75
625	**0.625** 15.88	**0.542** 13.77	**0.200** 15.75	**0.203** 5.16	**0.312** 7.92
750	**0.750** 19.05	**0.696** 17.68	**0.234** 8.43	**0.237** 6.02	**0.375** 9.53
55S	**0.625** 15.88	**0.542** 13.77	**0.200** 11.23	**0.203** 5.16	**0.312** 7.92
65S	**0.750** 19.05	**0.696** 17.68	**0.234** 13.51	**0.237** 6.02	**0.375** 9.53
85	**1.000** 25.40	**0.886** 22.50	**0.312** 15.75	**0.315** 8.00	**0.500** 12.70
105	**1.250** 31.75	**1.076** 27.33	**0.375** 8.43	**0.378** 9.60	**0.625** 15.88

ASME/ANSI Double Pitch Power Transmission Series Chain
#2040-2080 Pitch

Double Pitch Power Transmission roller chain utilizes figure eight style linkplates with a pitch twice that of the standard series chains. Typical uses for these chains include light load drives such as those in agricultural applications.



ASME/ ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H*	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
2040	1.000 25.40	0.313 7.94	0.312 7.92	0.156 3.96	0.060 1.52	0.760 19.30	0.680 17.27	0.475 12.07	0.280 0.42	3,700 16.46	76
2050	1.250 31.75	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	0.920 23.37	0.840 21.34	0.594 15.09	0.520 0.77	6,100 27.13	77
2060	1.500 38.10	0.500 12.70	0.469 7.11	0.234 5.94	0.094 2.39	1.110 28.19	1.050 26.67	0.712 18.08	0.720 1.07	8,500 37.81	78
2080	2.000 50.80	0.625 15.88	0.625 8.43	0.312 7.92	0.125 3.18	1.440 36.58	1.320 33.53	0.950 24.13	1.130 1.68	14,500 64.50	79

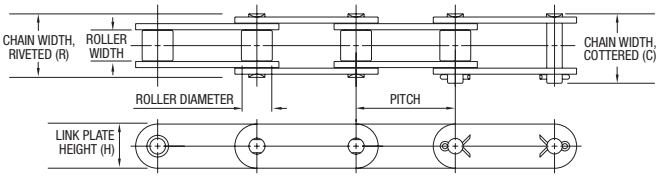
** Nominal value shown.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

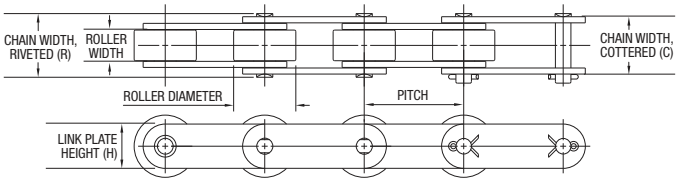
ASME/ANSI Double Pitch Conveyor Series Chain
C2040-C2160H Pitch

Double Pitch Conveyor roller chain utilizes oval contour linkplates and can be produced with either standard or oversized rollers. Typical uses for these chains are conveyor applications where loads are low and speeds are moderate. These chains can be produced with a variety of attachments. Optional oversized rollers (C2XX2 nomenclature) extend above and below the linkplates to produce a rolling rather than sliding action, thus minimizing friction and power requirements.

Standard Roller (C2XX0)



Oversized Roller (C2XX2)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H*	Avg. Weight	Avg. Tensile Strength†
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
Standard Roller										
C2040	**1.000** 25.40	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.760** 19.30	**0.680** 17.27	**0.475** 12.07	**0.340** 0.51	**3,700** 16.46
C2050	**1.250** 31.75	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.920** 23.37	**0.840** 21.34	**0.594** 15.09	**0.580** 0.86	**6,100** 27.13
C2060H	**1.500** 38.10	**0.500** 12.70	**0.469** 7.11	**0.234** 5.94	**0.125** 3.18	**1.250** 31.75	**1.180** 29.97	**0.712** 18.08	**1.050** 1.56	**8,500** 37.81
C2080H	**2.000** 50.80	**0.625** 15.88	**0.625** 8.43	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**0.950** 24.13	**1.400** 2.08	**14,500** 64.50
C2100H	**2.500** 63.50	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.187** 4.75	**1.860** 47.24	**1.740** 44.20	**1.187** 30.15	**2.480** 3.69	**24,000** 106.76
C2120H	**3.000** 76.20	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.219** 5.56	**2.270** 57.66	**2.130** 54.10	**1.425** 36.20	**3.600** 5.36	**34,000** 151.24
C2160H	**4.000** 101.60	**1.250** 31.75	**1.125** 7.11	**0.562** 14.27	**0.281** 7.14	**2.860** 72.64	**2.680** 68.07	**1.900** 48.26	**6.180** 9.20	**58,000** 258.00
Oversized Roller										
C2042	**1.000** 25.40	**0.313** 7.94	**0.625** 15.88	**0.156** 3.96	**0.060** 1.52	**0.760** 19.30	**0.680** 17.27	**0.475** 12.07	**0.500** 0.74	**3,700** 16.46
C2052	**1.250** 31.75	**0.375** 9.53	**0.750** 19.05	**0.200** 5.08	**0.080** 2.03	**0.920** 23.37	**0.840** 21.34	**0.594** 15.09	**0.810** 1.21	**6,100** 27.13
C2062H	**1.500** 38.10	**0.500** 12.70	**0.875** 7.11	**0.234** 5.94	**0.125** 3.18	**1.250** 31.75	**1.180** 29.97	**0.712** 18.08	**1.420** 2.11	**8,500** 37.81
C2082H	**2.000** 50.80	**0.625** 15.88	**1.125** 8.43	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**0.950** 24.13	**2.130** 3.17	**14,500** 64.50
C2102H	**2.500** 63.50	**0.750** 19.05	**1.562** 39.67	**0.375** 9.53	**0.187** 4.75	**1.860** 47.24	**1.740** 44.20	**1.187** 30.15	**3.510** 5.22	**24,000** 106.76
C2122H	**3.000** 76.20	**1.000** 25.40	**1.750** 44.45	**0.437** 11.10	**0.219** 5.56	**2.270** 57.66	**2.130** 54.10	**1.425** 36.20	**5.480** 8.16	**34,000** 151.24
C2162H	**4.000** 101.60	**1.250** 31.75	**2.250** 7.11	**0.562** 14.27	**0.281** 7.14	**2.860** 72.64	**2.680** 68.07	**1.900** 48.26	**9.340** 13.90	**58,000** 258.00

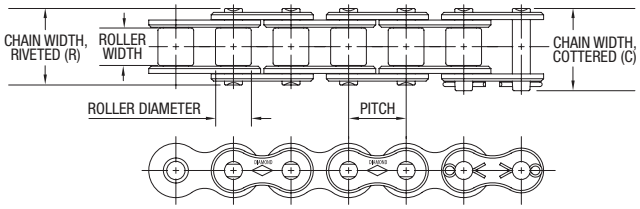
** Nominal value shown.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

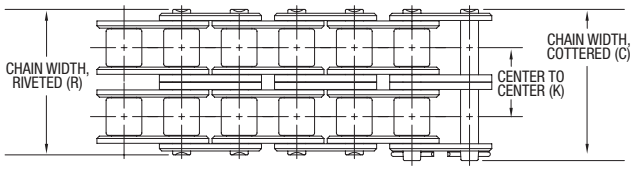
Non-Standard Series Chain

Diamond Chain Company has been in existence longer than the ASME/ANSI standards for roller chain. While many of the early chains produced by Diamond were incorporated into the new ASME/ANSI standards, some ultimately were not. Diamond Chain Company recognizes that a considerable amount of industrial equipment still utilizes these unique chains, and continues to support these non-standard models listed below.

Single Strand



Multiple Strand (-X suffix)



Diamond Number	Other ID	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	Avg. Weight	Avg. Tensile Strength†
		in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
867	BS #7	0.500 12.70	0.313 7.94	0.335 7.11	0.174 4.42	0.060 1.52	0.730 18.54	0.680 17.27	- -	0.430 0.64	4,200 18.68
148 x 1/4	BS #10	0.625 15.88	0.250 6.35	0.400 8.43	0.200 5.08	0.080 2.03	0.730 18.54	0.670 17.02	- -	0.590 0.88	6,600 29.36
148 x 5/16		0.625 15.88	0.188 4.76	0.400 11.23	0.200 5.08	0.080 2.03	0.860 21.84	0.740 18.80	- -	0.640 0.95	6,600 29.36
433 x 3/8		0.750 19.05	0.375 9.53	0.469 13.51	0.234 5.94	0.094 2.39	0.980 24.89	0.910 23.11	- -	0.910 1.35	8,500 37.81
435 x 3/8		1.000 25.40	0.375 0.50	0.562 15.75	0.281 7.14	0.125 3.18	1.140 28.96	1.050 26.67	- -	1.110 1.65	9,000 40.03
435 x 1/2		1.000 25.40	0.500 12.70	0.562 8.43	0.281 7.14	0.125 3.18	1.270 32.26	1.180 29.97	- -	1.210 1.80	9,000 40.03
472		1.500 38.10	0.750 19.05	0.875 11.23	0.437 11.10	0.187 4.75	1.860 47.24	1.720 43.69	- -	3.400 5.06	34,000 151.24
472-2		1.500 38.10	0.750 19.05	0.875 13.51	0.437 11.10	0.187 4.75	3.450 87.63	3.300 83.82	1.550 39.37	6.760 10.06	68,000 302.48
472-3		1.500 38.10	0.750 19.05	0.875 15.75	0.437 11.10	0.187 4.75	5.000 127.00	4.850 123.19	1.550 39.37	10.080 15.00	102,000 453.72
472-4		1.500 38.10	0.750 19.05	0.875 13.51	0.437 11.10	0.187 4.75	6.550 166.37	6.410 162.81	1.550 39.37	13.400 19.94	136,000 604.96
264	64S	2.500 63.50	1.500 38.10	1.562 15.75	0.875 22.23	0.375 9.53	3.710 94.23	3.390 86.11	- -	13.680 20.36	148,500 660.56
264-3	64S-3	2.500 63.50	1.500 38.10	1.562 8.43	0.875 22.23	0.375 9.53	9.880 250.95	9.560 242.82	3.083 78.31	40.920 60.90	445,500 1,981.68

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

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Moisture and Corrosion Resistant Chain



AP Series
Stainless Steel
Roller Chain

Multiple options are available for Moisture and Corrosion Resistant chain. Proper selection depends on the requirements of the specific application.

Moisture resistant chain: Recommended for applications with high humidity, saltwater, or water exposure/wash down. Because water is the principle element of concern, a plated carbon steel chain is the recommended option as it provides superior strength and wear life, as well as lower cost, when compared to stainless steel. Two plating options are available:

Nickel Plating	Provides good protection against water or humidity. Utilizes a nickel coating applied to each part prior to assembly.
Diamond ACE Plating	Provides superior protection against water, salt water, and humidity. May offer limited resistance to chemicals if application does not allow stainless steel. Utilizes a proprietary ACE (Anti-Corrosion Exterior) plating applied to each part prior to assembly.

Standard carbon steel lubrication rated for 32°F to 350°F (0°C to 177°C). See “Ordering Information” for high temperature or low temperature lubrication options.

Corrosion resistant chain: Recommended for applications involving exposure to chemicals or acids. Stainless steel is the recommended base material in these applications due to its resistance to corrosion; however, because stainless steel is softer than carbon steel the strength and wear performance will be reduced. Multiple stainless steel chain options are available:

AP Series	Diamond Chain's standard stainless steel product, the AP series provides the best balance between wear performance and corrosion resistance. Well suited for food processing, AP Series chain uses 300 series (austenic) stainless components with 600 series precipitation hardened stainless steel pins. Provided unless otherwise specified.
300 Series	Designed specifically for applications requiring exceptional corrosion resistance, low magnetic permeability, or that the chain be “non sparking.” Utilizes only 300 series stainless steel components and pins; wear performance is the lowest of the stainless steel material options.
400 Series	400 series is an application specific chain material, typically used only when there is exposure to select chemicals. Reference the corrosion resistance tables in this section for applicability.

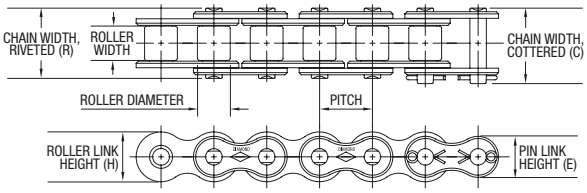
Stainless steel chain is provided with no lubrication and is rated for 600°F (316°C) in all sizes, up to 900°F (482°C) ANSI #60 and larger. See “Ordering Information” for optional food grade lubricants.

Moisture Resistant Chain
Nickel Plated

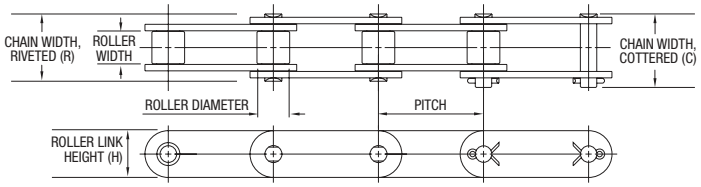
The typical plating used in the roller chain industry, a nickel plating is applied to each part prior to assembly which establishes a corrosion resistant barrier to prevent rust from occurring. However, product can rust if the nickel barrier is scratched or damaged. Offers good protection against water or humidity, poor protection from salt water.

Please note that nickel plating is an available option on all carbon steel chains; specify by adding “NP” to the part number (e.g. 60NP). The list below is a reference that details the most popular nickel plated chain part numbers.

Standard Chain



Conveyor Chain (C20X0)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
25NP	**0.250** 6.35	**0.125** 3.18	***.130** 3.30	**0.090** 2.29	**0.030** 0.76	**0.370** 9.40	**0.340** 8.64	**0.205** 5.21	**0.238** 6.05	**0.085** 0.13	**875** 3.89	**53**
35NP	**0.375** 9.53	**0.188** 4.76	***.200** 5.08	**0.141** 3.58	**0.050** 1.27	**0.560** 14.22	**0.500** 12.70	**0.308** 7.82	**0.356** 9.04	**0.220** 0.33	**2,100** 9.34	**54**
40NP	**0.500** 12.70	**0.313** 7.94	**0.301** 7.65	**0.156** 3.96	**0.060** 1.52	**0.720** 18.29	**0.670** 17.02	**0.410** 10.41	**0.475** 12.07	**0.420** 0.63	**4,000** 17.79	**55**
50NP	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**0.512** 13.00	**0.594** 15.09	**0.680** 1.01	**6,600** 29.36	**57**
60NP	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**1.110** 28.19	**1.040** 26.42	**0.615** 15.62	**0.713** 18.11	**0.970** 1.44	**8,500** 37.81	**58**
80NP	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.125** 3.18	**1.440** 36.58	**1.320** 33.53	**0.820** 20.83	**0.950** 24.13	**1.700** 2.53	**14,500** 64.50	**59**
100NP	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.156** 3.96	**1.730** 43.94	**1.610** 40.89	**1.025** 26.04	**1.188** 30.18	**2.500** 3.72	**24,000** 106.76	**60**
120NP	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.187** 4.75	**2.140** 54.36	**2.000** 50.80	**1.230** 31.24	**1.425** 36.20	**3.700** 5.51	**34,000** 151.24	**61**
C2040NP	**1.000** 25.40	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.760** 19.30	**0.680** 17.27	**-** -	**0.475** 12.07	**0.320** 0.48	**3,700** 16.46	**n/a**
C2050NP	**1.250** 31.75	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.920** 23.37	**0.840** 21.34	**-** -	**0.594** 15.09	**0.550** 0.82	**6,100** 27.13	**n/a**
C2060HNP	**1.500** 38.10	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**1.250** 31.75	**1.180** 29.97	**-** -	**0.712** 18.08	**0.970** 1.44	**8,500** 37.81	**n/a**
C2080HNP	**2.000** 50.80	**0.625** 15.88	**0.625** 8.43	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**-** -	**0.950** 24.13	**1.400** 2.08	**14,500** 84.50	**n/a**

** Chain is rollerless. Dimension shown is bushing diameter.*

*** Maximum value listed.*

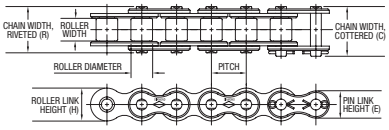
† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

Moisture Resistant Chain
Diamond ACE

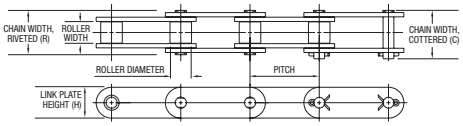
Diamond ACE (Anti-Corrosion Exterior) incorporates an electrically bonded specially formulated zinc-nickel alloy and non-hexavalent chromium coating that is applied to component parts prior to assembly. The plating serves as a protective barrier that oxidizes before the carbon steel base chain, thus preserving the chain's physical and structural integrity. As a result, the chain experiences superior protection over nickel plating - even if scratched or damaged. Excellent defense against water, salt water, and humidity. May offer limited resistance to chemicals if the application does not allow stainless steel.

Please note that ACE plating is an available option on all carbon steel chains; specify by adding "ACE" to the part number (e.g. 60ACE). The table below is a reference that contains the most popular ACE plated chain part numbers.

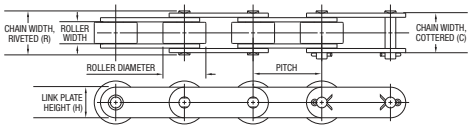
Standard Chain



Conveyor Chain (C20X0)



Oversized Roller Conveyor Chain (C20X2)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
40ACE	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.720** 18.29	**0.670** 17.02	**0.410** 10.41	**0.475** 12.07	**0.420** 0.63	**4,000** 17.79	**55**
50ACE	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**0.512** 13.00	**0.594** 15.09	**0.680** 1.01	**6,600** 29.36	**57**
60ACE	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**1.110** 28.19	**1.040** 26.42	**0.615** 15.62	**0.713** 18.11	**0.970** 1.44	**8,500** 37.81	**58**
80ACE	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.125** 3.18	**1.440** 36.58	**1.320** 33.53	**0.820** 20.83	**0.950** 24.13	**1.700** 2.53	**14,500** 64.50	**59**
C2040ACE	**1.000** 25.40	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.760** 19.30	**0.680** 17.27	**-** -	**0.475** 12.07	**0.340** 0.51	**3,700** 16.46	**n/a**
C2042ACE	**1.000** 25.40	**0.313** 7.94	**0.625** 15.88	**0.156** 3.96	**0.060** 1.52	**0.760** 19.30	**0.680** 17.27	**-** -	**0.475** 12.07	**0.340** 0.51	**3,700** 16.46	**n/a**
C2050ACE	**1.250** 31.75	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.920** 23.37	**0.840** 21.34	**-** -	**0.594** 15.09	**0.580** 0.86	**6,100** 27.13	**n/a**
C2052ACE	**1.250** 31.75	**0.375** 9.53	**0.750** 19.05	**0.200** 5.08	**0.080** 2.03	**0.920** 23.37	**0.840** 21.34	**-** -	**0.594** 15.09	**0.580** 0.86	**6,100** 27.13	**n/a**
C2060HACE	**1.500** 38.10	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**1.250** 31.75	**1.180** 29.97	**-** -	**0.712** 18.08	**1.050** 1.56	**8,500** 37.81	**n/a**
C2062HACE	**1.500** 38.10	**0.500** 12.70	**0.875** 22.23	**0.234** 5.94	**0.125** 3.18	**1.250** 31.75	**1.180** 29.97	**-** -	**0.712** 18.08	**1.050** 1.56	**8,500** 37.81	**n/a**
C2080HACE	**2.000** 50.80	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**-** -	**0.950** 24.13	**1.400** 2.08	**14,500** 64.50	**n/a**
C2082HACE	**2.000** 50.80	**0.625** 15.88	**1.125** 28.58	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**-** -	**0.950** 24.13	**1.400** 2.08	**14,500** 64.50	**n/a**

*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

Stainless Steel Chain
AP, 300, and 400 Series

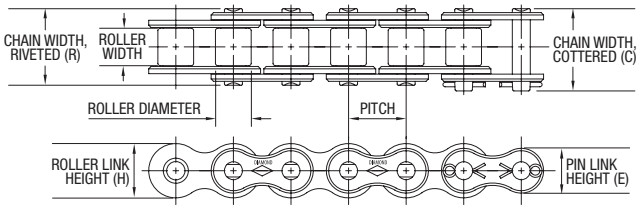
Stainless steel, because of its natural corrosion resistance, is recommended for applications involving exposure to chemicals or acids. However, stainless steel is softer than carbon steel so wear, fatigue, and tensile performance is reduced. Three different stainless steel materials are available; please see the section introduction and the corrosion tables at the back of the section for assistance in selecting the appropriate material. AP Series stainless is the most commonly used stainless steel material due to best combination of corrosion resistance and wear performance, followed by 300 Series. 400 Series is typically used only in special applications. AP Series is the default material for stainless steel chains; contact customer service if 300 or 400 Series is required. AP and 300 Series are approved for use as a food contact surface (FCS); 400 Series is not approved as a FCS. Operating temperature is not recommended to exceed 900°F (482°C) for ANSI #60 or larger, or 600°F (316°C) for smaller sizes.

AP Series: all components (except pins) 300 series (austenitic) stainless steel. Pins are precipitation hardened.

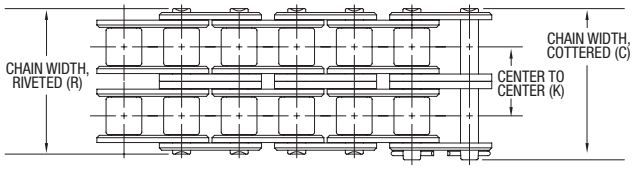
300 Series: all components (including pins) 300 series (austenitic) stainless steel.

400 Series: linkplates constructed from 300 series stainless steel; pins, bushings and rollers 400 series stainless steel.

Standard Chain



Multiple Strand Chain (-X suffix)



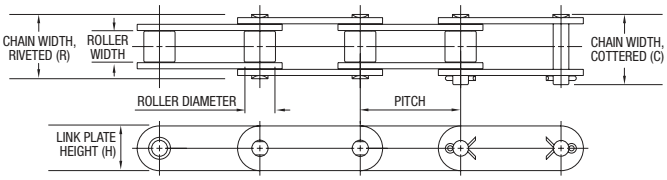
ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
47SS	**0.148** 3.75	**0.072** 1.83	***.090** 2.29	**0.062** 1.57	**0.015** 0.38	**0.250** 6.35	**0.220** 5.59	**-** -	**0.138** 3.51	**0.138** 3.51	**0.035** 0.05	**180** 0.80
25SS	**0.250** 6.35	**0.125** 3.18	***.130** 3.30	**0.090** 2.29	**0.030** 0.76	**0.370** 9.40	**0.340** 8.64	**-** -	**0.205** 5.21	**0.238** 6.05	**0.084** 0.13	**700** 3.11
25-2SS	**0.250** 6.35	**0.125** 3.18	***.130** 3.30	**0.090** 2.29	**0.030** 0.76	**0.630** 16.00	**0.590** 14.99	**0.252** 6.40	**0.205** 5.21	**0.238** 6.05	**0.163** 0.24	**1,400** 6.23
35SS	**0.375** 9.53	**0.188** 4.76	***.200** 5.08	**0.141** 3.58	**0.050** 1.27	**0.560** 14.22	**0.500** 12.70	**-** -	**0.308** 7.82	**0.356** 9.04	**0.210** 0.31	**1,700** 7.56
40SS	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.720** 18.29	**0.670** 17.02	**-** -	**0.410** 10.41	**0.475** 12.07	**0.410** 0.61	**3,000** 13.34
40-2SS	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**1.290** 32.77	**1.240** 31.50	**0.566** 14.38	**0.410** 10.41	**0.475** 12.07	**0.800** 1.19	**6,000** 26.69
41SS	**0.500** 12.70	**0.250** 6.35	**0.306** 7.77	**0.141** 3.58	**0.050** 1.27	**0.650** 16.51	**0.570** 14.48	**-** -	**0.310** 7.87	**0.383** 9.73	**0.280** 0.42	**1,700** 7.56
50SS	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**-** -	**0.512** 13.00	**0.594** 15.09	**0.680** 1.01	**4,700** 20.91
50-2SS	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**1.600** 40.64	**1.550** 39.37	**0.713** 18.11	**0.521** 13.00	**0.594** 15.09	**1.320** 1.96	**9,400** 41.81
60SS	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**1.110** 28.19	**1.040** 26.42	**-** -	**.0615** 15.52	**0.713** 18.11	**1.000** 1.49	**6,750** 30.03
60-2SS	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**2.010** 51.05	**1.940** 49.28	**0.897** 22.78	**.0615** 15.52	**0.713** 18.11	**1.950** 2.90	**13,500** 60.05
80SS	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.125** 3.18	**1.440** 36.58	**1.320** 33.53	**-** -	**0.820** 20.83	**0.950** 24.13	**1.690** 2.51	**12,000** 53.38

** Chain is rollerless. Dimension shown is bushing diameter.*

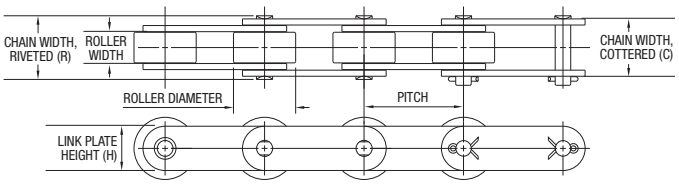
*** Maximum value listed.*

Stainless Steel Chain (continued)
Conveyor Series Chain

Standard Roller Conveyor Series (C2XX0)



Oversized Roller Conveyor Series (C2XX2)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H*	Avg. Weight	Avg. Tensile Strength†
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
Standard Rollers										
C2040SS	**1.000** 25.40	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.760** 19.30	**0.680** 17.27	**0.475** 12.07	**0.340** 0.51	**3,000** 13.34
C2050SS	**1.250** 31.75	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.920** 23.37	**0.840** 21.34	**0.594** 15.09	**0.560** 0.83	**4,700** 20.91
C2060SS	**1.500** 38.10	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**1.110** 28.19	**1.050** 26.67	**0.712** 18.08	**0.810** 1.21	**6,750** 30.03
C2080SS	**2.000** 50.80	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.125** 3.18	**1.440** 36.58	**1.320** 33.53	**0.950** 24.13	**1.400** 2.08	**12,000** 53.38
Oversized Roller										
C2042SS	**1.000** 25.40	**0.313** 7.94	**0.625** 15.88	**0.156** 3.96	**0.060** 1.52	**0.760** 19.30	**0.680** 17.27	**0.475** 12.07	**0.550** 0.82	**3,000** 13.34
C2052SS	**1.250** 31.75	**0.375** 9.53	**0.750** 19.05	**0.200** 5.08	**0.080** 2.03	**0.920** 23.37	**0.840** 21.34	**0.594** 15.09	**0.860** 1.28	**4,700** 20.91
C2062SS	**1.500** 38.10	**0.500** 12.70	**0.875** 22.23	**0.234** 5.94	**0.094** 2.39	**1.110** 28.19	**1.050** 26.67	**0.712** 18.08	**1.270** 1.89	**6,750** 30.03
C2082SS	**2.000** 50.80	**0.625** 15.88	**1.125** 28.58	**0.312** 7.92	**0.125** 3.18	**1.440** 36.58	**1.320** 33.53	**0.950** 24.13	**2.060** 3.07	**12,000** 53.38

* *Nominal value listed*

Corrosion Resistance Tables
Stainless Steel Roller Chain

●=Total Resistance ◔=Satisfactory Resistance ◒=Partial Resistance ○=Not Recommended

	AP Series Stainless	300 Series Stainless	400 Series Stainless
Acetic Acid			
Dilute 70°F	●	●	◒
Dilute Boiling	●	◒	◒
Conc. 70°F	●	●	◒
Conc. Boiling	◒	◔	◒
Acetic Anhydride	●	●	◔
Acetic Vapors	●	◒	-
Acetone	●	●	◔
Alcohol (Methyl, Ethyl, Propyl, and Butyl)	●	●	●
Aluminum Acetate	●	●	-
Aluminum Chloride	◒	◒	◒
Aluminum Sulfate			
70°F	◔	●	-
Boiling	◔	◔	-
Aluminum Potassium			
70°F	●	●	◒
Boiling	◔	◔	-
Ammonia			
Ammonium Hydroxide	●	●	●
Ammonium Bicarbonate	●	●	●
Ammonium Chloride			
70°F	●	●	◔
Boiling	○	◔	-
Ammonium Nitrate	●	●	●
Ammonium Oxalate	●	●	●
Ammonium Persulfate	●	●	-
Ammonium Sulfate			
70°F	●	●	◔
plus 0.5% H2SO4	●	●	-
plus 5.0% H2SO4	●	◒	-
Ammonium Stannichloride			
70°F	◔	◔	-
120°F	○	○	-
Aniline	-	●	●
Aniline Hydrochloride	◒	◒	-
Antimony, Molten, 1100°F	○	○	○
Baking Soda			
Sodium Bicarbonate	●	●	●
Barium Carbonate	●	●	●
Barium Chloride			
70°F	●	●	◔
Hot	◔	◔	-
Barium Nitrate	●	●	-
Barium Sulfate	●	●	-
Beer	●	●	●
Beet Juice	●	●	●
Benzene (Benzol)	-	●	●
Benzine TR	●	●	●
Benzoic Acid	●	●	●

	AP Series Stainless	300 Series Stainless	400 Series Stainless
Bichloride of Mercury			
less than 0.1%	●	●	-
greater than 0.7%-cold	◔	◔	-
greater than 0.7%-hot	◒	◒	-
Calcium Hypochloride	◒	◒	◒
Blood (Meat Juices)	●	●	●
Blue Vitriol (Copper Sulfate)			
5%-70°F	●	●	●
Saturated Solution-Boiling	●	●	-
Borax	●	●	●
Boric Acid	●	●	●
Bromine	○	○	○
Buttermilk	●	●	●
Butyric Acid	◔	●	●
Calcium Chloride (Alkaline)			
Boiling	●	●	-
Boiling, 300 lbs. Pressure	○	◒	-
Calcium Carbonate	●	●	●
Calcium Oxychloride	◒	◒	-
Calcium Sulfate	●	●	-
Carbolic Acid	●	●	●
Carbon Disulfide	●	●	●
Carbon Monoxide	●	●	●
Carbon Tetrachloride (Pure)	●	●	●
Carnallite (Potassium, Magnesium Chloride)	◔	◔	-
Caustic Lime, Potash or Soda (Calcium, Potassium, or Hydroxide), Lye			
70°F	●	●	●
Boiling	◔	◔	◔
Cellulose	●	●	-
Chlorine Gas			
Dry	○	◒	◒
Moist	○	○	○
Chlorinated Water	○	◒	●
Chlorobenzine	●	●	-
Chloroform	●	●	-
Chromic Acid			
70°F	●	◔	◒
Boiling	◒	◒	-
with SO3, Boiling	○	○	○
Chrome Aluminum	●	●	-
Boiling	○	○	-
Citric Acid-10%			
70°F	●	●	●
Boiling	◒	◒	○
Cola Syrup	●	●	◔
Copperas (Ferrous Sulfate)	◔	◔	◔
Copper Acetate	●	●	-

Corrosion Resistance Tables
Stainless Steel Roller Chain

	AP Series Stainless	300 Series Stainless	400 Series Stainless
Copper Carbonate	●	●	●
Copper Chloride			
70°F	◒	◒	◒
Boiling	○	○	○
Copper Cyanide	●	●	●
Copper Nitrate	●	●	●
Copper Sulfate	●	●	●
Creosote	●	●	●
Cyanogen Gas	●	●	-
Dichloro-ethane (Ethylidene Chloride, Ethylene Chloride, Dutch Liquor)	●	●	-
Dyewood Liquor	●	●	-
Epsom Salts (Magnesium Sulfate)	●	●	◔
Ether	●	●	●
Ferric Hydroxide	●	●	●
Ferric Chloride	◒	◒	◒
Ferric Nitrate	●	●	●
Ferric or Ferrous Sulfate	◔	◔	◔
Formaldehyde (Formalin)	●	●	●
Formic Acid	◒	◔	◒
Fruit Juices	◔	●	◒
Fuel Oil	●	●	-
Fuel Oil Containing Sulfuric Acid	◒	◒	-
Gallic Acid	●	●	●
Gasoline	●	●	●
Glauber's Salt (Sodium Sulfate)	●	●	●
Glue acidified	◔	◔	-
Glycerine	●	●	●
Grape Juice	◔	●	●
Gypsum (Calcium Sulfate)	●	●	-
Hydrogen Peroxide	◔	◔	◔
Hydrobromic Acid	◒	◒	◒
Hydrochloric Acid (Muriatic)			
70°F	○	◒	◒
Boiling	○	○	○
Fumes-70°F	○	◒	◒
Hydrocyanic Acid (Prussic Acid)	●	●	◒
Hydrofluoric Acid Fumes	◒	◒	-
Hydrafluosilic Acid	◒	◒	-
Hydrofluosilic Acid Fumes	○	○	○
Hyposulfite of Soda (Hypo, Sodium Thiosulfate)	●	●	◔
Hydrogen Sulfide			
Dry	●	●	-
Moist, H2SO, Present	○	◒	-
Inks			
Alkaline	●	●	-
Acid	◔	◔	-
Iodine			
Dry	○	●	-
Moist	○	○	○
Iodoform	●	●	-
Kerosene	●	●	●
Ketchup	●	◔	◔

	AP Series Stainless	300 Series Stainless	400 Series Stainless
Lactic Acid			
70°F	◔	●	◔
150°F	◒	◒	◒
Lard	●	●	-
Lead, Molten, 1200°F	◔	◔	◒
Linseed Oil	◔	●	◔
Lye (Sodium or Potassium Hydroxide)			
70°F	●	●	●
Boiling	◔	◔	◔
Lysol	●	●	◒
Magnesium Chloride			
70°F	◔	◔	◔
Hot	◒	◒	◒
Magnesium Oxychloride	◒	◒	-
Magnesium Sulfate (Epsom Salt)	●	●	◔
Malic Acid	●	●	◔
Manganese Chloride	●	●	-
Marsh Gas (Illuminating Gas)	●	●	-
Mash, Hot	●	●	-
Mayonnaise	●	◔	◒
Mercury	●	●	-
Methyl Aldehyde	●	●	-
Milk-Sweet or Sour	●	●	●
Mine Water, Acid	●	●	●
Mixed Acids			
a. 50% H2SO4 0.5 HN03			
70°F	◔	◔	◔
Boiling	◒	◒	◒
b. 75% H2SO4 0.25 HN03			
70°F	◔	◔	◔
Boiling	◒	◒	◒
c. 5% H2SO4 0.05 HN03			
80% H20			
70°F	◔	◔	◔
Boiling	◔	◔	-
d. Chromic and Sulfuric	◒	◒	-
Molasses	●	●	-
Mustard (Prepared)	●	●	○
Naphtha, Pure or Crude	●	●	●
Nickel Chloride	◔	◔	-
Nickel Sulfate	●	●	-
Nitre (Potassium Nitrate)	●	●	●
Nitric Acid			
70°F	◔	●	●
Concentrated, Boiling	◔	◔	○
Fuming, Concentrated, Boiling	◒	◒	○
Nitrous Acid	◔	●	◔
Oleic Acid	●	◔	◔
Oils, Mineral or Vegetable			
Refined	●	●	●
Crude	◔	◔	◔
Oxalic Acid	◒	◒	◔
Paraffin	●	●	●
Phenol (Carbolic Acid)	●	●	●

Corrosion Resistance Tables
Stainless Steel Roller Chain

●=Total Resistance ◔=Satisfactory Resistance ◒=Partial Resistance ○=Not Recommended

	AP Series Stainless	300 Series Stainless	400 Series Stainless
Petroleum	●	●	●
Petroleum Ether	●	●	●
Phosphoric Acid, Technical	●	◔	◒
Boiling Crude	○	○	○
Picric Acid	●	●	●
Plaster of Paris (Sulfate of Lime, Gypsum)	●	●	-
Potash (Potassium Carbonate)	●	●	●
Potassium Bitartrate	◔	◔	-
Potassium Bichromate	●	●	●
Potassium Bromide	◔	◔	◒
Potassium Chlorate	●	●	●
Potassium Chloride	◔	◔	◔
Potassium Cyanide	●	●	●
Potassium Hydroxide			
Boiling	◔	◔	◔
Molten, 650°F	○	○	○
Potassium Hypochlorite	◔	◔	-
Potassium Iodide	●	●	-
Potassium Nitrate (Nitre, Saltpeter)	●	●	●
Potassium Oxalate	●	●	◔
Potassium Permanganate	●	●	●
Potassium Sulfate	●	●	●
Potassium Sulfide	●	●	-
Pyrogallic Acid	●	●	●
Prussic Acid (Hydrocyanic Acid)	●	●	◒
Quinine Sulfate	●	●	◔
Quinine Bisulfate	◔	◔	◒
Rosin, Molten	●	●	●
Salt (Sodium Chloride, Salt Brine)			
70°F	◔	◔	◒
150°F	◔	◔	◒
Sea Water	◔	◔	◒
Sewage, Sulfuric Acid Present	◔	◔	-
Silver Bromide	◔	◔	◔
Silver Nitrate	●	●	●
Soda Ash (Sodium Carbonate)	●	●	●
Sodium Acetate	●	●	●
Sodium Bicarbonate (Baking Soda)	●	●	●
Sodium Bisulfate, dilute	●	●	-
Sodium Bisulfate	●	●	-
Sodium Citrate	●	●	●
Sodium Chlorate	●	●	●
Sodium Chloride (Salt, Salt Brine)			
70°F	◔	◔	◒
150°F	◔	◔	◒
Sodium Cyanide	●	●	-
Sodium Fluoride	◔	◔	◔
Sodium Hydroxide			
70°F	●	●	●
Molten, 600°F	◔	◔	-
Sodium Hypochlorite	◔	◔	◒
Slightly Alkaline	●	●	-
Sodium Perchlorate	○	●	-

	AP Series Stainless	300 Series Stainless	400 Series Stainless
Sodium Hyposulfite (Hypo)	●	●	◔
Sodium Nitrate (Chile Saltpeter, Soda Nitre)	●	●	●
Molten, 600°F	◔	◔	-
Sodium Peroxide	●	●	-
Sodium Salicylate	●	●	●
Sodium Sulfate (Glauber's Salt)	●	●	●
Sodium Sulfide	◔	◔	◔
Sodium Thiosulfate (Hypo)	●	●	◔
Stannic Chloride (Tetrachloride of Tin)	○	○	○
Stannous Chloride	◒	◒	○
Starch	●	●	-
Strontium Hydroxide	●	●	-
Strontium Nitrate	●	●	-
Sugar or Cane Juice	●	●	-
Sulfur, Dry			
Molten, 260°F	●	●	-
Molten, 750°F	◒	◒	-
Sulfur Monochloride (Rubber Vulcanizing)	●	●	-
Sulfur Dioxide Gas, Moist	○	◔	-
Sulfurous Acid Water Solution			
Atmospheric Pressure	●	●	-
Over 60 lbs. Pressure	◒	◒	-
Sulfuric Acid			
70°F	◔	◔	-
Boiling	○	○	○
Fuming	◒	◒	-
Vapor (Battery Room)	◔	◔	-
Tannic Acid	●	●	◔
Tanning Liquor	●	●	-
Tartaric Acid	●	●	◔
Tetrachloride of Tin	○	○	○
Tin, Molten, 1100°F	○	○	○
Trichloroethylene	◔	◔	◔
Uric Acid	●	●	●
Varnish	●	●	●
Vegetables	●	●	●
Vinegar (Acetic Acid)	●	●	◒
Whiskey	●	●	-
Wood Pulp	●	●	-
Yeast	●	●	-
Zinc, Molten, 1100°F	○	○	○
Zinc Chloride			
100°F	●	●	◒
Boiling	◒	◒	-
Zinc Cyanide	●	●	-
Zinc Nitrate	●	●	-
Zinc Sulfate (White Vitriol)	◔	●	●

Reduced Maintenance



Duralube LIVE Roller Chain

Reduced Maintenance roller chains are intended for applications where regular lubrication is not possible or practical. The life of these chains is significantly greater than a traditional chain that only has its initial lubrication. In all cases, life of reduced maintenance chain can be extended even further if regularly lubricated.

Diamond EHT	Ideal for high speed, high temperature, or abrasive environments, Diamond EHT (Enhanced Hardening Treatment) pins have been specially processed to provide exceptional wear performance in difficult environments. Available as an option on most carbon steel chains. Recommended for operating temperatures up to 450°F (232°C).
Duralube® LIVE	Duralube LIVE is a reduced maintenance chain specifically designed for moderate speed, moderate ambient temperature (<120°F/49°C), clean environments. Lubricant is impregnated into a specially designed bushing and released during service, providing supplemental lubrication to the pin/bushing joint. Duralube LIVE replaces the previous one-piece bushing/roller combination with a separate bushing and live turning roller for additional wear performance. Operating temperature is not recommended to exceed 120°F (49°C).
Duralube LIVE Food Grade	Duralube LIVE Food Grade adds an H1 food-grade lubricant rated for incidental food contact and ACE plating for moisture resistance to the Duralube LIVE product. Operating temperature is not recommended to exceed 120°F (49°C).
RING LEADER® O-Ring Chain	RING LEADER O-Ring chain is designed for applications that can introduce contaminants that can cause buildup in the clearances on standard chain where lubricant enters the pin/bushing area. O-Ring construction seals specially formulated lubrication into every joint and seals out contaminants that can shorten chain life. Ideal for abrasive environments. Operating temperature range up to 150°F (66°C) with standard o-rings; up to 450°F (232°C) with optional high-temperature o-rings.

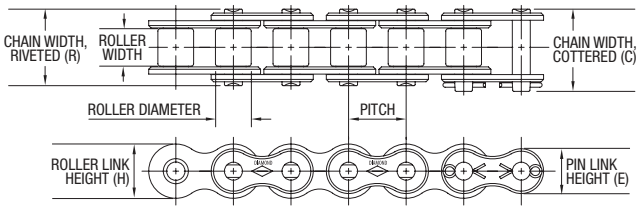
Reduced Maintenance
Diamond EHT

Diamond EHT is a optional heat treatment that is available on most carbon steel Diamond Series roller chain*. EHT (Enhanced Hardening Treatment) pins have a unique case-hardening that maintains the pin hardness in hot, high speed, or abrasive applications. By maintaining pin hardness in these difficult environments, superior wear performance is obtained. In contrast to coatings or platings, EHT pins offer a consistent pin hardness over a wide temperature range with no adverse wear if operated at ambient temperatures or lower speeds. Recommended for operating temperatures up to 450°F (232°C).

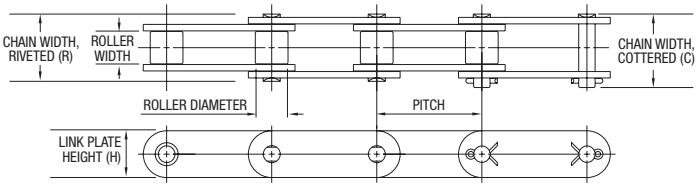
Please note that EHT is an available option on most carbon steel chains*; specify by adding EHT to the part number (e.g. 60 EHT). The table below is a reference that contains the most popular EHT part numbers.

*EHT pins are not available for High Strength or Hoist and Lift chain as medium carbon through-hardened pins are more appropriate for high shock applications. EHT pins are also not available for stainless steel chains.

Single Strand



Oval contour (C20X0)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbs kN	page
Standard Series (also available in multistrand, specify as -2 or -3)												
40EHT	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.720** 18.29	**0.670** 17.02	**0.410** 10.41	**0.475** 12.07	**0.410** 0.61	**4,000** 17.79	**55**
50EHT	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**0.512** 13.00	**0.594** 15.09	**0.680** 1.01	**6,600** 29.36	**57**
60EHT	**0.750** 19.05	**0.500** 12.70	**0.469** 11.913	**0.234** 5.944	**0.094** 2.39	**1.110** 28.19	**1.040** 26.416	**0.615** 15.62	**0.713** 18.11	**0.990** 1.47	**8,500** 37.81	**58**
80EHT	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.125** 3.18	**1.440** 36.58	**1.320** 33.53	**0.820** 20.83	**0.950** 24.13	**1.730** 2.57	**14,500** 64.50	**59**
100EHT	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.156** 3.96	**1.730** 43.94	**1.610** 40.89	**1.025** 26.04	**1.188** 30.18	**2.510** 3.74	**24,000** 106.76	**60**
120EHT	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.187** 4.75	**2.140** 54.36	**2.000** 50.80	**1.230** 31.24	**1.425** 36.20	**3.690** 5.49	**34,000** 151.24	**61**
140EHT	**1.750** 44.45	**1.000** 25.40	**1.000** 25.40	**0.500** 12.70	**0.219** 5.56	**2.310** 58.67	**2.140** 54.36	**1.435** 36.45	**1.663** 42.24	**5.000** 7.44	**46,000** 204.62	**62**
160EHT	**2.000** 50.80	**1.250** 31.75	**1.125** 28.58	**0.562** 14.27	**0.250** 6.35	**2.730** 69.34	**2.540** 64.52	**1.640** 41.66	**1.900** 48.26	**6.530** 9.72	**58,000** 258.00	**63**
200EHT	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.781** 19.84	**0.312** 7.92	**3.440** 87.38	**3.120** 79.25	**2.050** 52.07	**2.375** 60.33	**10.650** 15.85	**95,000** 422.58	**65**
Heavy Series												
60HEHT	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**1.240** 31.50	**1.170** 29.72	**0.615** 15.62	**0.713** 18.11	**1.180** 1.76	**8,500** 37.81	**67**
80HEHT	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**0.820** 20.83	**0.950** 24.13	**2.020** 3.01	**14,500** 64.50	**68**
100HEHT	**1.250** 31.75	**0.750** 19.05	**0.750** 19.05	**0.375** 9.53	**0.187** 4.75	**1.860** 47.24	**1.740** 44.20	**1.025** 26.04	**1.188** 30.18	**2.820** 4.20	**24,000** 106.76	**69**
120HEHT	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.219** 5.56	**2.270** 57.66	**2.130** 54.10	**1.230** 31.24	**1.425** 36.20	**4.080** 6.07	**34,000** 151.24	**70**
Conveyor Series (also available with oversized roller, specify as C20X2)												
C2040EHT	**1.000** 25.40	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.760** 19.30	**0.680** 17.27	**-** -	**0.475** 12.07	**0.340** 0.51	**3,700** 16.46	**n/a**
C2050EHT	**1.250** 31.75	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.920** 23.37	**0.840** 21.34	**-** -	**0.594** 15.09	**0.580** 0.86	**6,100** 27.13	**n/a**
C2060HEHT	**1.500** 38.10	**0.500** 12.70	**0.469** 7.11	**0.234** 5.94	**0.125** 3.18	**1.250** 31.75	**1.180** 29.97	**-** -	**0.712** 18.08	**1.050** 1.56	**8,500** 37.81	**n/a**
C2080HEHT	**2.000** 50.80	**0.625** 15.88	**0.625** 8.43	**0.312** 7.92	**0.156** 3.96	**1.570** 39.88	**1.450** 36.83	**-** -	**0.950** 24.13	**1.400** 2.08	**14,500** 64.50	**n/a**

*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

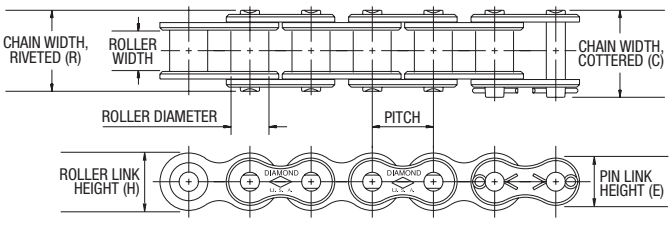
Reduced Maintenance

Duralube® LIVE / Duralube LIVE Food Grade

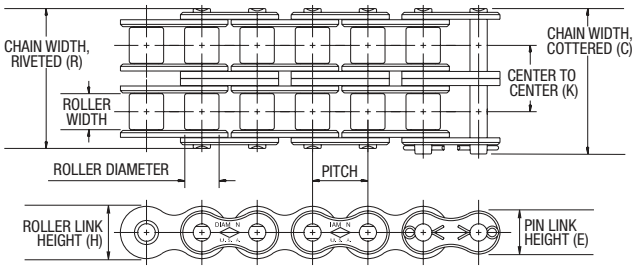
Duralube LIVE is a reduced maintenance chain intended for clean, dust-free applications. Lubricant is impregnated into the bushing and released during service, providing supplemental lubrication to the pin/bushing joint. Duralube LIVE replaces the one-piece roller/bushing of the original Duralube product with a separate bushing and live roller, Duralube LIVE Food grade adds an H1 food grade lubricant rated for incidental food contact and ACE (Anti Corrosion Exterior) plating for moisture resistance to the standard Duralube LIVE product. Ambient temperature should not exceed 120°F (49°C). Please reference chain speed recommendations in the table below.

Specify Duralube LIVE as DLR, specify Duralube LIVE Food Grade as DLF.

Standard Chain



Multistrand Chain (-X Suffix)



ASME/ANSI Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	E**	H**	Avg. Weight	Avg. Tensile Strength†
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
40 DLR	**0.500** 12.70	**0.313** 7.94	**0.312** 7.925	**0.156** 3.962	**0.060** 1.52	**0.720** 18.29	**0.670** 17.018	**-** -	**0.410** 10.41	**0.475** 12.07	**0.400** 0.60	**3300** 14.68
40-2 DLR	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**1.290** 32.77	**1.240** 31.50	**0.566** 14.38	**0.410** 10.41	**0.475** 12.07	**0.810** 1.21	**6,600** 29.36
50 DLR	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**-** -	**0.512** 13.00	**0.594** 15.09	**0.650** 0.97	**5,200** 23.13
50-2 DLR	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**1.600** 40.64	**1.550** 39.37	**0.713** 18.11	**0.512** 13.00	**0.594** 15.09	**1.270** 1.89	**10,400** 46.26
60 DLR	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**1.110** 28.19	**1.040** 26.42	**-** -	**0.615** 15.62	**0.713** 18.11	**0.950** 1.41	**7,400** 32.92
60-2 DLR	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**2.010** 51.05	**1.940** 49.28	**0.897** 22.78	**0.615** 15.62	**0.713** 18.11	**1.850** 2.75	**14,800** 65.83
80 DLR	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.125** 3.18	**1.440** 36.58	**1.320** 33.53	**-** -	**0.82** 20.83	**0.950** 24.13	**1.600** 2.38	**13,000** 57.83
80-2 DLR	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.125** 3.18	**2.590** 65.79	**2.470** 62.74	**-** -	**0.82** 20.83	**0.950** 24.13	**2.797** 4.16	**24,000** 106.76

Due to the nature of the Duralube LIVE construction, the following speed limitations should be considered.

Size	Max Speed
Single Pitch	
#40	1300 ft/min (396 meters/min)
#50	1000 ft/min (304 meters/min)
#60	850 ft/min (259 meters/min)
#80	650 ft/min (198 meters/min)

*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

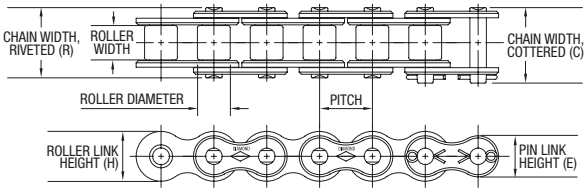
Reduced Maintenance
RINGLEADER® "XLO" O-Ring Chain

RINGLEADER "XLO" O-Ring Chain is specially designed for applications such as agriculture, packaging, printing, textile, and chemical processing that can introduce contaminants that can damage standard chain. Dirt, mud, dust, paper fines, food particles, and moisture can cause buildup on the chain on a standard roller chain and actually damage the surface of pins and bushings.

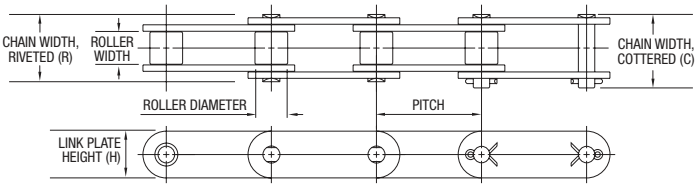
RINGLEADER "XLO" Chain is constructed with o-rings that seal in a specially formulated lubricant into every joint and seal out dirt, contaminants and moisture. Standard XLO chain can operate in ambient temperatures up to 150°F (65°C), while an optional o-ring (specify as "high temperature") allows operation in temperatures up to 450°F (232°C) (sizes 50-100 only).

Note: Diamond Chain recommends periodic lubrication on the external o-ring surfaces along with the roller/sprocket contact surfaces.

Standard chain



Oval contour (C20X0)



Diamond Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	E**	H**	Avg. Weight	Avg. Tensile Strength†	Horsepower Table
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbs kN	page
50 XLO	**0.625** 15.88	**0.375** 9.53	**0.400** 10.160	**0.200** 5.080	**0.080** 2.03	**0.950** 24.13	**0.890** 22.606	**0.512** 13.00	**0.594** 15.09	**0.720** 1.07	**6,500** 28.91	**80**
50H XLO	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.214** 5.44	**0.094** 2.39	**1.020** 25.91	**0.960** 24.38	**0.512** 13.00	**0.594** 15.09	**0.930** 1.38	**9,300** 41.37	**n/a**
60 XLO	**0.750** 19.05	**0.500** 12.70	**0.469** 11.913	**0.234** 5.944	**0.094** 2.39	**1.210** 30.73	**1.130** 28.702	**0.615** 15.62	**0.713** 18.11	**1.010** 1.50	**7,700** 34.25	**81**
80 XLO	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.312** 7.92	**0.125** 3.18	**1.510** 38.35	**1.410** 35.81	**0.615** 15.62	**0.713** 18.11	**1.770** 2.63	**13,500** 60.05	**82**
100 XLO	**1.250** 31.75	**0.750** 19.05	**0.750** 19.050	**0.375** 9.525	**0.156** 3.96	**1.830** 46.48	**1.740** 44.196	**1.025** 26.04	**1.188** 30.18	**2.550** 3.79	**22,000** 97.86	**83**
120 XLO	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.187** 4.75	**2.240** 56.90	**2.120** 53.85	**1.23** 31.24	**1.425** 36.20	**3.760** 5.60	**30,000** 133.45	**n/a**
140 XLO	**1.750** 44.45	**1.000** 25.40	**1.000** 25.400	**0.500** 12.700	**0.219** 5.56	**2.490** 63.25	**2.350** 59.690	**1.435** 36.45	**1.663** 42.24	**5.100** 7.59	**42,000** 186.83	**n/a**
160 XLO	**2.000** 50.80	**1.250** 31.75	**1.125** 28.58	**0.562** 14.27	**0.250** 6.35	**2.960** 75.18	**2.820** 71.63	**1.640** 41.66	**1.900** 48.26	**6.660** 9.91	**52,000** 231.31	**n/a**
C2050 XLO	**1.250** 31.75	**0.375** 9.53	**0.400** 10.160	**0.200** 5.080	**0.080** 2.03	**0.950** 24.13	**0.890** 22.606	**0.594** 15.09	**0.594** 15.09	**0.590** 0.88	**6,500** 28.91	**n/a**
C2060H XLO	**1.500** 38.10	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.125** 3.18	**1.270** 32.26	**1.210** 30.73	**0.712** 18.08	**0.712** 18.08	**1.170** 1.74	**7,700** 34.25	**n/a**

*** Maximum value listed.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

Attachments



Extended Pin Roller Chain

Diamond Chain offers an extensive assortment of attachments - over 100 “standard” attachments are available, plus the ability to create almost any kind of custom attachment. All attachments are designed with the same level of care and precision asDiamond Series roller chain. High-volume attachments have dedicated tooling and presses to quickly and repeatedly produce parts for an order, while lower volume and custom designs are fabricated using our laser fabrication cell that allows precision cutting without long equipment changeover or extensive tooling times.

This section details standard Diamond Series attachments that can accommodate a variety of uses. However, in some cases attachment chain is very specific to the application (e.g. pin oven chain, thermoforming chain, serrated top chain). If the desired attachment is not found in this section, please reference the “application specific” section of this catalog. If still not located, please contact Diamond Chain Customer Service to learn how custom parts can be created for your specific application.

Attachment Chain Guidelines:
Modifications: All attachments are designed and heat treated to permit further operations by the user such as drilling, reaming and tapping. Welding, however, should never be performed as it can adversely affect the heat treatment of the material.

Extended pins: Extended pins are made from medium carbon through-hardened steel and specially heat treated for ductility and toughness.

Shouldered pins: Diamond does not recommend the use of “shouldered pins”, as quality is compromised due to high stress concentration where the diameters change. Additions of sleeves or bearings on extended pins often yield a more dependable design at a lower cost.

Attachment hole sizes: If the application requires a different attachment hole than shown, please contact Diamond Chain Customer Service as alternative lug holes may be available.

Length matching: For applications requiring two or more chains to run in parallel with “flights” joining the chain, it is critical to have the chains ordered as a set, matched for length, and installed on the machinery with the same relationship to one another as when manufactured.

Standard chain tolerance: ASME/ANSI tolerance on a chain is +0.016"/-0.000" per foot.
Class 1 matching: ensures the longest and shortest chain in a set do not vary in length by more than 0.006"/ft. (0.5mm/m).
Class 2 matching: ensures the longest and shortest chain in a set do not vary in length by more than 0.002"/ft. (0.1667 mm/m).

Attachment Summary

This list provides an at-a-glance reference for standard Diamond Series attachments. Details are included in the following pages. If the desired attachment is not found in this section, please reference the Application Specific section of this catalog. If still not located, please contact Diamond Chain Customer Service to learn how custom parts can be created for your specific application.

Single Pitch Standard Attachments		Diamond	Tsubaki	Renold	Drives
	Bent Linkplate one side - one hole	B1-1H	A-1	A-1	BA-1
	Bent Linkplate two sides - one hole	B2-1H	K-1	K-1	BK-1
	Wide Contour Bent Linkplate one side - one hole	WCB1-1H	WA-1	WA-1	WBA-1
	Wide Contour Bent Linkplate one side - two holes	WCB1-2H	WA-2	WA-2	WBA-2
	Wide Contour Bent Linkplate two sides - one hole	WCB2-1H	WK-1	WK-1	WBK-1
	Wide Contour Bent Linkplate two sides - two holes	WCB2-2H	WK-2	WK-2	WBK-2
	Straight Linkplate one side - one hole	S1-1H	SA-1	M-35	SA-1
	Straight Linkplate two sides - one hole	S2-1H	SK-1	M-1	SK-1
	Wide Contour Straight Linkplate one side - one hole	WCS1-1H	WSA-1	WM-35	WSA-1
	Wide Contour Straight Linkplate one side - two holes	WCS1-2H	WSA-2	WM-35-2	WSA-2
	Wide Contour Straight Linkplate two sides - one hole	WCS2-1H	WSK-1	WM-1	WSK-1
	Wide Contour Straight Linkplate two sides - two holes	WCS2-2H	WSK-2	WM-2	WSK-2
	One Pin Extended	E1	D-1	D-1	D-1
	Two Pins Extended	E2	D-3	D-3	D-3

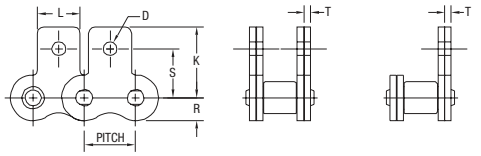
Double Pitch Standard Attachments (applies to regular and oversized rollers)		Diamond	Tsubaki	Renold	Drives
	Bent Linkplate one side - one hole	B1-1H	A-1	A-1	BA-1
	Bent Linkplate one side - two holes	B1-2H	A-2	A-2	BA-2
	Bent Linkplate two sides - one hole	B2-1H	K-1	K-1	BK-1
	Bent Linkplate two sides - two holes	B2-2H	K-2	K-2	BK-2
	Straight Linkplate one side -one hole	S1-1H	SA-1	M-35	SA-1
	Straight Linkplate one side - two holes	S1-2H	SA-2	M-35-2	SA-2
	Straight Linkplate two sides - one hole	S2-1H	SK-1	M-1	SK-1
	Straight Linkplate two sides - two holes	S2-2H	SK-2	M-2	SK-2
	One Pin Extended	E1	D-1	D-1	D-1
	Two Pins Extended	E2	D-3	D-3	D-3

Attachments

Standard Straight Attachments

Attachments available for all chain types and platings. Extended leadtimes may apply.

Description	Diamond P/N	Others P/N
One side, one hole	S1-1H	M-35, SA-1
Two sides, one hole	S2-1H	M-1, SK-1

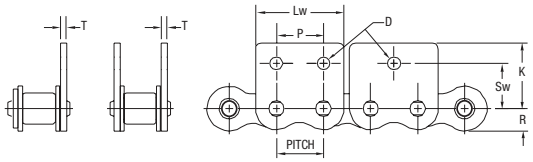


ASME/ANSI Number	Pitch	D	K	L	R Max.	S	T
	in mm	in mm	in mm	in mm	in mm	in mm	in mm
25 / 25SS	**0.250** 6.35	**0.125** 3.18	**0.451** 11.455	**0.218** 5.54	**0.119** 3.02	**0.308** 7.82	**0.030** 0.76
35 / 35SS	**0.375** 9.53	**0.102** 2.59	**0.577** 14.656	**0.312** 7.92	**0.178** 4.52	**0.387** 9.83	**0.050** 1.27
40 / 40SS	**0.500** 12.70	**0.141** 3.58	**0.684** 17.374	**0.375** 9.53	**0.238** 6.05	**0.489** 12.42	**0.060** 1.52
41 / 41SS	**0.500** 12.70	**0.141** 3.58	**0.698** 17.729	**0.375** 9.53	**0.192** 4.88	**0.482** 12.24	**0.050** 1.27
50 / 50SS	**0.625** 15.88	**0.203** 5.16	**0.895** 22.733	**0.500** 12.70	**0.297** 7.54	**0.618** 15.70	**0.080** 2.03
60 / 60SS	**0.750** 19.05	**0.203** 5.16	**1.038** 26.365	**0.625** 15.88	**0.356** 9.04	**0.716** 18.19	**0.094** 2.39
80 / 80SS	**1.000** 25.40	**0.266** 6.76	**1.339** 34.011	**0.750** 19.05	**0.475** 12.07	**0.968** 24.59	**0.125** 3.18
100	**1.250** 31.75	**0.343** 8.71	**1.696** 43.078	**1.000** 25.40	**0.594** 15.09	**1.233** 31.32	**0.156** 3.96
120	**1.500** 38.10	**0.386** 9.80	**2.024** 51.410	**1.125** 28.58	**0.713** 18.11	**1.424** 36.17	**0.187** 4.75
140	**1.750** 44.45	**0.448** 11.38	**2.445** 62.103	**1.375** 34.93	**0.831** 21.11	**1.750** 44.45	**0.220** 5.59
160	**2.000** 50.80	**0.516** 13.11	**2.756** 70.002	**1.500** 38.10	**0.950** 24.13	**2.007** 50.98	**0.250** 6.35

Wide Contour Straight Attachments

Attachments available for all chain types and platings. Extended leadtimes may apply.

Description	Diamond P/N	Others P/N
One side, one hole	WCS1-1H	WM-35, WSA-1
One side, two holes	WCS1-2H	WM-35-2, WSA-2
Two sides, one hole	WCS2-1H	WM-1, WSK-1
Two sides, two holes	WCS2-2H	WM-2, WSK-2



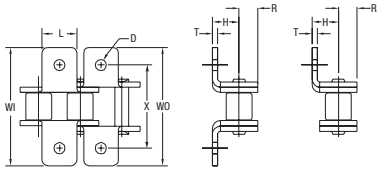
ASME/ANSI Number	Pitch	D	K	Lw	P	R Max.	Sw	T	W	X
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
35 / 35SS	**0.375** 9.53	**0.125** 3.18	**0.577** 14.66	**0.727** 18.47	**0.375** 9.53	**0.178** 4.52	**0.399** 10.13	**0.050** 1.27	**1.105** 28.07	**0.750** 19.05
40 / 40SS	**0.500** 12.70	**0.141** 3.58	**0.684** 17.37	**0.946** 24.03	**0.500** 12.70	**0.238** 6.05	**0.503** 12.78	**0.060** 1.52	**1.366** 34.70	**1.000** 25.40
41	**0.500** 12.70	**0.141** 3.58	**0.698** 17.73	**0.878** 22.30	**0.500** 12.70	**0.192** 4.88	**0.482** 12.24	**0.050** 1.27	**1.372** 34.85	**0.937** 23.80
50 / 50SS	**0.625** 15.88	**0.203** 5.16	**0.895** 22.73	**1.211** 30.76	**0.625** 15.88	**0.297** 7.54	**0.618** 15.70	**0.080** 2.03	**1.807** 45.90	**1.250** 31.75
60 / 60SS	**0.750** 19.05	**0.203** 5.16	**1.038** 26.37	**1.420** 36.07	**0.750** 19.05	**0.356** 9.04	**0.716** 18.19	**0.094** 2.39	**2.135** 54.23	**1.500** 38.10
80 / 80SS	**1.000** 25.40	**0.266** 6.76	**1.339** 34.01	**1.885** 47.88	**1.000** 25.40	**0.475** 12.07	**0.967** 24.56	**0.125** 3.18	**2.750** 69.85	**2.000** 50.80
100	**1.250** 31.75	**0.343** 8.71	**1.696** 43.08	**2.362** 59.99	**1.250** 31.75	**0.594** 15.09	**1.233** 31.32	**0.156** 3.96	**3.408** 86.56	**2.500** 63.50
120	**1.500** 38.10	**0.386** 9.80	**2.023** 51.38	**2.836** 72.03	**1.500** 38.10	**0.713** 18.11	**1.424** 36.17	**0.187** 4.75	**4.239** 107.67	**2.995** 76.07

Attachments

Standard Bent Attachments

Attachments available for all chain types and platings. Extended leadtimes may apply.

Description	Diamond P/N	Others P/N
One side, one hole	B1-1H	A1, BA-1
Two sides, one hole	B2-1H	K1, BK-1

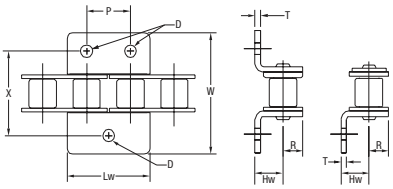


ASME/ANSI Number	Pitch	D	H	L	R Max.	T	WI	WO	X
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
25 / 25SS	**0.250** 6.35	**0.125** 3.18	**0.180** 4.572	**0.218** 5.54	**0.119** 3.02	**0.030** 0.76	**0.781** 19.84	**0.843** 21.41	**0.562** 14.27
35 / 35SS	**0.375** 9.53	**0.102** 2.59	**0.250** 6.350	**0.312** 7.92	**0.178** 4.52	**0.050** 1.27	**1.125** 28.58	**1.125** 28.58	**0.750** 19.05
40 / 40SS	**0.500** 12.70	**0.141** 3.58	**0.312** 7.925	**0.375** 9.53	**0.238** 6.05	**0.060** 1.52	**1.390** 35.31	**1.390** 35.31	**1.000** 25.40
41 / 41SS	**0.500** 12.70	**0.141** 3.58	**0.282** 7.163	**0.375** 9.53	**0.192** 4.88	**0.050** 1.27	**1.375** 34.93	**1.375** 34.93	**0.937** 23.80
50 / 50SS	**0.625** 15.88	**0.203** 5.16	**0.406** 10.312	**0.500** 12.70	**0.297** 7.54	**0.080** 2.03	**1.812** 46.02	**1.812** 46.02	**1.250** 31.75
60 / 60SS	**0.750** 19.05	**0.203** 5.16	**0.478** 12.141	**0.625** 15.88	**0.356** 9.04	**0.094** 2.39	**2.135** 54.23	**2.135** 54.23	**1.500** 38.10
80 / 80SS	**1.000** 25.40	**0.266** 6.76	**0.625** 15.875	**0.750** 19.05	**0.475** 12.07	**0.125** 3.18	**2.750** 69.85	**2.750** 69.85	**2.000** 50.80
100	**1.250** 31.75	**0.343** 8.71	**0.784** 19.914	**1.000** 25.40	**0.594** 15.09	**0.156** 3.96	**3.077** 78.16	**3.406** 86.51	**2.500** 63.50
120	**1.500** 38.10	**0.386** 9.80	**0.917** 23.292	**1.125** 28.58	**0.713** 18.11	**0.187** 4.75	**3.841** 97.56	**4.239** 107.67	**2.995** 76.07
140	**1.750** 44.45	**0.448** 11.38	**1.127** 28.626	**1.375** 34.93	**0.831** 21.11	**0.220** 5.59	**4.361** 110.77	**4.826** 122.58	**3.500** 88.90
160	**2.000** 50.80	**0.516** 13.11	**1.250** 31.750	**1.500** 38.10	**0.950** 24.13	**0.250** 6.35	**5.078** 128.98	**5.609** 142.47	**4.000** 101.60

Wide Contour Bent Attachments

Attachments available for all chain types and platings. Extended leadtimes may apply.

Description	Diamond P/N	Others P/N
One side, one hole	WCB1-1H	WA-1, WBA-1
One side, two holes	WCB1-2H	WA-2, WBA-2
Two sides, one hole	WCB2-1H	WK-1, WBK-1
Two sides, two holes	WCB2-2H	WK-2, WBK-2



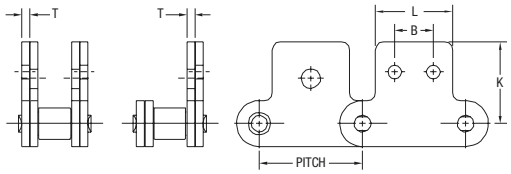
ASME/ANSI Number	Pitch	D	Hw	Lw	P	R Max.	T	W	X
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
35 / 35SS	**0.375** 9.53	**0.125** 3.18	**0.262** 6.655	**0.727** 18.47	**0.375** 9.53	**0.178** 4.52	**0.050** 1.27	**1.105** 28.07	**0.750** 19.05
40 / 40SS	**0.500** 12.70	**0.141** 3.58	**0.326** 8.280	**0.946** 24.03	**0.500** 12.70	**0.238** 6.05	**0.060** 1.52	**1.366** 34.70	**1.000** 25.40
41	**0.500** 12.70	**0.141** 3.58	**0.282** 7.163	**0.878** 22.30	**0.500** 12.70	**0.192** 4.88	**0.050** 1.27	**1.372** 34.85	**0.937** 23.80
50 / 50SS	**0.625** 15.88	**0.203** 5.16	**0.406** 10.312	**1.211** 30.76	**0.625** 15.88	**0.297** 7.54	**0.080** 2.03	**1.807** 45.90	**1.250** 31.75
60 / 60SS	**0.750** 19.05	**0.203** 5.16	**0.478** 12.14	**1.420** 36.07	**0.750** 19.05	**0.356** 9.04	**0.094** 2.39	**2.135** 54.23	**1.500** 38.10
80 / 80SS	**1.000** 25.40	**0.266** 6.76	**0.625** 15.88	**1.885** 47.88	**1.000** 25.40	**0.475** 12.07	**0.125** 3.18	**2.750** 69.85	**2.000** 50.80
100	**1.250** 31.75	**0.343** 8.71	**0.784** 19.91	**2.362** 59.99	**1.250** 31.75	**0.594** 15.09	**0.156** 3.96	**3.408** 86.56	**2.500** 63.50
120	**1.500** 38.10	**0.386** 9.80	**0.917** 23.29	**2.836** 72.03	**1.500** 38.10	**0.713** 18.11	**0.187** 4.75	**4.239** 107.67	**2.995** 76.07

Attachments

Double Pitch Oval Contour Straight Attachments

Attachments available for all chain types and platings. Extended leadtimes may apply.

Description	Diamond P/N	Others P/N
One side, one hole	S1-1H	M-35, SA-1
One side, two holes	S1-2H	M-35-2, SA-2
Two sides, one hole	S2-1H	M-1, SK-1
Two sides, two holes	S2-2H	M-2, SK-2

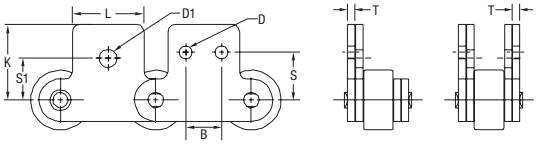


ASME/ANSI Number	Pitch	Roller Diameter	Two Attachment Holes			K	L	T	One Attachment Hole	
			B	D	S				D1	S1
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
C2040 / C2040SS	**1.000** 25.40	**0.312** 7.92	**0.375** 9.53	**0.141** 3.58	**0.531** 13.49	**0.773** 19.63	**0.750** 19.05	**0.060** 1.52	**0.188** 4.78	**0.438** 11.13
C2050 / C2050SS	**1.250** 31.75	**0.400** 10.16	**0.469** 11.91	**0.203** 5.16	**0.625** 15.88	**0.971** 24.66	**0.937** 23.80	**0.080** 2.03	**0.250** 6.35	**0.563** 14.30
C2060H	**1.500** 38.10	**0.469** 11.91	**0.562** 14.27	**0.203** 5.16	**0.750** 19.05	**1.203** 30.56	**1.125** 28.58	**0.125** 3.18	**0.329** 8.36	**0.688** 17.48
C2060SS	**1.500** 38.10	**0.469** 11.91	**0.562** 14.27	**0.203** 5.16	**0.750** 19.05	**1.203** 30.56	**1.125** 28.58	**0.094** 2.39	**0.329** 8.36	**0.688** 17.48
C2080H	**2.000** 50.80	**0.625** 15.88	**0.750** 19.05	**0.266** 6.76	**1.000** 25.40	**1.590** 40.39	**1.500** 38.10	**0.156** 3.96	**0.375** 9.53	**0.875** 22.23
C2080SS	**2.000** 50.80	**0.625** 15.88	**0.750** 19.05	**0.266** 6.76	**1.000** 25.40	**1.590** 40.39	**1.500** 38.10	**0.125** 3.18	**0.375** 9.53	**0.875** 22.23
C2100H	**2.500** 63.50	**0.750** 19.05	**0.937** 23.80	**0.328** 8.33	**1.250** 31.75	**1.982** 50.34	**1.875** 47.63	**0.187** 4.75	**0.516** 13.11	**1.125** 28.58
C2120H	**3.000** 76.20	**0.875** 22.23	**1.125** 28.58	**0.391** 9.93	**1.469** 37.31	**2.367** 60.12	**2.250** 57.15	**0.219** 5.56	**0.563** 14.30	**1.312** 33.32
C2160H	**4.000** 101.60	**1.125** 28.58	**1.500** 38.10	**0.516** 13.11	**2.000** 50.80	**3.090** 78.49	**3.000** 76.20	**0.281** 7.14	**0.750** 19.05	**1.750** 44.45

Double Pitch Oval Contour Straight Attachments Oversized Roller

Attachments available for all chain types and platings. Extended leadtimes may apply.

Description	Diamond P/N	Others P/N
One side, one hole	S1-1H	M-35, SA-1
One side, two holes	S1-2H	M-35-2, SA-2
Two sides, one hole	S2-1H	M-1, SK-1
Two sides, two holes	S2-2H	M-2, SK-2



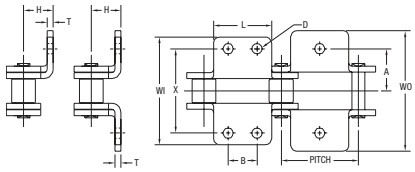
ASME/ANSI Number	Pitch	Roller Diameter	Two Attachment Holes			K	L	T	One Attachment Hole	
			B	D	S				D1	S1
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
C2042 / C2042SS	**1.000** 25.40	**0.625** 15.88	**0.375** 9.53	**0.141** 3.58	**0.531** 13.49	**0.773** 19.63	**0.750** 19.05	**0.060** 1.52	**0.188** 4.78	**0.438** 11.13
C2052 / C2052SS	**1.250** 31.75	**0.750** 19.05	**0.469** 11.91	**0.203** 5.16	**0.625** 15.88	**0.971** 24.66	**0.937** 23.80	**0.080** 2.03	**0.250** 6.35	**0.563** 14.30
C2062H	**1.500** 38.10	**0.875** 22.23	**0.562** 14.27	**0.203** 5.16	**0.750** 19.05	**1.203** 30.56	**1.125** 28.58	**0.125** 3.18	**0.329** 8.36	**0.688** 17.48
C2062SS	**1.500** 38.10	**0.875** 22.23	**0.562** 14.27	**0.203** 5.16	**0.750** 19.05	**1.203** 30.56	**1.125** 28.58	**0.094** 2.39	**0.329** 8.36	**0.688** 17.48
C2082H	**2.000** 50.80	**1.125** 28.58	**0.750** 19.05	**0.266** 6.76	**1.000** 25.40	**1.590** 40.39	**1.500** 38.10	**0.156** 3.96	**0.375** 9.53	**0.875** 22.23
C2082SS	**2.000** 50.80	**1.125** 28.58	**0.750** 19.05	**0.266** 6.76	**1.000** 25.40	**1.590** 40.39	**1.500** 38.10	**0.125** 3.18	**0.375** 9.53	**0.875** 22.23
C2102H	**2.500** 63.50	**1.562** 39.67	**0.937** 23.80	**0.328** 8.33	**1.250** 31.75	**1.982** 50.34	**1.875** 47.63	**0.187** 4.75	**0.516** 13.11	**1.125** 28.58
C2122H	**3.000** 76.20	**1.750** 44.45	**1.125** 28.58	**0.391** 9.93	**1.469** 37.31	**2.367** 60.12	**2.250** 57.15	**0.219** 5.56	**0.563** 14.30	**1.312** 33.32
C2162H	**4.000** 101.60	**2.250** 57.15	**1.500** 38.10	**0.516** 13.11	**2.000** 50.80	**3.090** 78.49	**3.000** 76.20	**0.281** 7.14	**0.750** 19.05	**1.750** 44.45

Attachments

Double Pitch Oval Contour Bent Attachments

Attachments available for all chain types and platings. Extended leadtimes may apply.

Description	Diamond P/N	Others P/N
One side, one hole	B1-1H	A-1, BA-1
One side, two holes	B1-2H	A-2, BA-2
Two sides, one hole	B2-1H	K-1, BK-1
Two sides, two holes	B2-2H	K-2, BK-2

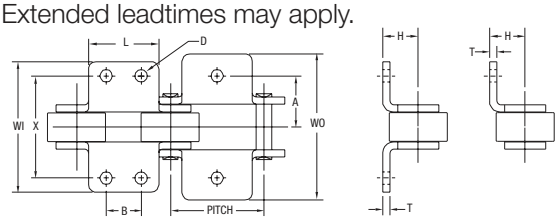


ASME/ANSI Number	Pitch	Roller Diameter	A	B	D	H	L	T	WI	WO	X
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
C2040	**1.000** 25.40	**0.312** 7.92	**0.500** 12.70	**0.375** 9.53	**0.141** 3.58	**0.359** 9.12	**0.750** 19.05	**0.060** 1.52	**1.350** 34.29	**1.483** 37.67	**1.000** 25.40
C2040SS	**1.000** 25.40	**0.312** 7.92	**0.500** 12.70	**0.375** 9.53	**0.141** 3.58	**0.355** 9.02	**0.750** 19.05	**0.060** 1.52	**1.350** 34.29	**1.488** 37.80	**1.000** 25.40
C2050	**1.250** 31.75	**0.400** 10.16	**0.625** 15.88	**0.469** 11.91	**0.203** 5.16	**0.453** 11.51	**0.937** 23.80	**0.080** 2.03	**1.692** 42.98	**1.863** 47.32	**1.250** 31.75
C2050SS	**1.250** 31.75	**0.400** 10.16	**0.625** 15.88	**0.469** 11.91	**0.203** 5.16	**0.453** 11.51	**0.937** 23.80	**0.080** 2.03	**1.692** 42.98	**1.863** 47.32	**1.250** 31.75
C2060H	**1.500** 31.75	**0.469** 10.16	**0.844** 15.88	**0.562** 11.91	**0.203** 5.16	**0.578** 11.51	**1.125** 23.80	**0.125** 2.03	**2.171** 42.98	**2.446** 47.32	**1.688** 31.75
C2060SS	**1.500** 38.10	**0.469** 11.91	**0.844** 21.44	**0.562** 14.27	**0.203** 5.16	**0.561** 14.68	**1.125** 28.58	**0.094** 3.18	**2.115** 55.14	**2.317** 62.13	**1.688** 42.88
C2080H	**2.000** 38.10	**0.625** 11.91	**1.094** 21.44	**0.750** 14.27	**0.266** 5.16	**0.766** 14.25	**1.500** 28.58	**0.156** 2.39	**2.792** 53.72	**3.125** 58.85	**2.188** 42.88
C2080SS	**2.000** 50.80	**0.625** 15.88	**1.094** 27.79	**0.750** 19.05	**0.266** 6.76	**0.739** 19.46	**1.500** 38.10	**0.125** 3.96	**2.760** 70.92	**3.028** 79.38	**2.188** 55.58
C2100H	**2.500** 63.50	**0.750** 19.05	**1.312** 33.32	**0.937** 23.80	**0.328** 8.33	**0.922** 23.42	**1.875** 47.63	**0.187** 4.75	**3.554** 90.27	**3.951** 100.36	**2.625** 66.68
C2120H	**3.000** 76.20	**0.875** 22.23	**1.562** 39.67	**1.125** 28.58	**0.391** 9.93	**1.095** 27.81	**2.250** 57.15	**0.219** 5.56	**4.318** 109.68	**4.782** 121.46	**3.125** 79.38
C2160H	**4.000** 101.60	**1.125** 28.58	**2.063** 52.40	**1.500** 38.10	**0.516** 13.11	**1.438** 36.53	**3.000** 76.20	**0.281** 7.14	**5.520** 140.21	**6.116** 155.35	**4.125** 104.78

Double Pitch Oval Contour Bent Attachments Oversized Roller

Attachments available for all chain types and platings. Extended leadtimes may apply.

Description	Diamond P/N	Others P/N
One side, one hole	B1-1H	A-1, BA-1
One side, two holes	B1-2H	A-2, BA-2
Two sides, one hole	B2-1H	K-1, BK-1
Two sides, two holes	B2-2H	K-2, BK-2



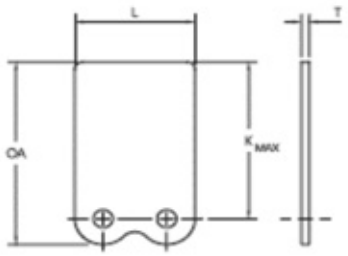
ASME/ANSI Number	Pitch	Roller Diameter	A	B	D	H	L	T	WI	WO	X
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
C2042	**1.000** 25.40	**0.625** 15.88	**0.500** 12.70	**0.375** 9.53	**0.141** 3.58	**0.359** 9.12	**0.750** 19.05	**0.060** 1.52	**1.350** 34.29	**1.483** 37.67	**1.000** 25.40
C2042SS	**1.000** 25.40	**0.625** 15.88	**0.500** 12.70	**0.375** 9.53	**0.141** 3.58	**0.355** 9.02	**0.750** 19.05	**0.060** 1.52	**1.350** 34.29	**1.488** 37.80	**1.000** 25.40
C2052	**1.250** 31.75	**0.750** 19.05	**0.625** 15.88	**0.469** 11.91	**0.203** 5.16	**0.453** 11.51	**0.937** 23.80	**0.080** 2.03	**1.692** 42.98	**1.863** 47.32	**1.250** 31.75
C2052SS	**1.250** 31.75	**0.750** 19.05	**0.625** 15.88	**0.469** 11.91	**0.203** 5.16	**0.453** 11.51	**0.937** 23.80	**0.080** 2.03	**1.692** 42.98	**1.863** 47.32	**1.250** 31.75
C2062H	**1.500** 38.10	**0.875** 22.23	**0.844** 21.44	**0.562** 14.27	**0.203** 5.16	**0.578** 14.68	**1.125** 28.58	**0.125** 3.18	**2.171** 55.14	**2.446** 62.13	**1.688** 42.88
C2062SS	**1.500** 38.10	**0.875** 22.23	**0.844** 21.44	**0.562** 14.27	**0.203** 5.16	**0.561** 14.25	**1.125** 28.58	**0.094** 2.39	**2.115** 53.72	**2.317** 58.85	**1.688** 42.88
C2082H	**2.000** 50.80	**1.125** 28.58	**1.094** 27.79	**0.750** 19.05	**0.266** 6.76	**0.766** 19.46	**1.500** 38.10	**0.156** 3.96	**2.792** 70.92	**3.125** 79.38	**2.188** 55.58
C2082SS	**2.000** 50.80	**1.125** 28.58	**1.094** 27.79	**0.750** 19.05	**0.266** 6.76	**0.739** 18.77	**1.500** 38.10	**0.125** 3.18	**2.760** 70.10	**3.028** 76.91	**2.188** 55.58
C2102H	**2.500** 63.50	**1.562** 39.67	**1.312** 33.32	**0.937** 23.80	**0.328** 8.33	**0.922** 23.42	**1.875** 47.63	**0.187** 4.75	**3.554** 90.27	**3.951** 100.36	**2.625** 66.68
C2122H	**3.000** 76.20	**1.750** 44.45	**1.562** 39.67	**1.125** 28.58	**0.391** 9.93	**1.095** 27.81	**2.250** 57.15	**0.219** 5.56	**4.318** 109.68	**4.782** 121.46	**3.125** 79.38
C2162H	**4.000** 101.60	**2.250** 57.15	**2.063** 52.40	**1.500** 38.10	**0.516** 13.11	**1.438** 36.53	**3.000** 76.20	**0.281** 7.14	**5.520** 140.21	**6.116** 155.35	**4.125** 104.78

Attachments

Wide-Tall Lugs

Attachments available for all chain types and platings.
Extended leadtimes may apply.

Wide-tall lugs are available in any height up to the K Max. specified below.
Please contact Diamond Chain customer service for ordering details.

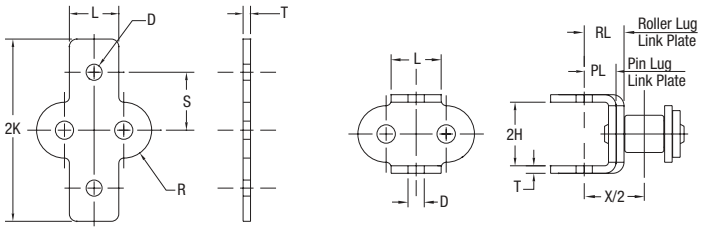


ASME/ANSI Number	Pitch	K Max.	L	OA	T
	in mm	in mm	in mm	in mm	in mm
35	0.375 9.53	1.290 32.77	0.713 18.11	1.459 37.06	0.050 1.27
40	0.500 12.70	1.560 39.62	0.971 24.66	1.796 45.62	0.060 1.52
41	0.500 12.70	1.560 39.62	0.878 22.30	1.749 44.42	0.050 1.27
50	0.625 15.88	1.810 45.97	1.209 30.71	2.103 53.42	0.080 2.03
60	0.750 19.05	2.049 52.04	1.420 36.07	2.384 60.55	0.094 2.39
80	1.000 25.40	2.485 63.12	1.885 47.88	2.930 74.42	0.125 3.18
100	1.250 31.75	2.927 74.35	2.362 59.99	3.483 88.47	0.156 3.96

Double Straight and Double Bent Lugs

Attachments available for all chain types and platings.
Extended leadtimes may apply.

Double straight and bent lugs are highly customizable;
Please contact Diamond Chain customer service for ordering details.

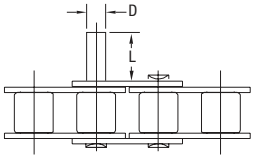


ASME/ANSI Number	Pitch	D	2H	2K	L	PL	RL	R	S	T	X/2
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
40	0.500 12.70	0.133 3.38	0.524 13.31	1.567 39.80	0.375 9.53	0.219 5.56	0.281 7.14	0.236 5.99	0.502 12.75	0.060 1.52	0.500 12.70
41	0.500 12.70	0.133 3.38	0.453 11.51	1.478 37.54	0.375 9.53	0.237 6.02	0.291 7.39	0.189 4.80	0.476 12.09	0.050 1.27	0.469 11.91
50	0.625 15.88	0.164 4.17	0.660 16.76	1.962 49.83	0.500 12.70	0.268 6.81	0.354 8.99	0.293 7.44	0.626 15.90	0.080 2.03	0.625 15.88
60	0.750 19.05	0.203 5.16	0.794 20.17	2.306 58.57	0.625 15.88	0.303 7.70	0.401 10.19	0.353 8.97	0.733 18.62	0.094 2.39	0.750 19.05
80	1.000 25.40	0.257 6.53	1.016 25.81	3.142 79.81	0.750 19.05	0.424 10.77	0.556 14.12	0.445 11.30	0.991 25.17	0.123 3.12	1.000 25.40
100	1.250 31.75	0.320 8.13	1.265 32.13	3.905 99.19	1.000 25.40	0.545 13.84	0.710 18.03	0.556 14.12	1.248 31.70	0.156 3.96	1.250 31.75

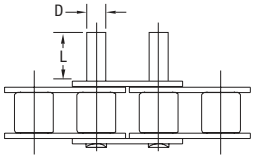
Attachments
Standard Extended Pins

Attachments available for all chain types and platings. Extended leadtimes may apply.

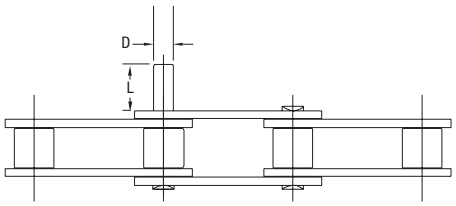
Description	Diamond P/N	Others P/N
Single Extended Pin	E1	D-1
Double Extended Pin	E2	D-3



Single pin



Double pin



Single pin on double pitch chain
(double pin not shown)

Carbon Steel Extended Pins

ASME/ANSI Number	Pitch	D*	L**
	in mm	in mm	in mm
25	**0.250** 6.35	**0.090** 2.29	**0.250** 6.35
35	**0.375** 9.53	**0.141** 3.58	**0.375** 9.53
40	**0.500** 12.70	**0.156** 3.96	**0.375** 9.53
41	**0.500** 12.70	**0.141** 3.58	**0.383** 9.73
50	**0.625** 15.88	**0.200** 5.08	**0.469** 11.91
60	**0.750** 19.05	**0.234** 5.94	**0.563** 14.30
80	**1.000** 25.40	**0.312** 7.92	**0.750** 19.05
100	**1.250** 31.75	**0.375** 9.53	**0.938** 23.83
120	**1.500** 38.10	**0.437** 11.10	**1.125** 28.58
140	**1.750** 44.45	**0.500** 12.70	**1.313** 33.35
160	**2.000** 50.80	**0.562** 14.27	**1.500** 38.10
C2040, C2042	**1.000** 25.40	**0.156** 3.96	**0.375** 9.53
C2050, C2052	**1.250** 31.75	**0.200** 5.08	**0.469** 11.91
C2060H, C2062H	**1.500** 38.10	**0.234** 5.94	**0.563** 14.30
C2080H, C2082H	**2.000** 50.80	**0.312** 7.92	**0.750** 19.05
C2100H, C2102H	**2.500** 63.50	**0.375** 9.53	**0.937** 23.80

Stainless Steel Extended Pins

ASME/ANSI Number	Pitch	D*	L**
	in mm	in mm	in mm
35SS	**0.375** 9.53	**0.141** 3.58	**0.375** 9.53
40SS	**0.500** 12.70	**0.156** 3.96	**0.375** 9.53
41SS	**0.500** 12.70	**0.141** 3.58	**0.383** 9.73
50SS	**0.625** 15.88	**0.200** 5.08	**0.471** 11.96
60SS	**0.750** 19.05	**0.234** 5.94	**0.562** 14.27
80SS	**1.000** 25.40	**0.312** 7.92	**0.750** 19.05
C2040SS, C2042SS	**1.000** 25.40	**0.156** 3.96	**0.375** 9.53
C2050SS, C2052SS	**1.250** 31.75	**0.200** 5.08	**0.471** 11.96
C2060SS, C2062SS	**1.500** 38.10	**0.234** 5.94	**0.563** 14.30
C2080SS, C2082SS	**2.000** 50.80	**0.312** 7.92	**0.750** 19.05

**D dimension +/- 0.0005" (0.0127mm)*
***L dimension +/- 0.010" (0.254mm)*

Application Specific Chain



Thermoforming Chain

Diamond Chain offers an extensive assortment of application specific chain. While often including attachments, this section differs from the prior by being highly specialized to specific applications. If your specific attachment or application cannot be located in this section, refer back to the "attachment" section. If still not available, please contact Diamond Chain Customer Service - we have an extensive library of chains and attachments produced for specific applications, and our advanced laser fabrication cell allows fast, cost effective production of custom product for new applications.

Pg. 43 Pin Oven Chain (can decorating)
Pg. 44 Thermoforming Chain (plastic film conveyance)
Pg. 44 Serrated Top Chain (lumber industry)
Pg. 45 Oil Field Chain
Pg. 46 POWER CURVE™ Chain (lateral deviation/curving conveyor)
Pg. 46 TUF-FLEX® Chain (construction industry/applications with lateral displacement)
Pg. 47 "Snap-on" Chain (applications involving snap-on flat plastic top plates)
Pg. 48 Coupling Chain
Pg. 49 Micropitch® Chain (precision applications including instrumentation, printers, etc.)
Pg. 50 Powersports Chain (ATVs, go-karts, motorcycles, snowmobiles)

Special Application Chain
Pin Oven Chain

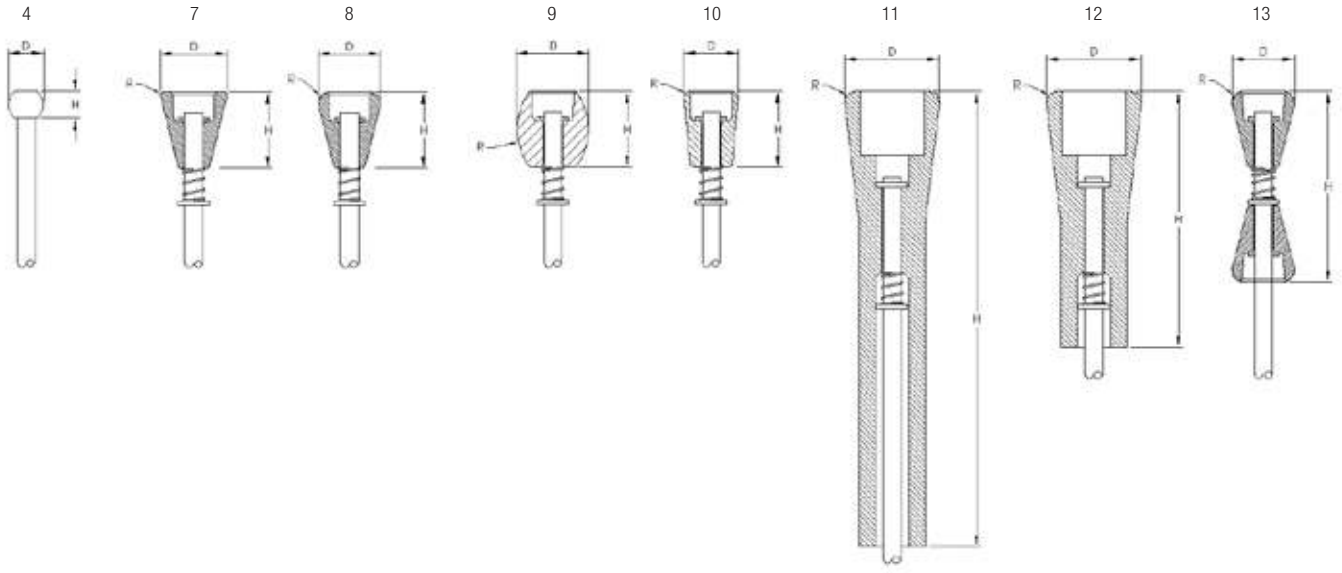
Pin oven chain is specially designed for two-piece metal decorating operations that can transfer and cure thousands of cans per minute. Diamond Chain offers two styles of pin oven chain that can be configured with various length pins and tips, in addition to custom designs.

Standard Pin Oven Chain uses ANSI #60 chain that has been modified for additional clearances to accommodate the high temperature drying ovens and to allow more lubricant to enter the critical pin/bushing joint.

RING LEADER® O-Ring Pin Oven Chain is more commonly used in this application. The chain utilizes a special compound o-ring that allows operation in temperatures up to 450°F (232°C) and that seals in lubrication while sealing out contaminants. The resulting chain runs more smoothly and evenly with less vibration, providing less downtime, fewer jams and more consistent production capacity. Note: chain does require periodic lubrication of the o-ring surface. Also, be certain to remove any wire cleaning brushings from the line such that the o-ring surface does not become inadvertently damaged.

The pins on standard and o-ring chain are built into the linkplate itself - not as an “add on” attachment. The default material for the pins is a medium carbon through-hardened steel such that if an obstruction is encountered in application the pin will “bend”. In that scenario, the pins can be straightened back to their original position in seconds. Case-hardened low carbon steel is also an option, resulting in pins that “break away” when contacted by an obstruction. Stainless steel pins are also available.

Pin Extensions & Tips. Because of the variability in applications, Diamond Chain offers numerous tips and pin extensions. The most common is a spring-loaded pin tip assembled with a side plate to end-of-tip dimension of seven inches (178mm). The table below shows the most common tips; if the desired configuration is not listed, Diamond Chain can easily create custom components for the specific application. The tips can be manufactured from steel, aluminum, heat stabilized nylon or high temperature PEEK™ (type 8, 9 and 10). Note that original pin tips 1-3 and 5-6 have been discontinued.



Pin Tip	4	7	8	9	10	11	12	13
Dimension	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm
D	**0.468** 11.89	**0.875** 22.23	**0.820** 20.83	**0.950** 24.13	**0.700** 17.78	**1.260** 32.00	**1.260** 32.00	**0.820** 20.83
H	**0.350** 8.89	**1.000** 25.40	**1.000** 25.40	**0.990** 25.15	**0.990** 25.15	**5.950** 151.13	**3.340** 84.84	**2.490** 63.25
R	**n/a** -	**45 deg.** 45 deg.	**0.125** 3.18	**0.840** 21.34	**0.060** 1.52	**0.060** 1.52	**0.060** 1.52	**0.125** 3.18

Ordering Instructions. Specify standard or XLO O-Ring, type of pin material (bendable, breakable, or stainless), type of tip configuration, and extension from the centerline of the chain to the end of the pin including the tip.

Special Application Chain
Thermoforming and Serrated Top Chain

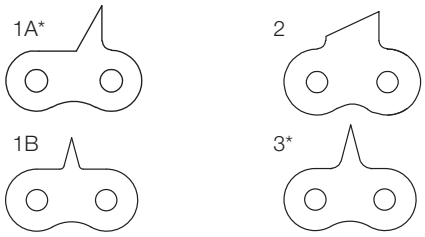
Thermoforming (Plastic Feeder) Chain

Thermforming chains are designed for thermforming applications such as those used in creating polystyrene plates, blister packs, and other plastic items. These chains feature precise, pointed linkplates combined with extended pins or straight attachments (for extra rigidity) which make them ideal for conveying plastic film into thermoforming operations.

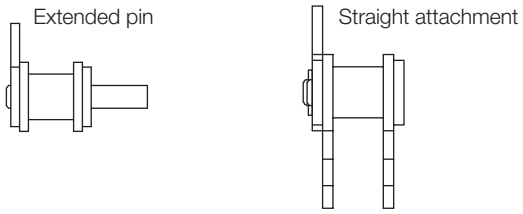
Note: because of the configured application-specific nature, thermoforming chain is made-to-order. Contact Diamond Chain Customer Service for ordering details.

Pointed Attachments and Extensions Diamond chain offers four primary pointed attachments; these types can then be combined with extended pins and/or straight attachments for additional support.

Tip Types



Extensions



Base Chain Sizes

40-1, 40-2

50-1, 50-2

60-1, 60-2

** Also available sharpened*

Length matching: Length matching is critical in thermoforming applications, where multiple chains in parallel are supporting a common piece of material. Diamond chain recommends all thermoforming chains to be ordered as a set, matched for length, and installed as a set to prevent the thermoforming material from twisting during processing.

Class 1 matching. For relatively small spans between chains, class 1 matching ensures the longest and shortest chain in a set do not vary by more than 0.006"/foot (0.5mm/m).

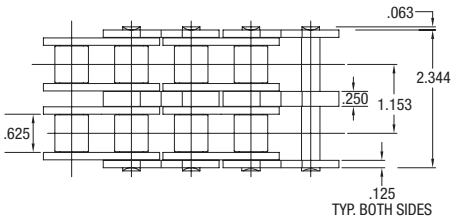
Class 2 matching. For longer spans between chains, class 2 matching ensures the longest and shortest chain in a set do not vary by more than 0.002"/foot (0.1667mm/m).

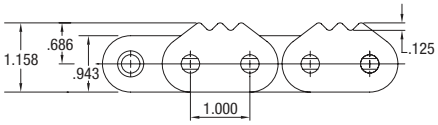
EHT Pins: Enhanced Hardening Treatment (EHT) pins are designed specifically for high temperature applications; the enhanced hardening treatment prevents the pin from “softening” in extreme temperature and thus prevents premature wear. Available as an option on all thermoforming chains.

Serrated Top Chain

Serrated top chains are designed for lumber industry applications such as edge finishing. This chain features specially designed linkplates to maximize grip while minimizing wood damage. Diamond Serrated Top chain offers superior performance, longer service life and reduced downtime due to elongation and fatigue failures. Single and multiple strand versions available.

Note: this chain is made-to-order to best accommodate the specific application operating conditions (frequency and depth of shock loading along with abrasion, temperature, and humidity factors). Contact Diamond Chain customer service for ordering details.





Special Application Chain
Oil Field Chain

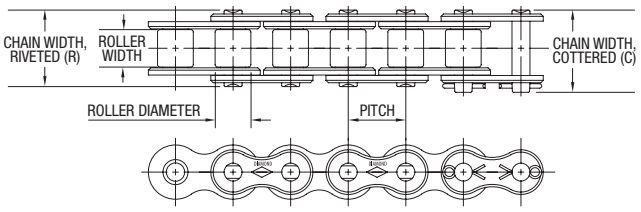
Roller chains used in the oil and natural gas industries are subject to some of the greatest loads and harshest environments. These conditions are far more severe than usually found in industrial applications. These "Oil Field" chains can be either single strand or multiple strand and are typically constructed using Heavy Series components. Multiple strand chain with press fit centerplates are recommended for use in heavy-duty applications requiring additional fatigue strength.

Diamond Oil Field chains are produced with the same attention to detail that goes into all Diamond products, but additionally have been subject to the most up to date API (American Petroleum Institute) Specification 7F performance testing.

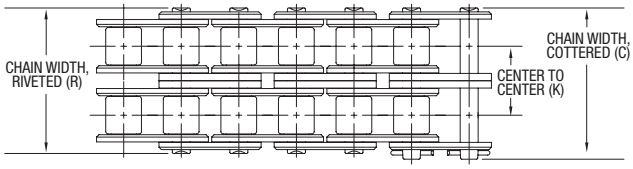
All Diamond Standard Series chain sizes 40 and above (except 41) and all Diamond Heavy Series chains meet API requirements. It is highly recommended that multiple strand chains with press fit center plates be used in oil field applications.

Additionally, Diamond Chain produces a narrow width 1-1/2" pitch roller chain and a 2-1/2" pitch roller chain with larger pin diameter - listed below - for use in older rigs. These chains do not fall under the ASME/ANSI standards and therefore are not covered by API.

Single Strand



Multiple Strand (-X suffix)



Diamond Number	Other ID	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	Avg. Weight	Avg. Tensile Strength†
		in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
472		**1.500** 38.10	**0.750** 19.05	**0.875** 22.23	**0.437** 11.10	**0.187** 4.75	**1.930** 49.02	**1.800** 45.72	**-** -	**3.410** 5.07	**34,000** 151.24
472-2		**1.500** 38.10	**0.750** 19.05	**0.875** 22.23	**0.437** 11.10	**0.187** 4.75	**3.450** 87.63	**3.300** 83.82	**1.550** 39.37	**6.760** 10.06	**68,000** 302.48
472-3		**1.500** 38.10	**0.750** 19.05	**0.875** 22.23	**0.437** 11.10	**0.187** 4.75	**5.000** 127.00	**4.850** 123.19	**1.550** 39.37	**10.080** 15.00	**102,000** 453.72
472-4		**1.500** 38.10	**0.750** 19.05	**0.875** 22.23	**0.437** 11.10	**0.187** 4.75	**6.550** 166.37	**6.410** 162.81	**1.550** 39.37	**13.400** 19.94	**136,000** 604.96
264	**64S**	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.875** 22.23	**0.375** 9.53	**3.710** 94.23	**3.390** 86.11	**-** -	**13.680** 20.36	**148,500** 660.56
264-3	**64S-3**	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.875** 22.23	**0.375** 9.53	**9.880** 250.95	**9.560** 242.82	**3.083** 78.31	**40.920** 60.90	**445,500** 1,981.68

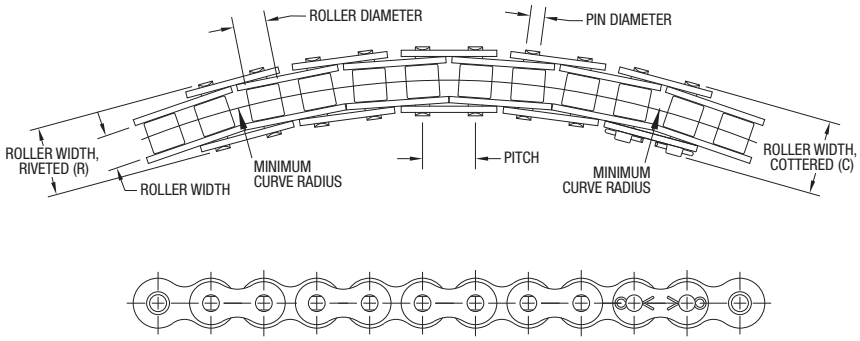
† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

Special Application Chain
Additional Clearance Chain

Diamond Series chain offers two solutions designed specifically for lateral deviations that standard chains cannot support.

POWER CURVE™ Chain

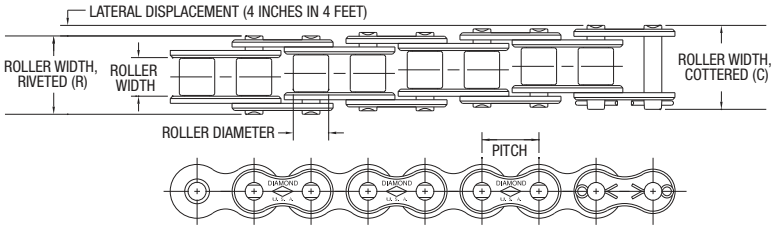
Designed for applications involving lateral turns, POWER CURVE chain is manufactured using a pin that is smaller in diameter while slightly longer than what is used in the Standard Series version. This design allows for extra clearance between the pin and the bushing and in the overall chain width as well.



Diamond Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	Min. Radius	Avg. Weight	Avg. Tensile Strength†
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
40LG	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.136** 3.45	**0.060** 1.52	**0.770** 19.56	**0.690** 17.53	**14.000** 355.60	**0.390** 0.58	**2,400** 10.68
50LG	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.172** 4.37	**0.080** 2.03	**0.900** 22.86	**0.860** 21.84	**16.000** 406.40	**0.660** 0.98	**4,600** 20.46
60LG	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.200** 5.08	**0.094** 2.39	**1.140** 28.96	**1.070** 27.18	**22.000** 558.80	**0.940** 1.40	**6,100** 27.13
80LG	**1.000** 25.40	**0.625** 15.88	**0.625** 15.88	**0.281** 7.14	**0.125** 3.18	**1.470** 37.34	**1.350** 34.29	**36.000** 914.40	**1.600** 2.38	**11,500** 51.15

TUF-FLEX® Chain

TUF-FLEX chain is designed to handle shaft or sprocket misalignment rather than a lateral turn. These chains can handle up to four inches (101mm) of lateral displacement in every four feet (1.2m) of chain length and up to eight degrees of axial twist. The special design provides extra durability and unusual flexibility to meet the strenuous demands of heavy duty construction machinery.



Diamond Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	Avg. Weight	Avg. Tensile Strength†
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
120-C	**1.500** 38.10	**1.000** 25.40	**0.875** 22.23	**0.437** 11.10	**0.187** 4.75	**2.160** 54.86	**2.020** 51.31	**3.690** 5.49	**34,000** 151.24
140-C	**1.750** 44.45	**1.000** 25.40	**1.000** 25.40	**0.500** 12.70	**0.219** 5.56	**2.330** 59.18	**2.160** 54.86	**5.000** 7.44	**46,000** 204.62
160-HC	**2.000** 50.80	**1.250** 31.75	**1.125** 28.58	**0.562** 14.27	**0.281** 7.14	**2.860** 72.64	**2.680** 68.07	**7.090** 10.55	**70,000** 311.38
200-C	**2.500** 63.50	**1.500** 38.10	**1.562** 39.67	**0.781** 19.84	**0.312** 7.92	**3.450** 87.63	**3.140** 79.76	**10.650** 15.85	**95,000** 422.58

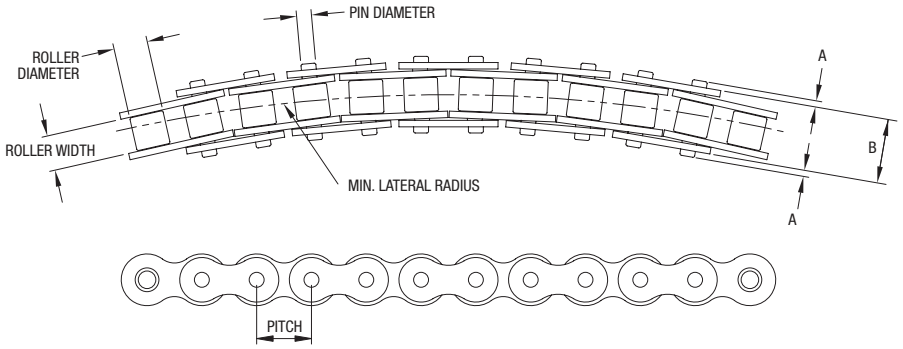
† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

Special Application Chain
"Snap-On Top Plate" Chain

"Snap-on" chains are designed with specially extended pins to retain plastic "snap-on" flat top plates. Diamond Chain offers chains for both straight-running and side flexing applications. These chains can be used with standard ASME/ANSI 40 or 60 sprockets, and are available in both carbon steel and stainless steel.

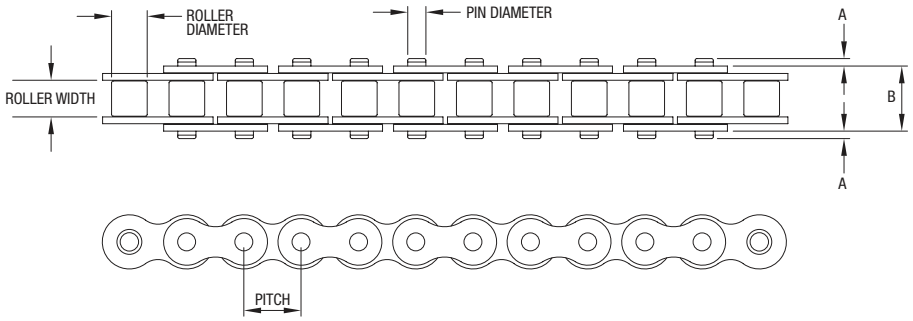
Note: Uses industry standard flat top plates sold separately. 63SB part numbers have oval contour linkplates (not shown).

Side-Flexing "Snap-On Top Plate" Chain



Diamond Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	A	B	Min. Radius	Avg. Weight	Avg. Tensile Strength†
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
Carbon Steel										
43SB	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.136** 3.45	**0.060** 1.52	**0.056** 1.42	**0.588** 14.94	**14.000** 355.60	**0.400** 0.60	**2,400** 10.68
63SB	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.200** 5.08	**0.094** 2.39	**0.120** 3.05	**0.900** 22.86	**22.000** 558.80	**0.940** 1.40	**6,100** 27.13
Stainless Steel										
43SB SS	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.136** 3.45	**0.060** 1.52	**0.056** 1.42	**0.588** 14.94	**14.000** 355.60	**0.400** 0.60	**2,400** 10.68
63SB SS	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.200** 5.08	**0.094** 2.39	**0.120** 3.05	**0.900** 22.86	**22.000** 558.80	**0.940** 1.40	**6,100** 27.13

Straight Running "Snap-On Top Plate" Chain

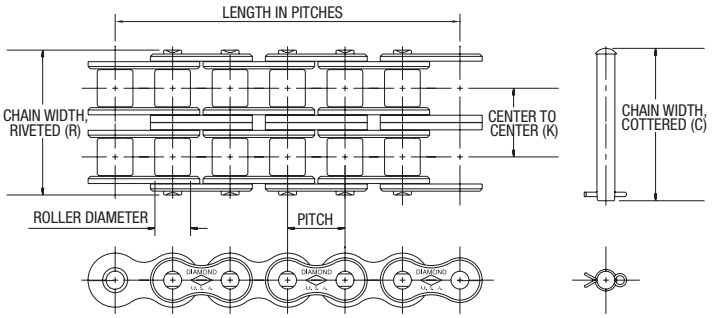


Diamond Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	A	B	Avg. Weight	Avg. Tensile Strength†
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
Carbon Steel									
43	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.065** 1.65	**0.568** 14.43	**0.440** 0.65	**4,000** 17.79
63	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**0.105** 2.67	**0.898** 22.81	**1.010** 1.50	**8,500** 37.81
Stainless Steel									
43 SS	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.065** 1.65	**0.568** 14.43	**0.440** 0.65	**4,000** 17.79
63 SS	**0.750** 19.05	**0.500** 12.70	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**0.105** 2.67	**0.898** 22.81	**1.010** 1.50	**8,500** 37.81

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

Special Application Chain
Coupling Chain

Coupling chain is specifically designed to work in concert with drive couplings to provide near-seamless power transmission. The chain's file-hard components develop a high-capacity unit durable enough to deliver long after other chains fail. Chain is double-strand press fit constructed to exact length. Exclusive single coupling bolt facilitates easier assembly/disassembly.

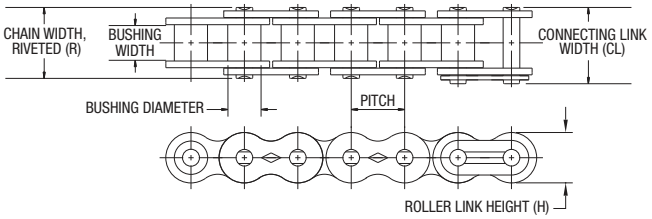


Diamond Number	Pitch	Roller Width	Roller Diameter	C	R	K	Avg. Weight	Length
	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	Pitches
D4012	0.500 12.70	0.312 7.92	0.312 7.92	1.297 32.94	1.240 31.50	0.566 14.38	0.410 0.61	12
D4016	0.500 12.70	0.312 7.92	0.312 7.92	1.297 32.94	1.240 31.50	0.566 14.38	0.550 0.82	16
D5016	0.625 15.88	0.375 9.53	0.400 7.11	1.592 40.44	1.550 39.37	0.713 18.11	1.120 1.67	16
D5018	0.625 15.88	0.375 9.53	0.400 8.43	1.592 40.44	1.550 39.37	0.713 18.11	1.260 1.88	18
D6018	0.750 19.05	0.500 12.70	0.469 11.23	1.980 50.29	1.940 49.28	0.897 22.78	2.160 3.21	18
D6020	0.750 19.05	0.500 12.70	0.469 13.51	1.980 50.29	1.940 49.28	0.897 22.78	2.400 3.57	20
D6022	0.750 19.05	0.500 12.70	0.469 15.75	1.980 50.29	1.940 49.28	0.897 22.78	2.640 3.93	22
D8018	1.000 25.40	0.625 15.88	0.625 13.51	2.567 65.20	2.470 62.74	1.153 29.29	5.000 7.44	18
D8020	1.000 25.40	0.625 15.88	0.625 15.75	2.567 65.20	2.470 62.74	1.153 29.29	5.560 8.27	20
D10018	1.250 31.75	0.750 19.05	0.750 13.51	3.162 80.31	3.020 76.71	1.408 35.76	9.240 13.75	18
D10020	1.250 31.75	0.750 19.05	0.750 15.75	3.162 80.31	3.020 76.71	1.408 35.76	10.300 15.33	20
D12018	1.500 38.10	1.000 25.40	0.875 13.51	3.977 101.02	3.790 96.27	1.789 45.44	16.200 24.11	18
D12022	1.500 38.10	1.000 25.40	0.875 15.75	3.977 101.02	3.790 96.27	1.789 45.44	19.800 29.47	22

Special Application Chain
Micropitch® Chain

Micropitch chain is constructed entirely from non-magnetic 300 series stainless steel and offers a large joint bearing area, making it well suited for precision applications requiring positive and negative articulation.

Micropitch chain is applied on the basis of maximum working loads imposed in the drive. For chain speed less than 100 feet (30.5 meters) per minute, maximum working load should not exceed 20 pounds (9.07 kg). For speeds greater than 100 feet (30.5 meters) per minute, the maximum working load should be reduced depending upon the specifics of the drive. As a general rule, working loads should not exceed 12 pounds (5.4 kg) for chain speed greater than 500 feet (152 meters) per minute.



Diamond Number	Pitch	Bushing Width	Bushing Diameter	Pin Diameter	Linkplate Thickness	H	CL	R	Avg. Tensile Strength
	in mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**in** mm	**lbf** kN
47SS	**0.147** 3.73	**0.072** 1.83	**0.090** 2.29	**0.062** 1.57	**0.015** 0.38	**0.138** 3.51	**0.250** 6.35	**0.220** 5.59	**180** 0.80

Special Application Chain
Powersports Chain

Diamond Series Powersports chains are designed to meet the individual needs of the powersport's enthusiast for ATVs, go-karts, motorcycles and snowmobiles.

Multi-Service chains offer Diamond's superior manufacturing parts processing technology which includes material selection, precise component fabrication, exacting heat treatment, and assembly techniques.

RING LEADER® O-Ring chains are top-of-the-line chains offering up to four times the service life of regular chains. O-Rings seal in lubrication and seal out foreign contaminants.

Additionally, some chains are available with a brass or nickel plating for an enhanced appearance.

Diamond Number	Plating	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	Avg. Weight	Avg. Tensile Strength†
		in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
Multi-Service											
35MS	–	**0.375** 9.53	**0.188** 4.76	***.200** 5.08	**0.141** 3.58	**0.050** 1.27	**0.560** 14.22	**0.500** 12.70	**–** –	**0.210** 0.31	**2,000** 8.90
35MS BR	**Brass**	**0.375** 9.53	**0.188** 4.76	***.200** 5.08	**0.141** 3.58	**0.050** 1.27	**0.560** 14.22	**0.500** 12.70	**–** –	**0.210** 0.31	**2,000** 8.90
35-2MS	–	**0.375** 9.53	**0.188** 4.76	***.200** 5.08	**0.141** 3.58	**0.050** 1.27	**0.960** 24.38	**0.900** 22.86	**0.399** 10.13	**0.450** 0.67	**4,200** 18.68
35-3**	–	**0.375** 9.53	**0.188** 4.76	***.200** 5.08	**0.141** 3.58	**0.050** 1.27	**1.360** 34.54	**1.310** 33.27	**0.399** 10.13	**0.770** 1.15	**6,300** 28.02
41MS	–	**0.500** 12.70	**0.250** 6.35	**0.306** 7.77	**0.141** 3.58	**0.050** 1.27	**0.650** 16.51	**0.570** 14.48	**–** –	**0.260** 0.39	**2,400** 10.68
40MS	–	**0.500** 12.70	**0.313** 7.94	**0.312** 7.92	**0.156** 3.96	**0.060** 1.52	**0.720** 18.29	**0.670** 17.02	**–** –	**0.410** 0.61	**4,000** 17.79
428MS	–	**0.500** 12.70	**0.313** 7.94	**0.335** 8.51	**0.174** 4.42	**0.060** 1.52	**0.720** 18.29	**0.670** 17.02	**–** –	**0.430** 0.64	**4,200** 18.68
428-2	–	**0.500** 12.70	**0.313** 7.94	**0.335** 8.51	**0.174** 4.42	**0.060** 1.52	**1.290** 32.77	**1.240** 31.50	**0.566** 14.38	**0.880** 1.31	**8,400** 37.37
520MS	–	**0.625** 15.88	**0.250** 6.35	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.770** 19.56	**0.710** 18.03	**–** –	**0.590** 0.88	**6,600** 29.36
520H	**Brass**	**0.625** 15.88	**0.250** 6.35	**0.400** 10.16	**0.214** 5.44	**0.094** 2.39	**0.800** 20.32	**0.740** 18.80	**–** –	**0.820** 1.22	**9,300** 41.37
530MS	–	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**–** –	**0.680** 1.01	**6,600** 29.36
530ENP	**Nickel**	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**–** –	**0.690** 1.03	**6,600** 29.36
530BP	**Brass**	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.200** 5.08	**0.080** 2.03	**0.890** 22.61	**0.830** 21.08	**–** –	**0.680** 1.01	**6,600** 29.36
630MS	–	**0.750** 19.05	**0.375** 9.53	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**0.980** 24.89	**0.910** 23.11	**–** –	**0.910** 1.35	**8,500** 37.81
630BP	**Brass**	**0.750** 19.05	**0.375** 9.53	**0.469** 11.91	**0.234** 5.94	**0.094** 2.39	**0.980** 24.89	**0.910** 23.11	**–** –	**0.910** 1.35	**8,500** 37.81
XLO O-Ring											
520XLO	–	**0.625** 15.88	**0.250** 6.35	**0.400** 10.16	**0.214** 5.44	**0.094** 2.39	**0.890** 22.61	**0.830** 21.08	**–** –	**0.850** 1.26	**9,300** 41.37
520XLO NI	**Nickel**	**0.625** 15.88	**0.250** 6.35	**0.400** 10.16	**0.214** 5.44	**0.094** 2.39	**0.890** 22.61	**0.830** 21.08	**–** –	**0.860** 1.28	**9,300** 41.37
520XLO BP	**Brass**	**0.625** 15.88	**0.250** 6.35	**0.400** 10.16	**0.214** 5.44	**0.094** 2.39	**0.890** 22.61	**0.830** 21.08	**–** –	**0.860** 1.28	**9,300** 41.37
530XLO	–	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.214** 5.44	**0.094** 2.39	**1.020** 25.91	**0.960** 24.38	**–** –	**0.930** 1.38	**9,300** 41.37
530XLO BP	**Brass**	**0.625** 15.88	**0.375** 9.53	**0.400** 10.16	**0.214** 5.44	**0.094** 2.39	**1.020** 25.91	**0.960** 24.38	**–** –	**0.930** 1.38	**9,300** 41.37

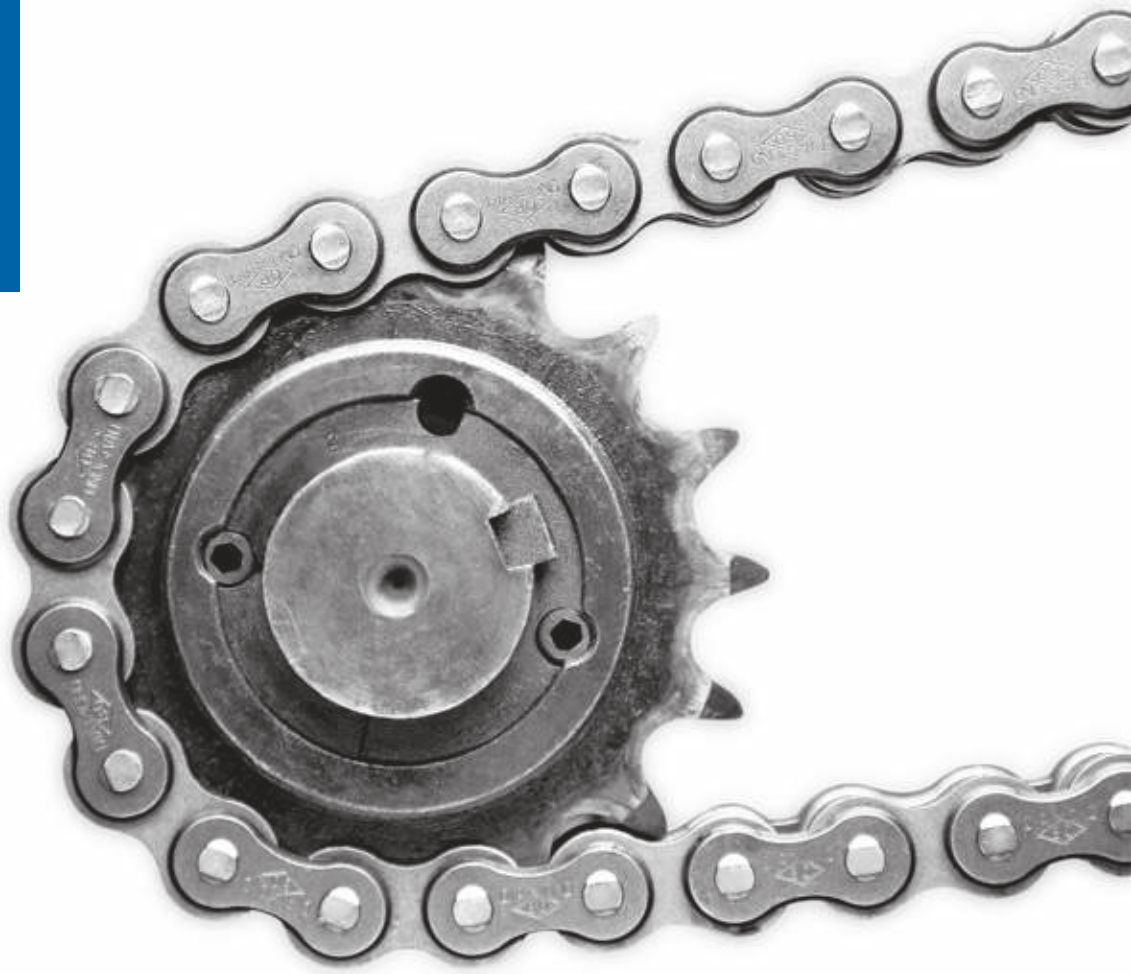
** Chain is rollerless. Dimension shown is bushing diameter.*

*** Chain uses oval contour sideplates and is supplied riveted endless.*

† Diamond Chain Company uses average tensile strength as it is a more appropriate value for strength and load calculations. Working load should not exceed 1/6th tensile strength under typical conditions when using a press fit connecting link or 1/9th tensile strength when using a slip fit connecting link or offset link.

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Horsepower Tables



The horsepower rating tables found on the following pages cover Standard Series, Heavy Series, Double Pitch, RING LEADER “XLO” O-Ring and EHT roller chains.

This horsepower table section is divided as follows:

Pg. 53-66 Standard Series chain
Pg. 67-75 Heavy Series chain
Pg. 76-79 Double pitch chain
Pg. 80-83 RINGLEADER “XLO” O-Ring chain

The power transmission capacity rating listed in the following tables are based upon these conditions:

1. A service factor of one.
2. Chain length of 100 pitches.
3. The use of recommended methods of lubrication.
4. A two-sprocket drive, properly aligned and mounted on parallel horizontal shafts.
5. A non-abrasive environment.

Under these conditions, a service life of approximately 15,000 hours can be expected.

Standard Series Horsepower Tables

#25 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																								
	50	100	300	365	500	700	900	1,200	1,500	1,800	2,100	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	7,000	8,000	9,000	10,000	11,000	12,000
11	0.03	0.06	0.19	0.22	0.30	0.42	0.53	0.70	0.87	1.03	1.20	1.42	1.69	1.69	1.38	1.16	0.99	0.86	0.75	0.60	0.49	0.41	0.35	0.30	0.27
12	0.04	0.07	0.20	0.24	0.33	0.46	0.58	0.76	0.95	1.13	1.31	1.55	1.84	1.92	1.57	1.32	1.12	0.97	0.86	0.68	0.56	0.47	0.40	0.34	0.30
13	0.04	0.08	0.22	0.26	0.36	0.49	0.63	0.83	1.03	1.22	1.42	1.67	1.99	2.17	1.77	1.49	1.27	1.10	0.96	0.77	0.63	0.53	0.45	0.39	0.34
14	0.04	0.08	0.24	0.28	0.38	0.53	0.68	0.89	1.10	1.32	1.52	1.80	2.15	2.42	1.98	1.66	1.42	1.23	1.08	0.86	0.70	0.59	0.50	0.43	0.38
15	0.05	0.09	0.25	0.30	0.41	0.57	0.72	0.95	1.18	1.41	1.63	1.93	2.30	2.67	2.20	1.84	1.57	1.36	1.20	0.95	0.78	0.65	0.56	0.48	0.42
16	0.05	0.09	0.27	0.32	0.44	0.61	0.77	1.02	1.26	1.50	1.74	2.06	2.45	2.85	2.42	2.03	1.73	1.50	1.32	1.05	0.86	0.72	0.61	0.53	0.47
17	0.05	0.10	0.29	0.35	0.47	0.64	0.82	1.08	1.34	1.60	1.85	2.19	2.61	3.02	2.65	2.22	1.90	1.64	1.44	1.14	0.94	0.79	0.67	0.58	0.51
18	0.05	0.11	0.30	0.37	0.49	0.68	0.87	1.15	1.42	1.69	1.96	2.32	2.76	3.20	2.89	2.42	2.07	1.79	1.57	1.25	1.02	0.86	0.73	0.63	0.56
19	0.06	0.11	0.32	0.39	0.52	0.72	0.92	1.21	1.50	1.78	2.07	2.45	2.91	3.38	3.13	2.62	2.24	1.94	1.70	1.35	1.11	0.93	0.79	0.69	
20	0.06	0.12	0.34	0.41	0.55	0.76	0.97	1.27	1.58	1.88	2.18	2.58	3.07	3.56	3.38	2.83	2.42	2.10	1.84	1.46	1.20	1.00	0.86	0.74	
21	0.06	0.12	0.35	0.43	0.58	0.80	1.01	1.34	1.66	1.97	2.29	2.70	3.22	3.74	3.64	3.05	2.60	2.26	1.98	1.57	1.29	1.08	0.92		
22	0.07	0.13	0.37	0.45	0.60	0.83	1.06	1.40	1.73	2.07	2.40	2.83	3.37	3.91	3.90	3.27	2.79	2.42	2.12	1.69	1.38	1.16	0.99		
23	0.07	0.13	0.39	0.47	0.63	0.87	1.11	1.46	1.81	2.16	2.51	2.96	3.53	4.09	4.17	3.50	2.98	2.59	2.27	1.80	1.47	1.24	1.04		
24	0.07	0.14	0.40	0.49	0.66	0.91	1.16	1.53	1.89	2.25	2.61	3.09	3.68	4.27	4.45	3.73	3.18	2.76	2.42	1.92	1.57	1.32	0.22		
25	0.08	0.15	0.42	0.51	0.69	0.95	1.21	1.59	1.97	2.35	2.72	3.22	3.84	4.45	4.73	3.96	3.38	2.93	2.57	2.04	1.67	1.40			
26	0.08	0.15	0.44	0.53	0.71	0.99	1.26	1.65	2.05	2.44	2.83	3.35	3.99	4.62	5.01	4.20	3.59	3.11	2.73	2.17	1.77	1.49			
28	0.08	0.16	0.47	0.57	0.77	1.06	1.35	1.78	2.21	2.63	3.05	3.61	4.30	4.98	5.60	4.70	4.01	3.47	3.05	2.42	1.98				
30	0.09	0.18	0.50	0.61	0.82	1.14	1.45	1.91	2.37	2.82	3.27	3.86	4.60	5.34	6.07	5.21	4.45	3.85	3.38	2.68	1.98				
32	0.10	0.19	0.54	0.65	0.88	1.21	1.55	2.04	2.52	3.01	3.49	4.12	4.91	5.69	6.47	5.74	4.90	4.25	3.73	2.96	0.35				
35	0.11	0.21	0.59	0.71	0.96	1.33	1.69	2.23	2.76	3.29	3.81	4.51	5.37	6.23	7.08	6.56	5.60	4.86	4.26	2.76					
40	0.12	0.23	0.67	0.81	1.10	1.52	1.93	2.55	3.15	3.76	4.36	5.15	6.14	7.11	8.09	8.02	6.85	5.93	4.91						
45	0.14	0.26	0.76	0.91	1.24	1.71	2.17	2.86	3.55	4.23	4.90	5.79	6.90	8.00	9.10	9.57	8.17	5.23	1.38						
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)										Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

#25 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																								
	50	100	300	365	500	700	900	1,200	1,500	1,800	2,100	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	7,000	8,000	9,000	10,000	11,000	12,000
11	0.02	0.04	0.14	0.16	0.22	0.31	0.40	0.52	0.65	0.77	0.89	1.06	1.26	1.26	1.03	0.87	0.74	0.64	0.56	0.45	0.37	0.31	0.26	0.22	0.20
12	0.03	0.05	0.15	0.18	0.25	0.34	0.43	0.57	0.71	0.84	0.98	1.16	1.37	1.43	1.17	0.98	0.84	0.72	0.64	0.51	0.42	0.35	0.30	0.25	0.22
13	0.03	0.06	0.16	0.19	0.27	0.37	0.47	0.62	0.77	0.91	1.06	1.25	1.48	1.62	1.32	1.11	0.95	0.82	0.72	0.57	0.47	0.40	0.34	0.29	0.25
14	0.03	0.06	0.18	0.21	0.28	0.40	0.51	0.66	0.82	0.98	1.13	1.34	1.60	1.80	1.48	1.24	1.06	0.92	0.81	0.64	0.52	0.44	0.37	0.32	0.28
15	0.04	0.07	0.19	0.22	0.31	0.43	0.54	0.71	0.88	1.05	1.22	1.44	1.72	1.99	1.64	1.37	1.17	1.01	0.89	0.71	0.58	0.48	0.42	0.36	0.31
16	0.04	0.07	0.20	0.24	0.33	0.45	0.57	0.76	0.94	1.12	1.30	1.54	1.83	2.13	1.80	1.51	1.29	1.12	0.98	0.78	0.64	0.54	0.45	0.40	0.35
17	0.04	0.07	0.22	0.26	0.35	0.48	0.61	0.81	1.00	1.19	1.38	1.63	1.95	2.25	1.98	1.66	1.42	1.22	1.07	0.85	0.70	0.59	0.50	0.43	0.38
18	0.04	0.08	0.22	0.28	0.37	0.51	0.65	0.86	1.06	1.26	1.46	1.73	2.06	2.39	2.16	1.80	1.54	1.33	1.17	0.93	0.76	0.64	0.54	0.47	0.42
19	0.04	0.08	0.24	0.29	0.39	0.54	0.69	0.90	1.12	1.33	1.54	1.83	2.17	2.52	2.33	1.95	1.67	1.45	1.27	1.01	0.83	0.69	0.59	0.51	
20	0.04	0.09	0.25	0.31	0.41	0.57	0.72	0.95	1.18	1.40	1.63	1.92	2.29	2.65	2.52	2.11	1.80	1.57	1.37	1.09	0.89	0.75	0.64	0.55	
21	0.04	0.09	0.26	0.32	0.43	0.60	0.75	1.00	1.24	1.47	1.71	2.01	2.40	2.79	2.71	2.27	1.94	1.69	1.48	1.17	0.96	0.81	0.69		
22	0.05	0.10	0.28	0.34	0.45	0.62	0.79	1.04	1.29	1.54	1.79	2.11	2.51	2.92	2.91	2.44	2.08	1.80	1.58	1.26	1.03	0.87	0.74		
23	0.05	0.10	0.29	0.35	0.47	0.65	0.83	1.09	1.35	1.61	1.87	2.21	2.63	3.05	3.11	2.61	2.22	1.93	1.69	1.34	1.10	0.92	0.78		
24	0.05	0.10	0.30	0.37	0.49	0.68	0.87	1.14	1.41	1.68	1.95	2.30	2.74	3.18	3.32	2.78	2.37	2.06	1.80	1.43	1.17	0.98	0.16		
25	0.06	0.11	0.31	0.38	0.51	0.71	0.90	1.19	1.47	1.75	2.03	2.40	2.86	3.32	3.53	2.95	2.52	2.18	1.92	1.52	1.25	1.04			
26	0.06	0.11	0.33	0.40	0.53	0.74	0.94	1.23	1.53	1.82	2.11	2.50	2.98	3.45	3.74	3.13	2.68	2.32	2.04	1.62	1.32	1.11			
28	0.06	0.12	0.35	0.43	0.57	0.79	1.01	1.33	1.65	1.96	2.27	2.69	3.21	3.71	4.18	3.50	2.99	2.59	2.27	1.80	1.48				
30	0.07	0.13	0.37	0.45	0.61	0.85	1.08	1.42	1.77	2.10	2.44	2.88	3.43	3.98	4.53	3.89	3.32	2.87	2.52	2.00	1.48				
32	0.07	0.14	0.40	0.48	0.66	0.90	1.16	1.52	1.88	2.24	2.60	3.07	3.66	4.24	4.82	4.28	3.65	3.17	2.78	2.21	0.26				
35	0.08	0.16	0.44	0.53	0.72	0.99	1.26	1.66	2.06	2.45	2.84	3.36	4.00	4.65	5.28	4.89	4.18	3.62	3.18	2.06					
40	0.09	0.17	0.50	0.60	0.82	1.13	1.44	1.90	2.35	2.80	3.25	3.84	4.58	5.30	6.03	5.98	5.11	4.42	3.66						
45	0.10	0.19	0.57	0.68	0.92	1.28	1.62	2.13	2.65	3.15	3.65	4.32	5.15	5.97	6.79	7.14	6.09	3.90	1.03						
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)										Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

Standard Series Horsepower Tables

#35 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																								
	50	100	200	240	500	700	900	1,200	1,500	1,800	2,100	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	8,000	9,000	10,000
11	0.11	0.22	0.42	0.50	1.02	1.41	1.80	2.37	2.93	3.49	4.05	3.86	2.94	2.33	1.91	1.60	1.37	1.18	1.04	0.92	0.82	0.74	0.67	0.57	0.48
12	0.12	0.24	0.46	0.55	1.11	1.54	1.96	2.58	3.20	3.81	4.42	4.40	3.35	2.66	2.17	1.82	1.56	1.35	1.18	1.05	0.94	0.85	0.77	0.64	0.55
13	0.13	0.26	0.50	0.60	1.21	1.67	2.12	2.80	3.47	4.13	4.79	4.96	3.77	3.00	2.45	2.05	1.75	1.52	1.33	1.18	1.06	0.95	0.87	0.73	0.62
14	0.14	0.28	0.54	0.64	1.30	1.80	2.29	3.01	3.73	4.45	5.15	5.55	4.22	3.35	2.74	2.30	1.96	1.70	1.49	1.32	1.18	1.07	0.97	0.81	0.10
15	0.15	0.30	0.58	0.69	1.39	1.92	2.45	3.23	4.00	4.76	5.52	6.15	4.68	3.71	3.04	2.55	2.17	1.88	1.65	1.47	1.31	1.18	1.07	0.90	
16	0.16	0.32	0.62	0.73	1.49	2.05	2.61	3.44	4.26	5.08	5.89	6.77	5.15	4.09	3.35	2.81	2.40	2.08	1.82	1.62	1.45	1.30	1.18	0.44	
17	0.17	0.34	0.65	0.78	1.58	2.18	2.77	3.66	4.53	5.40	6.26	7.40	5.64	4.48	3.67	3.07	2.62	2.27	2.00	1.77	1.58	1.43	1.30		
18	0.18	0.36	0.69	0.83	1.67	2.31	2.94	3.87	4.80	5.72	6.63	7.83	6.15	4.88	3.99	3.35	2.86	2.48	2.17	1.93	1.73	1.56	1.41		
19	0.19	0.38	0.73	0.87	1.76	2.44	3.10	4.09	5.06	6.03	7.00	8.27	6.67	5.29	4.33	3.63	3.10	2.69	2.36	2.09	1.87	1.69	0.05		
20	0.20	0.40	0.77	0.92	1.86	2.56	3.26	4.30	5.33	6.35	7.36	8.71	7.20	5.72	4.68	3.92	3.35	2.90	2.55	2.26	2.02	1.42			
21	0.21	0.42	0.81	0.96	1.95	2.69	3.43	4.52	5.60	6.67	7.73	9.14	7.75	6.15	5.03	4.22	3.60	3.12	2.74	2.43	2.17				
22	0.22	0.44	0.85	1.01	2.04	2.82	3.59	4.73	5.86	6.99	8.10	9.58	8.31	6.59	5.40	4.52	3.86	3.35	2.94	2.61	1.42				
23	0.23	0.46	0.89	1.06	2.14	2.95	3.75	4.95	6.13	7.30	8.47	10.01	8.88	7.05	5.77	4.83	4.13	3.58	3.14	2.79					
24	0.24	0.48	0.92	1.10	2.23	3.08	3.92	5.16	6.40	7.62	8.84	10.45	9.47	7.51	6.15	5.15	4.40	3.81	3.35	2.04					
25	0.25	0.50	0.96	1.15	2.32	3.21	4.08	5.38	6.66	7.94	9.20	10.88	10.07	7.99	6.54	5.48	4.68	4.05	3.56	0.12					
26	0.26	0.51	1.00	1.19	2.41	3.33	4.24	5.59	6.93	8.26	9.57	11.32	10.68	8.47	6.93	5.81	4.96	4.30	3.40						
28	0.29	0.55	1.08	1.28	2.60	3.59	4.57	6.02	7.46	8.89	10.31	12.19	11.93	9.47	7.75	6.49	5.55	4.81							
30	0.31	0.59	1.16	1.38	2.79	3.85	4.90	6.45	8.00	9.53	11.05	13.06	13.23	10.50	8.59	7.20	6.15	2.24							
32	0.33	0.63	1.23	1.47	2.97	4.10	5.22	6.88	8.53	10.16	11.78	13.93	14.58	11.57	9.47	7.93	5.76								
35	0.36	0.69	1.35	1.61	3.25	4.49	5.71	7.53	9.33	11.11	12.89	15.23	16.67	13.23	10.83	8.85	0.34								
40	0.41	0.79	1.54	1.84	3.71	5.13	6.53	8.61	10.66	12.70	14.73	17.41	20.37	16.17	11.04	0.34									
45	0.46	0.89	1.73	2.07	4.18	5.77	7.35	9.68	11.99	14.29	16.57	19.59	23.33	15.56	3.11										
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)							Type C (Oil Pump)														

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

#35 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																								
	50	100	200	240	500	700	900	1,200	1,500	1,800	2,100	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	8,000	9,000	10,000
11	0.08	0.16	0.31	0.37	0.76	1.05	1.34	1.77	2.18	2.60	3.02	2.88	2.19	1.74	1.42	1.19	1.02	0.88	0.78	0.69	0.61	0.55	0.50	0.43	0.36
12	0.09	0.18	0.34	0.41	0.83	1.15	1.46	1.92	2.39	2.84	3.30	3.28	2.50	1.98	1.62	1.36	1.16	1.01	0.88	0.78	0.70	0.63	0.57	0.48	0.41
13	0.10	0.19	0.37	0.45	0.90	1.25	1.58	2.09	2.59	3.08	3.57	3.70	2.81	2.24	1.83	1.53	1.30	1.13	0.99	0.88	0.79	0.71	0.65	0.54	0.46
14	0.10	0.21	0.40	0.48	0.97	1.34	1.71	2.24	2.78	3.32	3.84	4.14	3.15	2.50	2.04	1.72	1.46	1.27	1.11	0.98	0.88	0.80	0.72	0.60	0.07
15	0.11	0.22	0.43	0.51	1.04	1.43	1.83	2.41	2.98	3.55	4.12	4.59	3.49	2.77	2.27	1.90	1.62	1.40	1.23	1.10	0.98	0.88	0.80	0.67	
16	0.12	0.24	0.46	0.54	1.11	1.53	1.95	2.57	3.18	3.79	4.39	5.05	3.84	3.05	2.50	2.10	1.79	1.55	1.36	1.21	1.08	0.97	0.88	0.33	
17	0.13	0.25	0.48	0.58	1.18	1.63	2.07	2.73	3.38	4.03	4.67	5.52	4.21	3.34	2.74	2.29	1.95	1.69	1.49	1.32	1.18	1.07	0.97		
18	0.13	0.27	0.51	0.62	1.25	1.72	2.19	2.89	3.58	4.27	4.94	5.84	4.59	3.64	2.98	2.50	2.13	1.85	1.62	1.44	1.29	1.16	1.05		
19	0.14	0.28	0.54	0.65	1.31	1.82	2.31	3.05	3.77	4.50	5.22	6.17	4.97	3.94	3.23	2.71	2.31	2.01	1.76	1.56	1.39	1.26	0.04		
20	0.15	0.30	0.57	0.69	1.39	1.91	2.43	3.21	3.97	4.74	5.49	6.50	5.37	4.27	3.49	2.92	2.50	2.16	1.90	1.69	1.51	1.06			
21	0.16	0.31	0.60	0.72	1.45	2.01	2.56	3.37	4.18	4.97	5.76	6.82	5.78	4.59	3.75	3.15	2.68	2.33	2.04	1.81	1.62				
22	0.16	0.33	0.63	0.75	1.52	2.10	2.68	3.53	4.37	5.21	6.04	7.14	6.20	4.91	4.03	3.37	2.88	2.50	2.19	1.95	1.06				
23	0.17	0.34	0.66	0.79	1.60	2.20	2.80	3.69	4.57	5.44	6.32	7.46	6.62	5.26	4.30	3.60	3.08	2.67	2.34	2.08					
24	0.18	0.36	0.69	0.82	1.66	2.30	2.92	3.85	4.77	5.68	6.59	7.79	7.06	5.60	4.59	3.84	3.28	2.84	2.50	1.52					
25	0.19	0.37	0.72	0.86	1.73	2.39	3.04	4.01	4.97	5.92	6.86	8.11	7.51	5.96	4.88	4.09	3.49	3.02	2.65	0.09					
26	0.19	0.38	0.75	0.89	1.80	2.48	3.16	4.17	5.17	6.16	7.14	8.44	7.96	6.32	5.17	4.33	3.70	3.21	2.54						
28	0.22	0.41	0.81	0.95	1.94	2.68	3.41	4.49	5.56	6.63	7.69	9.09	8.90	7.06	5.78	4.84	4.14	3.59							
30	0.23	0.44	0.87	1.03	2.08	2.87	3.65	4.81	5.97	7.11	8.24	9.74	9.87	7.83	6.41	5.37	4.59	1.67							
32	0.25	0.47	0.92	1.10	2.21	3.06	3.89	5.13	6.36	7.58	8.78	10.39	10.87	8.63	7.06	5.91	4.30								
35	0.27	0.51	1.01	1.20	2.42	3.35	4.26	5.62	6.96	8.28	9.61	11.36	12.43	9.87	8.08	6.60	0.25								
40	0.31	0.59	1.15	1.37	2.77	3.83	4.87	6.42	7.95	9.47	10.98	12.98	15.19	12.06	8.23	0.25									
45	0.34	0.66	1.29	1.54	3.12	4.30	5.48	7.22	8.94	10.66	12.36	14.61	17.40	11.60	2.32										
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)							Type C (Oil Pump)														

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

Standard Series Horsepower Tables

#40 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	10	25	50	100	180	200	300	500	700	900	1,000	1,200	1,400	1,600	1,800	2,100	2,500	3,000	3,500	4,000	5,000	6,000	7,000	8,000
11	0.06	0.14	0.27	0.52	0.91	1.00	1.48	2.42	3.34	4.25	4.70	5.60	6.49	5.57	4.66	3.70	2.85	2.17	1.72	1.41	1.01	0.77	0.61	0.50
12	0.06	0.15	0.29	0.56	0.99	1.09	1.61	2.64	3.64	4.64	5.13	6.11	7.09	6.34	5.31	4.22	3.25	2.47	1.96	1.60	1.15	0.87	0.69	0.57
13	0.07	0.16	0.31	0.61	1.07	1.19	1.75	2.86	3.95	5.02	5.56	6.62	7.68	7.15	5.99	4.76	3.66	2.79	2.21	1.81	1.29	0.98	0.78	
14	0.07	0.17	0.34	0.66	1.15	1.28	1.88	3.08	4.25	5.41	5.98	7.13	8.27	7.99	6.70	5.31	4.09	3.11	2.47	2.02	1.45	1.10	0.87	
15	0.08	0.19	0.36	0.70	1.24	1.37	2.02	3.30	4.55	5.80	6.41	7.64	8.86	8.86	7.43	5.89	4.54	3.45	2.74	2.24	1.60	1.22	0.97	
16	0.08	0.20	0.39	0.75	1.32	1.46	2.15	3.52	4.86	6.18	6.84	8.15	9.45	9.76	8.18	6.49	5.00	3.80	3.02	2.47	1.77	1.34		
17	0.09	0.21	0.41	0.80	1.40	1.55	2.29	3.74	5.16	6.57	7.27	8.66	10.04	10.69	8.96	7.11	5.48	4.17	3.31	2.71	1.94	1.47		
18	0.09	0.22	0.43	0.84	1.48	1.64	2.42	3.96	5.46	6.95	7.69	9.17	10.63	11.65	9.76	7.75	5.97	4.54	3.60	2.95	2.11	1.60		
19	0.10	0.24	0.46	0.89	1.57	1.73	2.56	4.18	5.77	7.34	8.12	9.68	11.22	12.64	10.59	8.40	6.47	4.92	3.91	3.20	2.29	0.09		
20	0.10	0.25	0.48	0.94	1.65	1.82	2.69	4.39	6.07	7.73	8.55	10.18	11.81	13.42	11.44	9.07	6.99	5.31	4.22	3.45	2.47			
21	0.11	0.26	0.51	0.98	1.73	1.91	2.83	4.61	6.37	8.11	8.98	10.69	12.40	14.10	12.30	9.76	7.52	5.72	4.54	3.71	2.66			
22	0.11	0.27	0.53	1.03	1.81	2.01	2.96	4.83	6.68	8.50	9.40	11.20	12.99	14.77	13.19	10.47	8.06	6.13	4.87	3.98	2.85			
23	0.12	0.28	0.55	1.08	1.90	2.10	3.10	5.05	6.98	8.89	9.83	11.71	13.58	15.44	14.10	11.19	8.62	6.55	5.20	4.26	3.05			
24	0.12	0.30	0.58	1.12	1.98	2.19	3.23	5.27	7.28	9.27	10.26	12.22	14.17	16.11	15.03	11.93	9.18	6.99	5.54	4.54	0.87			
25	0.13	0.31	0.60	1.17	2.06	2.28	3.36	5.49	7.59	9.66	10.69	12.73	14.76	16.78	15.98	12.68	9.76	7.43	5.89	4.82				
26	0.13	0.32	0.63	1.22	2.14	2.37	3.50	5.71	7.89	10.04	11.11	13.24	15.35	17.45	16.95	13.45	10.36	7.88	6.25	5.12				
28	0.14	0.35	0.67	1.31	2.31	2.55	3.77	6.15	8.50	10.82	11.97	14.26	16.53	18.79	18.94	15.03	11.57	8.80	6.99	5.72				
30	0.15	0.37	0.72	1.41	2.47	2.74	4.04	6.59	9.11	11.59	12.82	15.28	17.71	20.14	21.01	16.67	12.84	9.76	7.75	6.34				
32	0.16	0.40	0.77	1.50	2.64	2.92	4.31	7.03	9.71	12.36	13.68	16.30	18.89	21.48	23.14	18.37	14.14	10.76	8.54	1.41				
35	0.18	0.43	0.84	1.64	2.88	3.19	4.71	7.69	10.62	13.52	14.96	17.82	20.67	23.49	26.30	21.01	16.17	12.30	9.76					
40	0.21	0.50	0.96	1.87	3.30	3.65	5.38	8.79	12.14	15.45	17.10	20.37	23.62	26.85	30.06	25.67	19.76	15.03						
45	0.23	0.56	1.08	2.11	3.71	4.10	6.06	9.89	13.66	17.39	19.24	22.92	26.57	30.20	33.82	30.63	23.58	5.53						
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)									Type C (Oil Pump)										

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

#40 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	10	25	50	100	180	200	300	500	700	900	1,000	1,200	1,400	1,600	1,800	2,100	2,500	3,000	3,500	4,000	5,000	6,000	7,000	8,000
11	0.04	0.10	0.20	0.39	0.68	0.75	1.10	1.80	2.49	3.17	3.50	4.18	4.84	4.15	3.47	2.76	2.13	1.62	1.28	1.05	0.75	0.57	0.45	0.37
12	0.04	0.11	0.22	0.42	0.74	0.81	1.20	1.97	2.71	3.46	3.83	4.56	5.29	4.73	3.96	3.15	2.42	1.84	1.46	1.19	0.86	0.65	0.51	0.43
13	0.05	0.12	0.23	0.45	0.80	0.89	1.30	2.13	2.95	3.74	4.15	4.94	5.73	5.33	4.47	3.55	2.73	2.08	1.65	1.35	0.96	0.73	0.58	
14	0.05	0.13	0.25	0.49	0.86	0.95	1.40	2.30	3.17	4.03	4.46	5.32	6.17	5.96	5.00	3.96	3.05	2.32	1.84	1.51	1.08	0.82	0.65	
15	0.06	0.14	0.27	0.52	0.92	1.02	1.51	2.46	3.39	4.33	4.78	5.70	6.61	6.61	5.54	4.39	3.39	2.57	2.04	1.67	1.19	0.91	0.72	
16	0.06	0.15	0.29	0.56	0.98	1.09	1.60	2.62	3.62	4.61	5.10	6.08	7.05	7.28	6.10	4.84	3.73	2.83	2.25	1.84	1.32	1.00		
17	0.07	0.16	0.31	0.60	1.04	1.16	1.71	2.79	3.85	4.90	5.42	6.46	7.49	7.97	6.68	5.30	4.09	3.11	2.47	2.02	1.45	1.10		
18	0.07	0.16	0.32	0.63	1.10	1.22	1.80	2.95	4.07	5.18	5.73	6.84	7.93	8.69	7.28	5.78	4.45	3.39	2.68	2.20	1.57	1.19		
19	0.07	0.18	0.34	0.66	1.17	1.29	1.91	3.12	4.30	5.47	6.06	7.22	8.37	9.43	7.90	6.26	4.82	3.67	2.92	2.39	1.71	0.07		
20	0.07	0.19	0.36	0.70	1.23	1.36	2.01	3.27	4.53	5.76	6.38	7.59	8.81	10.01	8.53	6.76	5.21	3.96	3.15	2.57	1.84			
21	0.08	0.19	0.38	0.73	1.29	1.42	2.11	3.44	4.75	6.05	6.70	7.97	9.25	10.51	9.17	7.28	5.61	4.27	3.39	2.77	1.98			
22	0.08	0.20	0.40	0.77	1.35	1.50	2.21	3.60	4.98	6.34	7.01	8.35	9.69	11.01	9.84	7.81	6.01	4.57	3.63	2.97	2.13			
23	0.09	0.21	0.41	0.81	1.42	1.57	2.31	3.77	5.20	6.63	7.33	8.73	10.13	11.51	10.51	8.34	6.43	4.88	3.88	3.18	2.27			
24	0.09	0.22	0.43	0.84	1.48	1.63	2.41	3.93	5.43	6.91	7.65	9.11	10.57	12.01	11.21	8.90	6.85	5.21	4.13	3.39	0.65			
25	0.10	0.23	0.45	0.87	1.54	1.70	2.51	4.09	5.66	7.20	7.97	9.49	11.01	12.51	11.92	9.46	7.28	5.54	4.39	3.59				
26	0.10	0.24	0.47	0.91	1.60	1.77	2.61	4.26	5.88	7.49	8.28	9.87	11.45	13.01	12.64	10.03	7.73	5.88	4.66	3.82				
28	0.10	0.26	0.50	0.98	1.72	1.90	2.81	4.59	6.34	8.07	8.93	10.63	12.33	14.01	14.12	11.21	8.63	6.56	5.21	4.27				
30	0.11	0.28	0.54	1.05	1.84	2.04	3.01	4.91	6.79	8.64	9.56	11.39	13.21	15.02	15.67	12.43	9.57	7.28	5.78	4.73				
32	0.12	0.30	0.57	1.12	1.97	2.18	3.21	5.24	7.24	9.22	10.20	12.15	14.09	16.02	17.26	13.70	10.54	8.02	6.37	1.05				
35	0.13	0.32	0.63	1.22	2.15	2.38	3.51	5.73	7.92	10.08	11.16	13.29	15.41	17.52	19.61	15.67	12.06	9.17	7.28					
40	0.16	0.37	0.72	1.39	2.46	2.72	4.01	6.55	9.05	11.52	12.75	15.19	17.61	20.02	22.42	19.14	14.74	11.21						
45	0.17	0.42	0.81	1.57	2.77	3.06	4.52	7.37	10.19	12.97	14.35	17.09	19.81	22.52	25.22	22.84	17.58	4.12						
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)									Type C (Oil Pump)										

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

Standard Series Horsepower Tables

#41 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	10	25	50	100	180	200	300	500	700	900	1,000	1,200	1,400	1,600	1,800	2,100	2,500	3,000	3,500	4,000	5,000	6,000	7,000	8,000
11	0.03	0.07	0.15	0.28	0.50	0.55	0.81	1.33	1.84	2.34	2.25	1.71	1.36	1.11	0.93	0.74	0.57	0.43	0.34	0.28	0.20	0.15	0.12	0.10
12	0.03	0.08	0.16	0.31	0.54	0.60	0.89	1.45	2.00	2.55	2.57	1.95	1.55	1.27	1.06	0.84	0.65	0.49	0.39	0.32	0.23	0.17	0.14	0.11
13	0.04	0.09	0.17	0.34	0.59	0.65	0.96	1.57	2.17	2.76	2.89	2.20	1.75	1.43	1.20	0.95	0.73	0.56	0.44	0.36	0.26	0.20	0.16	
14	0.04	0.10	0.19	0.36	0.63	0.70	1.04	1.69	2.34	2.97	3.23	2.46	1.95	1.60	1.34	1.06	0.82	0.62	0.49	0.40	0.29	0.22	0.17	
15	0.04	0.10	0.20	0.39	0.68	0.75	1.11	1.81	2.50	3.19	3.53	2.73	2.17	1.77	1.49	1.18	0.91	0.69	0.55	0.45	0.32	0.24	0.19	
16	0.05	0.11	0.21	0.41	0.73	0.80	1.18	1.93	2.67	3.40	3.76	3.01	2.39	1.95	1.64	1.30	1.00	0.76	0.60	0.49	0.35	0.27		
17	0.05	0.12	0.23	0.44	0.77	0.85	1.26	2.05	2.84	3.61	4.00	3.29	2.61	2.14	1.79	1.42	1.10	0.83	0.66	0.54	0.39	0.29		
18	0.05	0.12	0.24	0.46	0.82	0.90	1.33	2.18	3.00	3.82	4.23	3.59	2.85	2.33	1.95	1.55	1.19	0.91	0.72	0.59	0.42	0.32		
19	0.05	0.13	0.25	0.49	0.86	0.95	1.41	2.30	3.17	4.04	4.47	3.89	3.09	2.53	2.12	1.68	1.29	0.98	0.78	0.64	0.46	0.09		
20	0.06	0.14	0.27	0.52	0.91	1.00	1.48	2.42	3.34	4.25	4.70	4.20	3.33	2.73	2.29	1.81	1.40	1.06	0.84	0.69	0.49			
21	0.06	0.14	0.28	0.54	0.95	1.05	1.55	2.54	3.51	4.46	4.94	4.52	3.59	2.94	2.46	1.95	1.50	1.14	0.91	0.74	0.53			
22	0.06	0.15	0.29	0.57	1.00	1.10	1.63	2.66	3.67	4.67	5.17	4.85	3.85	3.15	2.64	2.09	1.61	1.23	0.97	0.80	0.57			
23	0.07	0.16	0.30	0.59	1.04	1.15	1.70	2.78	3.84	4.89	5.41	5.18	4.11	3.37	2.82	2.24	1.72	1.31	1.04	0.85	0.61			
24	0.07	0.16	0.32	0.62	1.09	1.20	1.78	2.90	4.01	5.10	5.64	5.52	4.38	3.59	3.01	2.39	1.84	1.40	1.11	0.91	0.65			
25	0.07	0.17	0.33	0.64	1.13	1.25	1.85	3.02	4.17	5.31	5.88	5.87	4.66	3.81	3.20	2.54	1.95	1.49	1.18	0.96				
26	0.07	0.18	0.34	0.67	1.18	1.30	1.92	3.14	4.34	5.52	6.11	6.23	4.94	4.05	3.39	2.69	2.07	1.58	1.25	1.02				
28	0.08	0.19	0.37	0.72	1.27	1.40	2.07	3.38	4.67	5.95	6.58	6.96	5.52	4.52	3.79	3.01	2.31	1.76	1.40	1.14				
30	0.08	0.20	0.40	0.77	1.36	1.50	2.22	3.63	5.01	6.37	7.05	7.72	6.13	5.01	4.20	3.33	2.57	1.95	1.55	1.27				
32	0.09	0.22	0.42	0.82	1.45	1.60	2.37	3.87	5.34	6.80	7.52	8.50	6.75	5.52	4.63	3.67	2.83	2.15	1.71	1.40				
35	0.10	0.24	0.46	0.90	1.59	1.76	2.59	4.23	5.84	7.44	8.23	9.80	7.72	6.32	5.29	4.20	3.23	2.46	1.95					
40	0.11	0.27	0.53	1.03	1.81	2.01	2.96	4.83	6.68	8.50	9.40	11.20	9.43	7.72	6.47	5.13	3.95	3.01						
45	0.13	0.31	0.60	1.16	2.04	2.26	3.33	5.44	7.51	9.56	10.58	12.60	11.25	9.21	7.72	6.13	4.72	3.59						
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)									Type C (Oil Pump)										

#41 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	10	25	50	100	180	200	300	500	700	900	1,000	1,200	1,400	1,600	1,800	2,100	2,500	3,000	3,500	4,000	5,000	6,000	7,000	8,000
11	0.02	0.05	0.11	0.21	0.37	0.41	0.60	0.99	1.37	1.74	1.68	1.28	1.01	0.83	0.69	0.55	0.43	0.32	0.25	0.21	0.15	0.11	0.09	0.07
12	0.02	0.06	0.12	0.23	0.40	0.45	0.66	1.08	1.49	1.90	1.92	1.45	1.16	0.95	0.79	0.63	0.48	0.37	0.29	0.24	0.17	0.13	0.10	0.08
13	0.03	0.07	0.13	0.25	0.44	0.48	0.72	1.17	1.62	2.06	2.16	1.64	1.30	1.07	0.89	0.71	0.54	0.42	0.33	0.27	0.19	0.15	0.12	
14	0.03	0.07	0.14	0.27	0.47	0.52	0.78	1.26	1.74	2.21	2.41	1.83	1.45	1.19	1.00	0.79	0.61	0.46	0.37	0.30	0.22	0.16	0.13	
15	0.03	0.07	0.15	0.29	0.51	0.56	0.83	1.35	1.86	2.38	2.63	2.04	1.62	1.32	1.11	0.88	0.68	0.51	0.41	0.34	0.24	0.18	0.14	
16	0.04	0.08	0.16	0.31	0.54	0.60	0.88	1.44	1.99	2.54	2.80	2.24	1.78	1.45	1.22	0.97	0.75	0.57	0.45	0.37	0.26	0.20		
17	0.04	0.09	0.17	0.33	0.57	0.63	0.94	1.53	2.12	2.69	2.98	2.45	1.95	1.60	1.33	1.06	0.82	0.62	0.49	0.40	0.29	0.22		
18	0.04	0.09	0.18	0.34	0.61	0.67	0.99	1.63	2.24	2.85	3.15	2.68	2.13	1.74	1.45	1.16	0.89	0.68	0.54	0.44	0.31	0.24		
19	0.04	0.10	0.19	0.37	0.64	0.71	1.05	1.72	2.36	3.01	3.33	2.90	2.30	1.89	1.58	1.25	0.96	0.73	0.58	0.48	0.34	0.07		
20	0.04	0.10	0.20	0.39	0.68	0.75	1.10	1.80	2.49	3.17	3.50	3.13	2.48	2.04	1.71	1.35	1.04	0.79	0.63	0.51	0.37			
21	0.04	0.10	0.21	0.40	0.71	0.78	1.16	1.89	2.62	3.33	3.68	3.37	2.68	2.19	1.83	1.45	1.12	0.85	0.68	0.55	0.40			
22	0.04	0.11	0.22	0.43	0.75	0.82	1.22	1.98	2.74	3.48	3.86	3.62	2.87	2.35	1.97	1.56	1.20	0.92	0.72	0.60	0.43			
23	0.05	0.12	0.22	0.44	0.78	0.86	1.27	2.07	2.86	3.65	4.03	3.86	3.06	2.51	2.10	1.67	1.28	0.98	0.78	0.63	0.45			
24	0.05	0.12	0.24	0.46	0.81	0.89	1.33	2.16	2.99	3.80	4.21	4.12	3.27	2.68	2.24	1.78	1.37	1.04	0.83	0.68	0.48			
25	0.05	0.13	0.25	0.48	0.84	0.93	1.38	2.25	3.11	3.96	4.38	4.38	3.47	2.84	2.39	1.89	1.45	1.11	0.88	0.72				
26	0.05	0.13	0.25	0.50	0.88	0.97	1.43	2.34	3.24	4.12	4.56	4.65	3.68	3.02	2.53	2.01	1.54	1.18	0.93	0.76				
28	0.06	0.14	0.28	0.54	0.95	1.04	1.54	2.52	3.48	4.44	4.91	5.19	4.12	3.37	2.83	2.24	1.72	1.31	1.04	0.85				
30	0.06	0.15	0.30	0.57	1.01	1.12	1.66	2.71	3.74	4.75	5.26	5.76	4.57	3.74	3.13	2.48	1.92	1.45	1.16	0.95				
32	0.07	0.16	0.31	0.61	1.08	1.19	1.77	2.89	3.98	5.07	5.61	6.34	5.03	4.12	3.45	2.74	2.11	1.60	1.28	1.04				
35	0.07	0.18	0.34	0.67	1.19	1.31	1.93	3.15	4.35	5.55	6.14	7.31	5.76	4.71	3.94	3.13	2.41	1.83	1.45					
40	0.08	0.20	0.40	0.77	1.35	1.50	2.21	3.60	4.98	6.34	7.01	8.35	7.03	5.76	4.82	3.83	2.95	2.24						
45	0.10	0.23	0.45	0.87	1.52	1.69	2.48	4.06	5.60	7.13	7.89	9.40	8.39	6.87	5.76	4.57	3.52	2.68						
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)									Type C (Oil Pump)										

Standard Series Horsepower Tables

#50 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	100	140	200	300	500	700	900	1,200	1,500	1,800	2,100	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000
11	0.11	0.27	0.52	1.00	1.39	1.95	2.88	4.70	6.50	8.27	10.24	7.33	5.58	4.42	3.41	2.59	2.06	1.68	1.41	1.20	1.04	0.92	0.81	0.73
12	0.12	0.29	0.56	1.09	1.51	2.13	3.14	5.13	7.09	9.02	11.67	8.35	6.35	5.04	3.88	2.95	2.34	1.92	1.61	1.37	1.19	1.04	0.93	
13	0.13	0.31	0.61	1.19	1.64	2.31	3.40	5.56	7.68	9.77	12.88	9.42	7.16	5.69	4.38	3.33	2.64	2.16	1.81	1.55	1.34	1.18		
14	0.14	0.34	0.66	1.28	1.76	2.48	3.67	5.99	8.27	10.53	13.87	10.52	8.01	6.35	4.89	3.72	2.95	2.42	2.03	1.73	1.50	0.28		
15	0.15	0.36	0.70	1.37	1.89	2.66	3.93	6.41	8.86	11.28	14.86	11.67	8.88	7.05	5.42	4.13	3.27	2.68	2.25	1.92	1.66			
16	0.16	0.39	0.75	1.46	2.02	2.84	4.19	6.84	9.45	12.03	15.85	12.86	9.78	7.76	5.98	4.55	3.61	2.95	2.47	2.11				
17	0.17	0.41	0.80	1.55	2.14	3.02	4.45	7.27	10.04	12.78	16.85	14.08	10.71	8.50	6.55	4.98	3.95	3.23	2.71	2.31				
18	0.18	0.43	0.84	1.64	2.27	3.19	4.71	7.70	10.63	13.53	17.84	15.34	11.67	9.26	7.13	5.42	4.30	3.52	2.95	0.05				
19	0.19	0.46	0.89	1.73	2.39	3.37	4.98	8.12	11.22	14.28	18.83	16.64	12.66	10.05	7.73	5.88	4.67	3.82	3.20					
20	0.20	0.48	0.94	1.82	2.52	3.55	5.24	8.55	11.81	15.04	19.82	17.97	13.67	10.85	8.35	6.35	5.04	4.13	3.46					
21	0.21	0.51	0.98	1.92	2.65	3.73	5.50	8.98	12.40	15.79	20.81	19.34	14.71	11.67	8.99	6.84	5.42	4.44						
22	0.22	0.53	1.03	2.01	2.77	3.90	5.76	9.41	12.99	16.54	21.80	20.73	15.77	12.52	9.64	7.33	5.82	4.76						
23	0.23	0.55	1.08	2.10	2.90	4.08	6.02	9.83	13.58	17.29	22.79	22.16	16.86	13.38	10.30	7.84	6.22	5.09						
24	0.24	0.58	1.13	2.19	3.02	4.26	6.28	10.26	14.18	18.04	23.78	23.62	17.97	14.26	10.98	8.35	6.63	1.36						
25	0.25	0.60	1.17	2.28	3.15	4.44	6.55	10.69	14.77	18.79	24.77	25.11	19.11	15.16	11.67	8.88	7.05							
26	0.26	0.63	1.22	2.37	3.28	4.61	6.81	11.12	15.36	19.55	25.76	26.64	20.26	16.08	12.38	9.42	7.47							
28	0.28	0.67	1.31	2.55	3.53	4.97	7.33	11.97	16.54	21.05	27.75	29.77	22.65	17.97	13.84	10.52	4.74							
30	0.30	0.72	1.41	2.74	3.78	5.32	7.86	12.83	17.72	22.55	29.73	33.01	25.11	19.93	15.34	11.67								
32	0.32	0.77	1.50	2.92	4.03	5.68	8.38	13.68	18.90	24.06	31.71	36.37	27.67	21.96	16.90	12.86								
35	0.35	0.84	1.64	3.19	4.41	6.21	9.16	14.97	20.67	26.31	34.68	41.60	31.65	25.11	19.34	0.94								
40	0.40	0.96	1.88	3.65	5.04	7.10	10.47	17.10	23.63	30.07	39.64	49.11	38.67	30.68	23.62									
45	0.45	1.08	2.11	4.10	5.67	7.98	11.78	19.24	26.58	33.83	44.59	55.24	46.14	36.61	8.64									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)						Type C (Oil Pump)													

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

#50 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	100	140	200	300	500	700	900	1,200	1,500	1,800	2,100	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000
11	0.08	0.20	0.39	0.75	1.04	1.45	2.15	3.50	4.85	6.17	7.64	5.47	4.16	3.30	2.54	1.93	1.54	1.25	1.05	0.89	0.78	0.69	0.60	0.54
12	0.09	0.22	0.42	0.81	1.13	1.59	2.34	3.83	5.29	6.73	8.70	6.23	4.74	3.76	2.89	2.20	1.74	1.43	1.20	1.02	0.89	0.78	0.69	
13	0.10	0.23	0.45	0.89	1.22	1.72	2.54	4.15	5.73	7.29	9.60	7.02	5.34	4.24	3.27	2.48	1.97	1.61	1.35	1.16	1.00	0.88		
14	0.10	0.25	0.49	0.95	1.31	1.85	2.74	4.47	6.17	7.85	10.34	7.84	5.97	4.74	3.65	2.77	2.20	1.80	1.51	1.29	1.12	0.21		
15	0.11	0.27	0.52	1.02	1.41	1.98	2.93	4.78	6.61	8.41	11.08	8.70	6.62	5.26	4.04	3.08	2.44	2.00	1.68	1.43	1.24			
16	0.12	0.29	0.56	1.09	1.51	2.12	3.12	5.10	7.05	8.97	11.82	9.59	7.29	5.79	4.46	3.39	2.69	2.20	1.84	1.57				
17	0.13	0.31	0.60	1.16	1.60	2.25	3.32	5.42	7.49	9.53	12.57	10.50	7.99	6.34	4.88	3.71	2.95	2.41	2.02	1.72				
18	0.13	0.32	0.63	1.22	1.69	2.38	3.51	5.74	7.93	10.09	13.30	11.44	8.70	6.91	5.32	4.04	3.21	2.62	2.20	0.04				
19	0.14	0.34	0.66	1.29	1.78	2.51	3.71	6.06	8.37	10.65	14.04	12.41	9.44	7.49	5.76	4.38	3.48	2.85	2.39					
20	0.15	0.36	0.70	1.36	1.88	2.65	3.91	6.38	8.81	11.22	14.78	13.40	10.19	8.09	6.23	4.74	3.76	3.08	2.58					
21	0.16	0.38	0.73	1.43	1.98	2.78	4.10	6.70	9.25	11.77	15.52	14.42	10.97	8.70	6.70	5.10	4.04	3.31						
22	0.16	0.40	0.77	1.50	2.07	2.91	4.30	7.02	9.69	12.33	16.26	15.46	11.76	9.34	7.19	5.47	4.34	3.55						
23	0.17	0.41	0.81	1.57	2.16	3.04	4.49	7.33	10.13	12.89	16.99	16.52	12.57	9.98	7.68	5.85	4.64	3.80						
24	0.18	0.43	0.84	1.63	2.25	3.18	4.68	7.65	10.57	13.45	17.73	17.61	13.40	10.63	8.19	6.23	4.94	1.01						
25	0.19	0.45	0.87	1.70	2.35	3.31	4.88	7.97	11.01	14.01	18.47	18.72	14.25	11.30	8.70	6.62	5.26							
26	0.19	0.47	0.91	1.77	2.45	3.44	5.08	8.29	11.45	14.58	19.21	19.87	15.11	11.99	9.23	7.02	5.57							
28	0.21	0.50	0.98	1.90	2.63	3.71	5.47	8.93	12.33	15.70	20.69	22.20	16.89	13.40	10.32	7.84	3.53							
30	0.22	0.54	1.05	2.04	2.82	3.97	5.86	9.57	13.21	16.82	22.17	24.62	18.72	14.86	11.44	8.70								
32	0.24	0.57	1.12	2.18	3.01	4.24	6.25	10.20	14.09	17.94	23.65	27.12	20.63	16.38	12.60	9.59								
35	0.26	0.63	1.22	2.38	3.29	4.63	6.83	11.16	15.41	19.62	25.86	31.02	23.60	18.72	14.42	0.70								
40	0.30	0.72	1.40	2.72	3.76	5.29	7.81	12.75	17.62	22.42	29.56	36.62	28.84	22.88	17.61									
45	0.34	0.81	1.57	3.06	4.23	5.95	8.78	14.35	19.82	25.23	33.25	41.19	34.41	27.30	6.44									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)						Type C (Oil Pump)													

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

Standard Series Horsepower Tables

#60 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	100	120	200	300	400	500	600	800	1,000	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500
11	0.19	0.46	0.89	1.72	2.05	3.35	4.95	6.52	8.08	9.63	12.69	15.58	11.85	9.41	7.70	6.45	5.51	3.94	3.00	2.38	1.95	1.63	1.39	1.21
12	0.21	0.50	0.97	1.88	2.24	3.66	5.40	7.12	8.82	10.51	13.85	17.15	13.51	10.72	8.77	7.35	6.28	4.49	3.42	2.71	2.22	1.86	1.59	1.38
13	0.22	0.54	1.05	2.04	2.43	3.96	5.85	7.71	9.55	11.38	15.00	18.58	15.23	12.08	9.89	8.29	7.08	5.06	3.85	3.06	2.50	2.10	1.79	
14	0.24	0.58	1.13	2.19	2.61	4.27	6.30	8.30	10.29	12.26	16.15	20.01	17.02	13.51	11.05	9.26	7.91	5.66	4.31	3.42	2.80	2.34	0.41	
15	0.26	0.62	1.21	2.35	2.80	4.57	6.75	8.90	11.02	13.13	17.31	21.44	18.87	14.98	12.26	10.27	8.77	6.28	4.77	3.79	3.10	2.60		
16	0.27	0.66	1.29	2.51	2.99	4.88	7.20	9.49	11.76	14.01	18.46	22.87	20.79	16.50	13.51	11.32	9.66	6.91	5.26	4.17	3.42	1.78		
17	0.29	0.70	1.37	2.66	3.17	5.18	7.65	10.08	12.49	14.88	19.62	24.30	22.77	18.07	14.79	12.40	10.58	7.57	5.76	4.57	3.74			
18	0.31	0.75	1.45	2.82	3.36	5.49	8.10	10.68	13.23	15.76	20.77	25.73	24.81	19.69	16.11	13.51	11.53	8.25	6.28	4.98	4.08			
19	0.33	0.79	1.53	2.98	3.55	5.79	8.55	11.27	13.96	16.63	21.92	27.16	26.91	21.35	17.48	14.65	12.50	8.95	6.81	5.40	0.20			
20	0.34	0.83	1.61	3.13	3.73	6.10	9.00	11.86	14.70	17.51	23.08	28.59	29.06	23.06	18.87	15.82	13.51	9.66	7.35	5.83				
21	0.36	0.87	1.69	3.29	3.92	6.40	9.45	12.46	15.43	18.38	24.23	30.02	31.26	24.81	20.31	17.02	14.53	10.40	7.91	6.28				
22	0.38	0.91	1.77	3.45	4.11	6.71	9.90	13.05	16.17	19.26	25.39	31.45	33.52	26.60	21.77	18.25	15.58	11.15	8.48					
23	0.40	0.95	1.85	3.61	4.29	7.01	10.35	13.64	16.90	20.13	26.54	32.88	35.84	28.44	23.28	19.51	16.66	11.92	9.07					
24	0.41	0.99	1.93	3.76	4.48	7.32	10.80	14.24	17.64	21.01	27.69	34.31	38.20	30.31	24.81	20.79	17.75	12.70	9.66					
25	0.43	1.04	2.01	3.92	4.67	7.62	11.25	14.83	18.37	21.89	28.85	35.74	40.61	32.23	26.38	22.11	18.87	13.51	10.27					
26	0.45	1.08	2.09	4.08	4.85	7.93	11.70	15.42	19.11	22.76	30.00	37.17	43.07	34.18	27.98	23.44	20.02	14.32	10.90					
28	0.48	1.16	2.26	4.39	5.23	8.54	12.60	16.61	20.58	24.51	32.31	40.03	47.68	38.20	31.26	26.20	22.37	16.01						
30	0.52	1.24	2.42	4.70	5.60	9.15	13.50	17.79	22.05	26.26	34.62	42.89	51.09	42.36	34.67	29.06	24.81	17.75						
32	0.55	1.33	2.58	5.02	5.98	9.76	14.40	18.98	23.52	28.01	36.92	45.75	54.50	46.67	38.20	32.01	27.33	19.56						
35	0.60	1.45	2.82	5.49	6.54	10.67	15.75	20.76	25.72	30.64	40.39	50.03	59.60	53.38	43.69	36.62	31.26	1.35						
40	0.69	1.66	3.22	6.27	7.47	12.20	18.00	23.73	29.39	35.02	46.16	57.18	68.12	65.22	53.38	44.74	38.20							
45	0.77	1.86	3.63	7.05	8.40	13.72	20.25	26.69	33.07	39.39	51.92	64.33	76.63	77.83	63.70	53.38	12.45							
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

#60 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	100	120	200	300	400	500	600	800	1,000	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500
11	0.14	0.34	0.66	1.28	1.53	2.50	3.69	4.86	6.03	7.18	9.46	11.62	8.84	7.02	5.74	4.81	4.11	2.94	2.24	1.77	1.45	1.22	1.04	0.90
12	0.16	0.37	0.72	1.40	1.67	2.73	4.03	5.31	6.58	7.84	10.33	12.79	10.07	7.99	6.54	5.48	4.68	3.35	2.55	2.02	1.66	1.39	1.19	1.03
13	0.16	0.40	0.78	1.52	1.81	2.95	4.36	5.75	7.12	8.49	11.19	13.86	11.36	9.01	7.37	6.18	5.28	3.77	2.87	2.28	1.86	1.57	1.33	
14	0.18	0.43	0.84	1.63	1.95	3.18	4.70	6.19	7.67	9.14	12.04	14.92	12.69	10.07	8.24	6.91	5.90	4.22	3.21	2.55	2.09	1.74	0.31	
15	0.19	0.46	0.90	1.75	2.09	3.41	5.03	6.64	8.22	9.79	12.91	15.99	14.07	11.17	9.14	7.66	6.54	4.68	3.56	2.83	2.31	1.94		
16	0.20	0.49	0.96	1.87	2.23	3.64	5.37	7.08	8.77	10.45	13.77	17.05	15.50	12.30	10.07	8.44	7.20	5.15	3.92	3.11	2.55	1.33		
17	0.22	0.52	1.02	1.98	2.36	3.86	5.70	7.52	9.31	11.10	14.63	18.12	16.98	13.47	11.03	9.25	7.89	5.64	4.30	3.41	2.79			
18	0.23	0.56	1.08	2.10	2.51	4.09	6.04	7.96	9.87	11.75	15.49	19.19	18.50	14.68	12.01	10.07	8.60	6.15	4.68	3.71	3.04			
19	0.25	0.59	1.14	2.22	2.65	4.32	6.38	8.40	10.41	12.40	16.35	20.25	20.07	15.92	13.03	10.92	9.32	6.67	5.08	4.03	0.15			
20	0.25	0.62	1.20	2.33	2.78	4.55	6.71	8.84	10.96	13.06	17.21	21.32	21.67	17.20	14.07	11.80	10.07	7.20	5.48	4.35				
21	0.27	0.65	1.26	2.45	2.92	4.77	7.05	9.29	11.51	13.71	18.07	22.39	23.31	18.50	15.15	12.69	10.84	7.76	5.90	4.68				
22	0.28	0.68	1.32	2.57	3.06	5.00	7.38	9.73	12.06	14.36	18.93	23.45	25.00	19.84	16.23	13.61	11.62	8.31	6.32					
23	0.30	0.71	1.38	2.69	3.20	5.23	7.72	10.17	12.60	15.01	19.79	24.52	26.73	21.21	17.36	14.55	12.42	8.89	6.76					
24	0.31	0.74	1.44	2.80	3.34	5.46	8.05	10.62	13.15	15.67	20.65	25.58	28.49	22.60	18.50	15.50	13.24	9.47	7.20					
25	0.32	0.78	1.50	2.92	3.48	5.68	8.39	11.06	13.70	16.32	21.51	26.65	30.28	24.03	19.67	16.49	14.07	10.07	7.66					
26	0.34	0.81	1.56	3.04	3.62	5.91	8.72	11.50	14.25	16.97	22.37	27.72	32.12	25.49	20.86	17.48	14.93	10.68	8.13					
28	0.36	0.87	1.69	3.27	3.90	6.37	9.40	12.39	15.35	18.28	24.09	29.85	35.55	28.49	23.31	19.54	16.68	11.94						
30	0.39	0.92	1.80	3.50	4.18	6.82	10.07	13.27	16.44	19.58	25.82	31.98	38.10	31.59	25.85	21.67	18.50	13.24						
32	0.41	0.99	1.92	3.74	4.46	7.28	10.74	14.15	17.54	20.89	27.53	34.12	40.64	34.80	28.49	23.87	20.38	14.59						
35	0.45	1.08	2.10	4.09	4.88	7.96	11.74	15.48	19.18	22.85	30.12	37.31	44.44	39.81	32.58	27.31	23.31	1.01						
40	0.51	1.24	2.40	4.68	5.57	9.10	13.42	17.70	21.92	26.11	34.42	42.64	50.80	48.63	39.81	33.36	28.49							
45	0.57	1.39	2.71	5.26	6.26	10.23	15.10	19.90	24.66	29.37	38.72	47.97	57.14	58.04	47.50	39.81	9.28							
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

Standard Series Horsepower Tables

#80 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	75	88	100	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500	4,000
11	0.44	1.06	2.07	3.05	3.56	4.03	7.83	11.56	15.23	18.87	22.48	26.07	27.41	22.97	19.61	14.92	11.84	9.69	8.12	6.93	4.96	3.77	3.00	2.45
12	0.48	1.16	2.26	3.33	3.88	4.39	8.54	12.61	16.62	20.59	24.53	28.44	31.23	26.17	22.35	17.00	13.49	11.04	9.25	7.90	5.65	4.30	3.41	2.79
13	0.52	1.26	2.45	3.61	4.21	4.76	9.26	13.66	18.00	22.31	26.57	30.81	35.02	29.51	25.20	19.17	15.21	12.45	10.43	8.91	6.37	4.85	3.85	3.15
14	0.56	1.35	2.63	3.89	4.53	5.12	9.97	14.71	19.39	24.02	28.62	33.18	37.72	32.98	28.16	21.42	17.00	13.91	11.66	9.96	7.12	5.42	4.30	3.52
15	0.60	1.45	2.82	4.16	4.86	5.49	10.68	15.76	20.77	25.74	30.66	35.55	40.41	36.58	31.23	23.76	18.85	15.43	12.93	11.04	7.90	6.01	4.77	
16	0.64	1.55	3.01	4.44	5.18	5.86	11.39	16.81	22.16	27.45	32.70	37.92	43.11	40.30	34.41	26.17	20.77	17.00	14.25	12.16	8.70	6.62	5.25	
17	0.68	1.64	3.20	4.72	5.50	6.22	12.10	17.86	23.54	29.17	34.75	40.29	45.80	44.13	37.68	28.66	22.75	18.62	15.60	13.32	9.53	7.25		
18	0.72	1.74	3.39	5.00	5.83	6.59	12.81	18.91	24.93	30.88	36.79	42.66	48.49	48.08	41.05	31.23	24.78	20.29	17.00	14.51	10.39	7.90		
19	0.76	1.84	3.57	5.28	6.15	6.95	13.53	19.96	26.31	32.60	38.84	45.03	51.19	52.15	44.52	33.87	26.88	22.00	18.44	15.74	11.26	0.36		
20	0.80	1.93	3.76	5.55	6.47	7.32	14.24	21.01	27.70	34.32	40.88	47.40	53.88	56.32	48.08	36.58	29.03	23.76	19.91	17.00	12.16			
21	0.84	2.03	3.95	5.83	6.80	7.69	14.95	22.07	29.08	36.03	42.92	49.77	56.58	60.59	51.73	39.36	31.23	25.56	21.42	18.29	13.09			
22	0.88	2.13	4.14	6.11	7.12	8.05	15.66	23.12	30.47	37.75	44.97	52.14	59.27	64.97	55.47	42.20	33.49	27.41	22.97	19.61	14.03			
23	0.92	2.22	4.33	6.39	7.45	8.42	16.37	24.17	31.85	39.46	47.01	54.51	61.97	69.38	59.30	45.11	35.80	29.30	24.55	20.97	15.00			
24	0.96	2.32	4.52	6.66	7.77	8.78	17.09	25.22	33.24	41.18	49.06	56.88	64.66	72.40	63.21	48.08	38.16	31.23	26.17	22.35	15.99			
25	1.00	2.42	4.70	6.94	8.09	9.15	17.80	26.27	34.62	42.89	51.10	59.25	67.35	75.42	67.20	51.12	40.57	33.20	27.83	23.76	8.16			
26	1.04	2.51	4.89	7.22	8.42	9.52	18.51	27.32	36.01	44.61	53.14	61.62	70.05	78.43	71.27	54.22	43.02	35.22	29.51	25.20				
28	1.12	2.71	5.27	7.77	9.06	10.25	19.93	29.42	38.78	48.04	57.23	66.36	75.44	84.47	79.65	60.59	48.08	39.36	32.98	28.16				
30	1.20	2.90	5.64	8.33	9.71	10.98	21.36	31.52	41.55	51.47	61.32	71.10	80.82	90.50	88.33	67.20	53.33	43.65	36.58	31.23				
32	1.28	3.09	6.02	8.89	10.36	11.71	22.78	33.62	44.32	54.91	65.41	75.84	86.21	96.53	97.31	74.03	58.75	48.08	40.30	5.65				
35	1.40	3.38	6.58	9.72	11.33	12.81	24.92	36.78	48.47	60.05	71.54	82.95	94.29	105.58	111.31	84.68	67.20	55.00	28.15					
40	1.61	3.87	7.53	11.11	12.95	14.64	28.48	42.03	55.40	68.63	81.76	94.80	107.77	120.67	133.51	103.46	82.10	40.16						
45	1.81	4.35	8.47	12.49	14.57	16.47	32.04	47.28	62.32	77.21	91.98	106.65	121.24	135.75	150.20	123.45	72.28							
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)								Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#80 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	75	88	100	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500	4,000
11	0.33	0.79	1.54	2.27	2.65	3.01	5.84	8.62	11.36	14.07	16.76	19.44	20.44	17.13	14.62	11.13	8.83	7.23	6.06	5.17	3.70	2.81	2.24	1.83
12	0.36	0.87	1.69	2.48	2.89	3.27	6.37	9.40	12.39	15.35	18.29	21.21	23.29	19.51	16.67	12.68	10.06	8.23	6.90	5.89	4.21	3.21	2.54	2.08
13	0.39	0.94	1.83	2.69	3.14	3.55	6.91	10.19	13.42	16.64	19.81	22.98	26.11	22.01	18.79	14.30	11.34	9.28	7.78	6.64	4.75	3.62	2.87	2.35
14	0.42	1.01	1.96	2.90	3.38	3.82	7.43	10.97	14.46	17.91	21.34	24.74	28.13	24.59	21.00	15.97	12.68	10.37	8.69	7.43	5.31	4.04	3.21	2.62
15	0.45	1.08	2.10	3.10	3.62	4.09	7.96	11.75	15.49	19.19	22.86	26.51	30.13	27.28	23.29	17.72	14.06	11.51	9.64	8.23	5.89	4.48	3.56	
16	0.48	1.16	2.24	3.31	3.86	4.37	8.49	12.54	16.52	20.47	24.38	28.28	32.15	30.05	25.66	19.51	15.49	12.68	10.63	9.07	6.49	4.94	3.91	
17	0.51	1.22	2.39	3.52	4.10	4.64	9.02	13.32	17.55	21.75	25.91	30.04	34.15	32.91	28.10	21.37	16.96	13.88	11.63	9.93	7.11	5.41		
18	0.54	1.30	2.53	3.73	4.35	4.91	9.55	14.10	18.59	23.03	27.43	31.81	36.16	35.85	30.61	23.29	18.48	15.13	12.68	10.82	7.75	5.89		
19	0.57	1.37	2.66	3.94	4.59	5.18	10.09	14.88	19.62	24.31	28.96	33.58	38.17	38.89	33.20	25.26	20.04	16.41	13.75	11.74	8.40	0.27		
20	0.60	1.44	2.80	4.14	4.82	5.46	10.62	15.67	20.66	25.59	30.48	35.35	40.18	42.00	35.85	27.28	21.65	17.72	14.85	12.68	9.07			
21	0.63	1.51	2.95	4.35	5.07	5.73	11.15	16.46	21.68	26.87	32.01	37.11	42.19	45.18	38.58	29.35	23.29	19.06	15.97	13.64	9.76			
22	0.66	1.59	3.09	4.56	5.31	6.00	11.68	17.24	22.72	28.15	33.53	38.88	44.20	48.45	41.36	31.47	24.97	20.44	17.13	14.62	10.46			
23	0.69	1.66	3.23	4.77	5.56	6.28	12.21	18.02	23.75	29.43	35.06	40.65	46.21	51.74	44.22	33.64	26.70	21.85	18.31	15.64	11.19			
24	0.72	1.73	3.37	4.97	5.79	6.55	12.74	18.81	24.79	30.71	36.58	42.42	48.22	53.99	47.14	35.85	28.46	23.29	19.51	16.67	11.92			
25	0.75	1.80	3.50	5.18	6.03	6.82	13.27	19.59	25.82	31.98	38.11	44.18	50.22	56.24	50.11	38.12	30.25	24.76	20.75	17.72	6.08			
26	0.78	1.87	3.65	5.38	6.28	7.10	13.80	20.37	26.85	33.27	39.63	45.95	52.24	58.49	53.15	40.43	32.08	26.26	22.01	18.79				
28	0.84	2.02	3.93	5.79	6.76	7.64	14.86	21.94	28.92	35.82	42.68	49.48	56.26	62.99	59.40	45.18	35.85	29.35	24.59	21.00				
30	0.89	2.16	4.21	6.21	7.24	8.19	15.93	23.50	30.98	38.38	45.73	53.02	60.27	67.49	65.87	50.11	39.77	32.55	27.28	23.29				
32	0.95	2.30	4.49	6.63	7.73	8.73	16.99	25.07	33.05	40.95	48.78	56.55	64.29	71.98	72.56	55.20	43.81	35.85	30.05	4.21				
35	1.04	2.52	4.91	7.25	8.45	9.55	18.58	27.43	36.14	44.78	53.35	61.86	70.31	78.73	83.00	63.15	50.11	41.01	20.99					
40	1.20	2.89	5.62	8.28	9.66	10.92	21.24	31.34	41.31	51.18	60.97	70.69	80.36	89.98	99.56	77.15	61.22	29.95						
45	1.35	3.24	6.32	9.31	10.86	12.28	23.89	35.26	46.47	57.58	68.59	79.53	90.41	101.23	112.00	92.06	53.90							
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)								Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Standard Series Horsepower Tables

#100 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																								
	10	25	50	71	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500
11	0.85	2.04	3.96	5.55	7.71	11.38	15.00	22.14	29.18	36.15	43.06	40.03	32.77	27.46	23.45	20.32	17.84	14.15	11.58	9.71	8.29	5.93	4.51	3.58
12	0.92	2.22	4.32	6.05	8.41	12.41	16.36	24.15	31.83	39.44	46.98	45.61	37.33	31.29	26.71	23.16	20.32	16.13	13.20	11.06	9.45	6.76	5.14	
13	1.00	2.41	4.68	6.56	9.11	13.45	17.73	26.16	34.48	42.72	50.89	51.43	42.10	35.28	30.12	26.11	22.92	18.18	14.88	12.47	10.65	7.62	5.80	
14	1.08	2.59	5.04	7.06	9.81	14.48	19.09	28.18	37.14	46.01	54.81	57.48	47.05	39.43	33.66	29.18	25.61	20.32	16.63	13.94	11.90	8.52	1.13	
15	1.15	2.78	5.41	7.57	10.51	15.52	20.45	30.19	39.79	49.30	58.72	63.75	52.18	43.73	37.33	32.36	28.40	22.54	18.45	15.46	13.20	9.45		
16	1.23	2.96	5.77	8.07	11.22	16.55	21.82	32.20	42.44	52.58	62.64	70.23	57.48	48.17	41.13	35.65	31.29	24.83	20.32	17.03	14.54	10.41		
17	1.31	3.15	6.13	8.58	11.92	17.59	23.18	34.21	45.10	55.87	66.55	76.91	62.95	52.76	45.05	39.04	34.27	27.19	22.26	18.65	15.93	11.40		
18	1.38	3.33	6.49	9.08	12.62	18.62	24.55	36.23	47.75	59.15	70.47	81.71	68.59	57.48	49.08	42.54	37.33	29.63	24.25	20.32	17.35	0.18		
19	1.46	3.52	6.85	9.59	13.32	19.66	25.91	38.24	50.40	62.44	74.38	86.25	74.38	62.34	53.22	46.13	40.49	32.13	26.30	22.04	18.82			
20	1.54	3.70	7.21	10.09	14.02	20.69	27.27	40.25	53.05	65.73	78.30	90.79	80.33	67.32	57.48	49.82	43.73	34.70	28.40	23.80	20.32			
21	1.61	3.89	7.57	10.60	14.72	21.73	28.64	42.26	55.71	69.01	82.21	95.33	86.43	72.43	61.85	53.61	47.05	37.33	30.56	25.61	21.87			
22	1.69	4.08	7.93	11.10	15.42	22.76	30.00	44.28	58.36	72.30	86.13	99.87	92.68	77.67	66.31	57.48	50.45	40.03	32.77	27.46	23.45			
23	1.77	4.26	8.29	11.60	16.12	23.79	31.36	46.29	61.01	75.59	90.04	104.41	99.07	83.02	70.89	61.44	53.93	42.79	35.03	29.35	25.06			
24	1.84	4.45	8.65	12.11	16.82	24.83	32.73	48.30	63.66	78.87	93.96	108.95	105.60	88.50	75.56	65.49	57.48	45.61	37.33	31.29	5.43			
25	1.92	4.63	9.01	12.61	17.52	25.86	34.09	50.31	66.32	82.16	97.87	113.48	112.27	94.09	80.33	69.63	61.11	48.49	39.69	33.26				
26	2.00	4.82	9.37	13.12	18.23	26.90	35.45	52.33	68.97	85.45	101.79	118.02	119.07	99.79	85.20	73.85	64.81	51.43	42.10	35.28				
28	2.15	5.19	10.09	14.13	19.63	28.97	38.18	56.35	74.27	92.02	109.62	127.10	133.07	111.52	95.22	82.53	72.43	57.48	47.05					
30	2.31	5.56	10.81	15.14	21.03	31.04	40.91	60.38	79.58	98.59	117.45	136.18	147.58	123.68	105.60	91.53	80.33	63.75	49.40					
32	2.46	5.93	11.53	16.15	22.43	33.11	43.64	64.40	84.88	105.16	125.28	145.26	162.58	136.25	116.33	100.84	88.50	70.23	8.82					
35	2.69	6.48	12.61	17.66	24.53	36.21	47.73	70.44	92.84	115.02	137.02	158.88	180.61	155.85	133.07	115.34	101.23	69.02						
40	3.07	7.41	14.41	20.18	28.04	41.38	54.54	80.50	106.11	131.45	156.60	181.58	206.41	190.42	162.58	140.92	122.68							
45	3.46	8.34	16.22	22.71	31.54	46.55	61.36	90.56	119.37	147.89	176.17	204.27	232.21	227.21	194.00	168.15	34.58							
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)							Type C (Oil Pump)													

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#100 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																								
	10	25	50	71	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500
11	0.63	1.52	2.95	4.14	5.75	8.49	11.19	16.51	21.76	26.96	32.11	29.85	24.44	20.48	17.49	15.15	13.30	10.55	8.64	7.24	6.18	4.42	3.36	2.67
12	0.69	1.66	3.22	4.51	6.27	9.25	12.20	18.01	23.74	29.41	35.03	34.01	27.84	23.33	19.92	17.27	15.15	12.03	9.84	8.25	7.05	5.04	3.83	
13	0.75	1.80	3.49	4.89	6.79	10.03	13.22	19.51	25.71	31.86	37.95	38.35	31.39	26.31	22.46	19.47	17.09	13.56	11.10	9.30	7.94	5.68	4.33	
14	0.81	1.93	3.76	5.26	7.32	10.80	14.24	21.01	27.70	34.31	40.87	42.86	35.09	29.40	25.10	21.76	19.10	15.15	12.40	10.40	8.87	6.35	0.84	
15	0.86	2.07	4.03	5.64	7.84	11.57	15.25	22.51	29.67	36.76	43.79	47.54	38.91	32.61	27.84	24.13	21.18	16.81	13.76	11.53	9.84	7.05		
16	0.92	2.21	4.30	6.02	8.37	12.34	16.27	24.01	31.65	39.21	46.71	52.37	42.86	35.92	30.67	26.58	23.33	18.52	15.15	12.70	10.84	7.76		
17	0.98	2.35	4.57	6.40	8.89	13.12	17.29	25.51	33.63	41.66	49.63	57.35	46.94	39.34	33.59	29.11	25.56	20.28	16.60	13.91	11.88	8.50		
18	1.03	2.48	4.84	6.77	9.41	13.88	18.31	27.02	35.61	44.11	52.55	60.93	51.15	42.86	36.60	31.72	27.84	22.10	18.08	15.15	12.94	0.13		
19	1.09	2.62	5.11	7.15	9.93	14.66	19.32	28.52	37.58	46.56	55.47	64.32	55.47	46.49	39.69	34.40	30.19	23.96	19.61	16.44	14.03			
20	1.15	2.76	5.38	7.52	10.45	15.43	20.34	30.01	39.56	49.01	58.39	67.70	59.90	50.20	42.86	37.15	32.61	25.88	21.18	17.75	15.15			
21	1.20	2.90	5.64	7.90	10.98	16.20	21.36	31.51	41.54	51.46	61.30	71.09	64.45	54.01	46.12	39.98	35.09	27.84	22.79	19.10	16.31			
22	1.26	3.04	5.91	8.28	11.50	16.97	22.37	33.02	43.52	53.91	64.23	74.47	69.11	57.92	49.45	42.86	37.62	29.85	24.44	20.48	17.49			
23	1.32	3.18	6.18	8.65	12.02	17.74	23.39	34.52	45.50	56.37	67.14	77.86	73.88	61.91	52.86	45.82	40.22	31.91	26.12	21.89	18.69			
24	1.37	3.32	6.45	9.03	12.54	18.52	24.41	36.02	47.47	58.81	70.07	81.24	78.75	65.99	56.35	48.84	42.86	34.01	27.84	23.33	4.05			
25	1.43	3.45	6.72	9.40	13.06	19.28	25.42	37.52	49.45	61.27	72.98	84.62	83.72	70.16	59.90	51.92	45.57	36.16	29.60	24.80				
26	1.49	3.59	6.99	9.78	13.59	20.06	26.44	39.02	51.43	63.72	75.90	88.01	88.79	74.41	63.53	55.07	48.33	38.35	31.39	26.31				
28	1.60	3.87	7.52	10.54	14.64	21.60	28.47	42.02	55.38	68.62	81.74	94.78	99.23	83.16	71.01	61.54	54.01	42.86	35.09					
30	1.72	4.15	8.06	11.29	15.68	23.15	30.51	45.03	59.34	73.52	87.58	101.55	110.05	92.23	78.75	68.25	59.90	47.54	36.84					
32	1.83	4.42	8.60	12.04	16.73	24.69	32.54	48.02	63.30	78.42	93.42	108.32	121.24	101.60	86.75	75.20	65.99	52.37	6.58					
35	2.01	4.83	9.40	13.17	18.29	27.00	35.59	52.53	69.23	85.77	102.18	118.48	134.68	116.22	99.23	86.01	75.49	51.47						
40	2.29	5.53	10.75	15.05	20.91	30.86	40.67	60.03	79.13	98.02	116.78	135.40	153.92	142.00	121.24	105.08	91.48							
45	2.58	6.22	12.10	16.93	23.52	34.71	45.76	67.53	89.01	110.28	131.37	152.32	173.16	169.43	144.67	125.39	25.79							
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)							Type C (Oil Pump)													

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Standard Series Horsepower Tables

ANSI #120 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	60	75	100	150	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,700
11	1.43	3.44	6.69	7.97	9.88	13.02	19.22	25.33	37.38	49.27	61.04	58.37	46.32	37.91	31.77	27.13	20.64	16.38	13.40	11.23	9.59	8.31	7.30	6.11
12	1.56	3.75	7.30	8.70	10.78	14.20	20.96	27.63	40.78	53.75	66.59	66.51	52.78	43.20	36.20	30.91	23.51	18.66	15.27	12.80	10.93	9.47	8.31	6.97
13	1.69	4.07	7.91	9.42	11.67	15.39	22.71	29.93	44.18	58.23	72.14	74.99	59.51	48.71	40.82	34.85	26.51	21.04	17.22	14.43	12.32	10.68	9.37	
14	1.82	4.38	8.52	10.15	12.57	16.57	24.46	32.24	47.58	62.71	77.69	83.81	66.51	54.44	45.62	38.95	29.63	23.51	19.25	16.13	13.77	11.94	10.48	
15	1.95	4.69	9.13	10.87	13.47	17.76	26.20	34.54	50.98	67.19	83.24	92.95	73.76	60.37	50.59	43.20	32.86	26.08	21.34	17.89	15.27	13.24		
16	2.08	5.00	9.74	11.60	14.37	18.94	27.95	36.84	54.37	71.67	88.79	102.39	81.26	66.51	55.74	47.59	36.20	28.73	23.51	19.71	16.83	14.58		
17	2.21	5.32	10.34	12.32	15.27	20.12	29.70	39.14	57.77	76.15	94.34	112.14	88.99	72.84	61.04	52.12	39.65	31.46	25.75	21.58	18.43			
18	2.34	5.63	10.95	13.05	16.16	21.31	31.45	41.45	61.17	80.63	99.89	119.00	96.96	79.36	66.51	56.78	43.20	34.28	28.06	23.51	20.08			
19	2.47	5.94	11.56	13.77	17.06	22.49	33.19	43.75	64.57	85.11	105.44	125.61	105.15	86.06	72.13	61.58	46.85	37.18	30.43	25.50	0.80			
20	2.60	6.26	12.17	14.50	17.96	23.67	34.94	46.05	67.97	89.59	110.99	132.22	113.56	92.95	77.89	66.51	50.59	40.15	32.86	27.54				
21	2.73	6.57	12.78	15.22	18.86	24.86	36.69	48.36	71.37	94.07	116.54	138.83	122.18	100.00	83.81	71.56	54.44	43.20	35.36	27.46				
22	2.86	6.88	13.39	15.95	19.76	26.04	38.43	50.66	74.76	98.55	122.09	145.44	131.01	107.23	89.87	76.73	58.37	46.32	37.91					
23	2.99	7.19	14.00	16.67	20.65	27.22	40.18	52.96	78.16	103.02	127.64	152.05	140.04	114.62	96.06	82.02	62.39	49.51	40.53					
24	3.11	7.51	14.60	17.40	21.55	28.41	41.93	55.26	81.56	107.50	133.19	158.66	149.28	122.18	102.39	87.43	66.51	52.78	43.20					
25	3.24	7.82	15.21	18.12	22.45	29.59	43.67	57.57	84.96	111.98	138.74	165.27	158.70	129.90	108.86	92.95	70.71	56.11	18.37					
26	3.37	8.13	15.82	18.85	23.35	30.78	45.42	59.87	88.36	116.46	144.29	171.88	168.32	137.77	115.46	98.58	74.99	59.51						
28	3.63	8.76	17.04	20.30	25.15	33.14	48.92	64.47	95.15	125.42	155.38	185.11	188.11	153.97	129.03	110.17	83.81	66.51						
30	3.89	9.38	18.25	21.75	26.94	35.51	52.41	69.08	101.95	134.38	166.48	198.33	208.62	170.75	143.10	122.18	92.95	13.70						
32	4.15	10.01	19.47	23.20	28.74	37.88	55.90	73.68	108.75	143.34	177.58	211.55	229.83	188.11	157.65	134.60	102.39							
35	4.54	10.95	21.30	25.37	31.43	41.43	61.14	80.59	118.94	156.78	194.23	231.38	262.89	215.17	180.33	153.97	117.13							
40	5.19	12.51	24.34	28.99	35.92	47.35	69.88	92.11	135.94	179.17	221.98	264.44	306.61	262.89	220.32	176.66								
45	5.84	14.08	27.38	32.62	40.41	53.27	78.61	103.62	152.93	201.57	249.72	297.49	344.94	313.69	213.33	49.79								
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#120 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	60	75	100	150	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,700
11	1.07	2.57	4.99	5.94	7.37	9.71	14.33	18.89	27.87	36.74	45.52	43.53	34.54	28.27	23.69	20.23	15.39	12.21	9.99	8.37	7.15	6.20	5.44	4.56
12	1.16	2.80	5.44	6.49	8.04	10.59	15.63	20.60	30.41	40.08	49.66	49.60	39.36	32.21	26.99	23.05	17.53	13.91	11.39	9.54	8.15	7.06	6.20	5.20
13	1.26	3.03	5.90	7.02	8.70	11.48	16.93	22.32	32.95	43.42	53.79	55.92	44.38	36.32	30.44	25.99	19.77	15.69	12.84	10.76	9.19	7.96	6.99	
14	1.36	3.27	6.35	7.57	9.37	12.36	18.24	24.04	35.48	46.76	57.93	62.50	49.60	40.60	34.02	29.05	22.10	17.53	14.35	12.03	10.27	8.90	7.81	
15	1.45	3.50	6.81	8.11	10.04	13.24	19.54	25.76	38.02	50.10	62.07	69.31	55.00	45.02	37.72	32.21	24.50	19.45	15.91	13.34	11.39	9.87		
16	1.55	3.73	7.26	8.65	10.72	14.12	20.84	27.47	40.54	53.44	66.21	76.35	60.60	49.60	41.57	35.49	26.99	21.42	17.53	14.70	12.55	10.87		
17	1.65	3.97	7.71	9.19	11.39	15.00	22.15	29.19	43.08	56.79	70.35	83.62	66.36	54.32	45.52	38.87	29.57	23.46	19.20	16.09	13.74			
18	1.74	4.20	8.17	9.73	12.05	15.89	23.45	30.91	45.61	60.13	74.49	88.74	72.30	59.18	49.60	42.34	32.21	25.56	20.92	17.53	14.97			
19	1.84	4.43	8.62	10.27	12.72	16.77	24.75	32.62	48.15	63.47	78.63	93.67	78.41	64.17	53.79	45.92	34.94	27.73	22.69	19.02	0.60			
20	1.94	4.67	9.08	10.81	13.39	17.65	26.05	34.34	50.69	66.81	82.77	98.60	84.68	69.31	58.08	49.60	37.72	29.94	24.50	20.54				
21	2.04	4.90	9.53	11.35	14.06	18.54	27.36	36.06	53.22	70.15	86.90	103.53	91.11	74.57	62.50	53.36	40.60	32.21	26.37	20.48				
22	2.13	5.13	9.98	11.89	14.74	19.42	28.66	37.78	55.75	73.49	91.04	108.45	97.69	79.96	67.02	57.22	43.53	34.54	28.27					
23	2.23	5.36	10.44	12.43	15.40	20.30	29.96	39.49	58.28	76.82	95.18	113.38	104.43	85.47	71.63	61.16	46.52	36.92	30.22					
24	2.32	5.60	10.89	12.98	16.07	21.19	31.27	41.21	60.82	80.16	99.32	118.31	111.32	91.11	76.35	65.20	49.60	39.36	32.21					
25	2.42	5.83	11.34	13.51	16.74	22.07	32.56	42.93	63.35	83.50	103.46	123.24	118.34	96.87	81.18	69.31	52.73	41.84	13.70					
26	2.51	6.06	11.80	14.06	17.41	22.95	33.87	44.65	65.89	86.84	107.60	128.17	125.52	102.74	86.10	73.51	55.92	44.38						
28	2.71	6.53	12.71	15.14	18.75	24.71	36.48	48.08	70.95	93.53	115.87	138.04	140.27	114.82	96.22	82.15	62.50	49.60						
30	2.90	6.99	13.61	16.22	20.09	26.48	39.08	51.51	76.02	100.21	124.14	147.89	155.57	127.33	106.71	91.11	69.31	10.22						
32	3.09	7.46	14.52	17.30	21.43	28.25	41.68	54.94	81.09	106.89	132.42	157.75	171.38	140.27	117.56	100.37	76.35							
35	3.39	8.17	15.88	18.92	23.44	30.89	45.59	60.10	88.69	116.91	144.84	172.54	196.04	160.45	134.47	114.82	87.34							
40	3.87	9.33	18.15	21.62	26.79	35.31	52.11	68.69	101.37	133.61	165.53	197.19	228.64	196.04	164.29	131.74								
45	4.35	10.50	20.42	24.32	30.13	39.72	58.62	77.27	114.04	150.31	186.22	221.84	257.22	233.92	159.08	37.13								
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Standard Series Horsepower Tables

#140 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	5	10	25	50	53	75	100	150	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400
11	1.14	2.21	5.32	10.36	10.95	15.28	20.15	29.73	39.19	57.84	76.24	86.80	66.03	52.40	42.89	35.94	30.69	23.35	18.53	15.16	12.71	10.85	9.40	8.25
12	1.24	2.41	5.81	11.30	11.95	16.67	21.98	32.44	42.75	63.10	83.17	98.90	75.24	59.70	48.87	40.95	34.97	26.60	21.11	17.28	14.48	12.36	10.72	0.72
13	1.34	2.61	6.29	12.24	12.94	18.06	23.81	35.14	46.32	68.36	90.10	111.52	84.83	67.32	55.10	46.18	39.43	29.99	23.80	19.48	16.33	13.94	12.08	
14	1.45	2.81	6.78	13.18	13.94	19.45	25.64	37.84	49.88	73.61	97.03	120.21	94.81	75.24	61.58	51.61	44.06	33.52	26.60	21.77	18.25	15.58		
15	1.55	3.01	7.26	14.12	14.93	20.84	27.47	40.54	53.44	78.87	103.96	128.79	105.15	83.44	68.29	57.23	48.87	37.17	29.50	24.15	20.24	17.28		
16	1.65	3.21	7.74	15.06	15.93	22.23	29.30	43.25	57.00	84.13	110.89	137.38	115.83	91.92	75.24	63.05	53.83	40.95	32.50	26.60	22.29			
17	1.75	3.41	8.23	16.00	16.93	23.62	31.13	45.95	60.57	89.39	117.82	145.97	126.86	100.67	82.40	69.05	58.96	44.85	35.59	29.13	24.41			
18	1.86	3.61	8.71	16.95	17.92	25.01	32.97	48.65	64.13	94.65	124.75	154.55	138.22	109.68	89.77	75.24	64.24	48.87	38.78	31.74				
19	1.96	3.82	9.20	17.89	18.92	26.40	34.80	51.36	67.69	99.90	131.68	163.14	149.89	118.95	97.36	81.59	69.66	53.00	42.06	34.42				
20	2.06	4.02	9.68	18.83	19.91	27.79	36.63	54.06	71.25	105.16	138.61	171.73	161.88	128.46	105.15	88.12	75.24	57.23	45.42	35.82				
21	2.17	4.22	10.16	19.77	20.91	29.18	38.46	56.76	74.82	110.42	145.54	180.31	174.17	138.22	113.13	94.81	80.95	61.58	48.87					
22	2.27	4.42	10.65	20.71	21.90	30.57	40.29	59.47	78.38	115.68	152.47	188.90	186.76	148.21	121.30	101.66	86.80	66.03	52.40					
23	2.37	4.62	11.13	21.65	22.90	31.96	42.12	62.17	81.94	120.94	159.40	197.48	199.64	158.43	129.67	108.67	92.78	70.58	56.01					
24	2.48	4.82	11.62	22.60	23.90	33.35	43.95	64.87	85.51	126.20	166.33	206.07	212.80	168.87	138.22	115.83	98.90	75.24	37.90					
25	2.58	5.02	12.10	23.54	24.89	34.74	45.79	67.57	89.07	131.45	173.27	214.66	226.24	179.53	146.94	123.15	105.15	79.99						
26	2.68	5.22	12.58	24.48	25.89	36.13	47.62	70.28	92.63	136.71	180.20	223.24	239.95	190.41	155.85	130.61	111.52	84.83						
28	2.89	5.62	13.55	26.36	27.88	38.91	51.28	75.68	99.76	147.23	194.06	240.42	268.16	212.80	174.17	145.97	124.63	94.81						
30	3.10	6.02	14.52	28.24	29.87	41.68	54.94	81.09	106.88	157.74	207.92	257.59	297.40	236.00	193.16	161.88	138.22	18.64						
32	3.30	6.43	15.49	30.13	31.86	44.46	58.61	86.50	114.01	168.26	221.78	274.76	327.63	259.99	212.80	178.34	152.27							
35	3.61	7.03	16.94	32.95	34.85	48.63	64.10	94.60	124.70	184.03	242.57	300.52	358.00	297.40	243.41	203.99	135.27							
40	4.13	8.03	19.36	37.66	39.83	55.58	73.26	108.12	142.51	210.33	277.22	343.45	409.15	363.35	297.40	153.78								
45	4.65	9.04	21.78	42.37	44.80	62.53	82.42	121.63	160.32	236.62	311.88	386.38	460.29	433.56	221.34									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#140 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	5	10	25	50	53	75	100	150	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400
11	0.85	1.65	3.97	7.73	8.17	11.39	15.03	22.17	29.22	43.13	56.85	64.73	49.24	39.07	31.98	26.80	22.89	17.41	13.82	11.30	9.48	8.09	7.01	6.15
12	0.92	1.80	4.33	8.43	8.91	12.43	16.39	24.19	31.88	47.05	62.02	73.75	56.11	44.52	36.44	30.54	26.08	19.84	15.74	12.89	10.80	9.22	7.99	0.54
13	1.00	1.95	4.69	9.13	9.65	13.47	17.76	26.20	34.54	50.98	67.19	83.16	63.26	50.20	41.09	34.44	29.40	22.36	17.75	14.53	12.18	10.40	9.01	
14	1.08	2.10	5.06	9.83	10.40	14.50	19.12	28.22	37.20	54.89	72.36	89.64	70.70	56.11	45.92	38.49	32.86	25.00	19.84	16.23	13.61	11.62		
15	1.16	2.24	5.41	10.53	11.13	15.54	20.48	30.23	39.85	58.81	77.52	96.04	78.41	62.22	50.92	42.68	36.44	27.72	22.00	18.01	15.09	12.89		
16	1.23	2.39	5.77	11.23	11.88	16.58	21.85	32.25	42.50	62.74	82.69	102.44	86.37	68.54	56.11	47.02	40.14	30.54	24.24	19.84	16.62			
17	1.30	2.54	6.14	11.93	12.62	17.61	23.21	34.26	45.17	66.66	87.86	108.85	94.60	75.07	61.45	51.49	43.97	33.44	26.54	21.72	18.20			
18	1.39	2.69	6.50	12.64	13.36	18.65	24.59	36.28	47.82	70.58	93.03	115.25	103.07	81.79	66.94	56.11	47.90	36.44	28.92	23.67				
19	1.46	2.85	6.86	13.34	14.11	19.69	25.95	38.30	50.48	74.50	98.19	121.65	111.77	88.70	72.60	60.84	51.95	39.52	31.36	25.67				
20	1.54	3.00	7.22	14.04	14.85	20.72	27.31	40.31	53.13	78.42	103.36	128.06	120.71	95.79	78.41	65.71	56.11	42.68	33.87	26.71				
21	1.62	3.15	7.58	14.74	15.59	21.76	28.68	42.33	55.79	82.34	108.53	134.46	129.88	103.07	84.36	70.70	60.36	45.92	36.44					
22	1.69	3.30	7.94	15.44	16.33	22.80	30.04	44.35	58.45	86.26	113.70	140.86	139.27	110.52	90.45	75.81	64.73	49.24	39.07					
23	1.77	3.45	8.30	16.14	17.08	23.83	31.41	46.36	61.10	90.18	118.86	147.26	148.87	118.14	96.69	81.04	69.19	52.63	41.77					
24	1.85	3.59	8.67	16.85	17.82	24.87	32.77	48.37	63.76	94.11	124.03	153.67	158.68	125.93	103.07	86.37	73.75	56.11	28.26					
25	1.92	3.74	9.02	17.55	18.56	25.91	34.15	50.39	66.42	98.02	129.21	160.07	168.71	133.88	109.57	91.83	78.41	59.65						
26	2.00	3.89	9.38	18.25	19.31	26.94	35.51	52.41	69.07	101.94	134.38	166.47	178.93	141.99	116.22	97.40	83.16	63.26						
28	2.16	4.19	10.10	19.66	20.79	29.02	38.24	56.43	74.39	109.79	144.71	179.28	199.97	158.68	129.88	108.85	92.94	70.70						
30	2.31	4.49	10.83	21.06	22.27	31.08	40.97	60.47	79.70	117.63	155.05	192.08	221.77	175.99	144.04	120.71	103.07	13.90						
32	2.46	4.79	11.55	22.47	23.76	33.15	43.71	64.50	85.02	125.47	165.38	204.89	244.31	193.87	158.68	132.99	113.55							
35	2.69	5.24	12.63	24.57	25.99	36.26	47.80	70.54	92.99	137.23	180.88	224.10	266.96	221.77	181.51	152.12	100.87							
40	3.08	5.99	14.44	28.08	29.70	41.45	54.63	80.63	106.27	156.84	206.72	256.11	305.10	270.95	221.77	114.67								
45	3.47	6.74	16.24	31.60	33.41	46.63	61.46	90.70	119.55	176.45	232.57	288.12	343.24	323.31	165.05									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Standard Series Horsepower Tables

#160 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	5	10	25	47	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,200
11	1.65	3.20	7.72	14.16	15.02	22.17	29.23	43.14	56.86	83.91	110.60	96.58	73.47	58.31	47.72	39.99	34.15	29.60	25.98	20.61	16.87	14.14	12.07	10.46
12	1.80	3.50	8.43	15.45	16.39	24.19	31.88	47.06	62.03	91.54	120.66	110.05	83.72	66.44	54.38	45.57	38.91	33.73	29.60	23.49	19.22	16.11	13.76	
13	1.95	3.79	9.13	16.73	17.76	26.21	34.54	50.98	67.19	99.17	130.71	124.09	94.40	74.91	61.31	51.38	43.87	38.03	33.37	26.48	21.68	18.17		
14	2.10	4.08	9.83	18.02	19.12	28.22	37.20	54.90	72.36	106.80	140.77	138.68	105.50	83.72	68.52	57.43	49.03	42.50	37.30	29.60	24.23	20.30		
15	2.25	4.37	10.53	19.31	20.49	30.24	39.86	58.82	77.53	114.43	150.82	153.80	117.00	92.85	75.99	63.69	54.38	47.13	41.37	32.83	26.87			
16	2.40	4.66	11.23	20.59	21.85	32.25	42.51	62.74	82.70	122.05	160.88	169.43	128.89	102.28	83.72	70.16	59.90	51.92	45.57	36.16	29.60			
17	2.55	4.95	11.94	21.88	23.22	34.27	45.17	66.66	87.87	129.68	170.93	185.56	141.16	112.02	91.69	76.84	65.61	56.87	49.91	39.61	24.21			
18	2.70	5.24	12.64	23.17	24.59	36.29	47.83	70.59	93.04	137.31	180.99	202.17	153.80	122.05	99.90	83.72	71.48	61.96	54.38	43.15				
19	2.85	5.54	13.34	24.45	25.95	38.30	50.48	74.51	98.21	144.94	191.04	219.25	166.79	132.36	108.33	90.79	77.52	67.19	58.97	46.80				
20	3.00	5.83	14.04	25.74	27.32	40.32	53.14	78.43	103.38	152.57	201.10	236.79	180.13	142.95	117.00	98.05	83.72	72.57	63.69	46.79				
21	3.15	6.12	14.74	27.03	28.68	42.33	55.80	82.35	108.54	160.20	211.15	254.77	193.81	153.80	125.88	105.50	90.07	78.08	68.52					
22	3.29	6.41	15.45	28.32	30.05	44.35	58.45	86.27	113.71	167.83	221.21	273.18	207.82	164.91	134.98	113.12	96.58	83.72	73.47					
23	3.44	6.70	16.15	29.60	31.42	46.36	61.11	90.19	118.88	175.45	231.26	286.51	222.15	176.29	144.29	120.92	103.24	89.49	78.54					
24	3.59	6.99	16.85	30.89	32.78	48.38	63.77	94.11	124.05	183.08	241.32	298.97	236.79	187.91	153.80	128.89	110.05	95.39	83.72					
25	3.74	7.28	17.55	32.18	34.15	50.40	66.43	98.04	129.22	190.71	251.37	311.42	251.74	199.77	163.51	137.03	117.00	101.41	32.66					
26	3.89	7.57	18.26	33.46	35.51	52.41	69.08	101.96	134.39	198.34	261.43	323.88	267.00	211.88	173.42	145.33	124.09	107.56						
28	4.19	8.16	19.66	36.04	38.24	56.44	74.40	109.80	144.73	213.60	281.54	348.79	298.39	236.79	193.81	162.42	138.68	36.88						
30	4.49	8.74	21.06	38.61	40.98	60.48	79.71	117.64	155.06	228.85	301.65	373.71	330.92	262.61	214.94	180.13	126.46							
32	4.79	9.32	22.47	41.19	43.71	64.51	85.03	125.49	165.40	244.11	321.76	398.62	364.56	289.30	236.79	198.44	22.58							
35	5.24	10.20	24.57	45.05	47.81	70.55	93.00	137.25	180.91	266.99	351.92	435.99	417.01	330.92	270.86	112.60								
40	5.99	11.65	28.09	51.48	54.63	80.63	106.28	156.86	206.75	305.14	402.19	498.28	509.49	404.31	160.63									
45	6.74	13.11	31.60	57.92	61.46	90.71	119.57	176.47	232.59	343.28	452.47	560.56	607.95	289.10										
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#160 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	5	10	25	47	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,200
11	1.23	2.39	5.76	10.56	11.20	16.53	21.80	32.17	42.40	62.57	82.47	72.02	54.79	43.48	35.58	29.82	25.47	22.07	19.37	15.37	12.58	10.54	9.00	7.80
12	1.34	2.61	6.29	11.52	12.22	18.04	23.77	35.09	46.26	68.26	89.98	82.06	62.43	49.54	40.55	33.98	29.02	25.15	22.07	17.52	14.33	12.01	10.26	
13	1.45	2.83	6.81	12.48	13.24	19.54	25.76	38.02	50.10	73.95	97.47	92.53	70.39	55.86	45.72	38.31	32.71	28.36	24.88	19.75	16.17	13.55		
14	1.57	3.04	7.33	13.44	14.26	21.04	27.74	40.94	53.96	79.64	104.97	103.41	78.67	62.43	51.10	42.83	36.56	31.69	27.81	22.07	18.07	15.14		
15	1.68	3.26	7.85	14.40	15.28	22.55	29.72	43.86	57.81	85.33	112.47	114.69	87.25	69.24	56.67	47.49	40.55	35.14	30.85	24.48	20.04			
16	1.79	3.47	8.37	15.35	16.29	24.05	31.70	46.79	61.67	91.01	119.97	126.34	96.11	76.27	62.43	52.32	44.67	38.72	33.98	26.96	22.07			
17	1.90	3.69	8.90	16.32	17.32	25.56	33.68	49.71	65.52	96.70	127.46	138.37	105.26	83.53	68.37	57.30	48.93	42.41	37.22	29.54	18.05			
18	2.01	3.91	9.43	17.28	18.34	27.06	35.67	52.64	69.38	102.39	134.96	150.76	114.69	91.01	74.50	62.43	53.30	46.20	40.55	32.18				
19	2.13	4.13	9.95	18.23	19.35	28.56	37.64	55.56	73.24	108.08	142.46	163.49	124.38	98.70	80.78	67.70	57.81	50.10	43.97	34.90				
20	2.24	4.35	10.47	19.19	20.37	30.07	39.63	58.49	77.09	113.77	149.96	176.57	134.32	106.60	87.25	73.12	62.43	54.12	47.49	34.89				
21	2.35	4.56	10.99	20.16	21.39	31.57	41.61	61.41	80.94	119.46	157.45	189.98	144.52	114.69	93.87	78.67	67.17	58.22	51.10					
22	2.45	4.78	11.52	21.12	22.41	33.07	43.59	64.33	84.79	125.15	164.96	203.71	154.97	122.97	100.65	84.35	72.02	62.43	54.79					
23	2.57	5.00	12.04	22.07	23.43	34.57	45.57	67.25	88.65	130.83	172.45	213.65	165.66	131.46	107.60	90.17	76.99	66.73	58.57					
24	2.68	5.21	12.57	23.03	24.44	36.08	47.55	70.18	92.50	136.52	179.95	222.94	176.57	140.12	114.69	96.11	82.06	71.13	62.43					
25	2.79	5.43	13.09	24.00	25.47	37.58	49.54	73.11	96.36	142.21	187.45	232.23	187.72	148.97	121.93	102.18	87.25	75.62	24.35					
26	2.90	5.64	13.62	24.95	26.48	39.08	51.51	76.03	100.21	147.90	194.95	241.52	199.10	158.00	129.32	108.37	92.53	80.21						
28	3.12	6.08	14.66	26.88	28.52	42.09	55.48	81.88	107.93	159.28	209.94	260.09	222.51	176.57	144.52	121.12	103.41	27.50						
30	3.35	6.52	15.70	28.79	30.56	45.10	59.44	87.72	115.63	170.65	224.94	278.68	246.77	195.83	160.28	134.32	94.30							
32	3.57	6.95	16.76	30.72	32.59	48.11	63.41	93.58	123.34	182.03	239.94	297.25	271.85	215.73	176.57	147.98	16.84							
35	3.91	7.61	18.32	33.59	35.65	52.61	69.35	102.35	134.90	199.09	262.43	325.12	310.96	246.77	201.98	83.97								
40	4.47	8.69	20.95	38.39	40.74	60.13	79.25	116.97	154.17	227.54	299.91	371.57	379.93	301.49	119.78									
45	5.03	9.78	23.56	43.19	45.83	67.64	89.16	131.59	173.44	255.98	337.41	418.01	453.35	215.58										
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Standard Series Horsepower Tables

#180 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	43	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800
11	0.94	2.27	4.43	10.66	17.95	20.75	30.62	40.36	59.56	78.51	115.87	148.32	106.13	80.73	64.07	52.44	43.95	37.52	32.52	28.54	22.65	18.54	15.54
12	1.03	2.48	4.83	11.63	19.58	22.63	33.40	44.03	64.98	85.64	126.40	166.61	120.92	91.99	73.00	59.75	50.07	42.75	37.06	32.52	25.81	21.12	17.70
13	1.12	2.69	5.23	12.60	21.21	24.52	36.19	47.70	70.39	92.78	136.93	180.49	136.35	103.72	82.31	67.37	56.46	48.21	41.79	36.67	29.10	23.82	
14	1.20	2.90	5.63	13.57	22.84	26.40	38.97	51.36	75.81	99.92	147.47	194.37	152.38	115.92	91.99	75.29	63.10	53.87	46.70	40.98	32.52	26.62	
15	1.29	3.10	6.03	14.54	24.48	28.29	41.75	55.03	81.22	107.06	158.00	208.26	169.00	128.56	102.02	83.50	69.98	59.75	51.79	45.45	36.07		
16	1.37	3.31	6.44	15.51	26.11	30.18	44.54	58.70	86.64	114.19	168.53	222.14	186.17	141.63	112.39	91.99	77.09	65.82	57.05	50.07	39.74		
17	1.46	3.52	6.84	16.48	27.74	32.06	47.32	62.37	92.05	121.33	179.07	236.02	203.90	155.11	123.09	100.75	84.43	72.09	62.49	54.84	43.52		
18	1.54	3.72	7.24	17.45	29.37	33.95	50.10	66.04	97.47	128.47	189.60	249.91	222.15	169.00	134.11	109.77	91.99	78.54	68.08	59.75			
19	1.63	3.93	7.64	18.42	31.00	35.83	52.89	69.71	102.88	135.60	200.13	263.79	240.92	183.27	145.44	119.04	99.76	85.18	73.83	64.80			
20	1.72	4.14	8.05	19.39	32.64	37.72	55.67	73.38	108.30	142.74	210.67	277.68	260.19	197.93	157.07	128.56	107.74	91.99	79.74	69.98			
21	1.80	4.34	8.45	20.36	34.27	39.61	58.45	77.05	113.71	149.88	221.20	291.56	279.94	212.96	169.00	138.32	115.92	98.97	85.79	75.29			
22	1.89	4.55	8.85	21.33	35.90	41.49	61.24	80.71	119.12	157.02	231.73	305.44	300.17	228.35	181.21	148.32	124.30	106.13	91.99				
23	1.97	4.76	9.25	22.30	37.53	43.38	64.02	84.38	124.54	164.15	242.27	319.33	320.87	244.10	193.70	158.54	132.87	113.45	98.33				
24	2.06	4.96	9.65	23.27	39.16	45.26	66.80	88.05	129.95	171.29	252.80	333.21	342.02	260.19	206.47	169.00	141.63	120.92	40.34				
25	2.15	5.17	10.06	24.24	40.79	47.15	69.59	91.72	135.37	178.43	263.33	347.10	363.62	276.62	219.51	179.67	150.57	128.56					
26	2.23	5.38	10.46	25.21	42.43	49.04	72.37	95.39	140.78	185.56	273.87	360.98	385.66	293.38	232.81	190.55	159.69	122.43					
28	2.40	5.79	11.26	27.15	45.69	52.81	77.94	102.73	151.61	199.84	294.93	388.75	431.00	327.87	260.19	212.96	178.47						
30	2.57	6.20	12.07	29.09	48.95	56.58	83.50	110.07	162.44	214.11	316.00	416.51	477.99	363.62	288.56	236.18	128.92						
32	2.75	6.62	12.87	31.02	52.22	60.35	89.07	117.40	173.27	228.39	337.07	444.28	526.58	400.58	317.89	260.19							
35	3.00	7.24	14.08	33.93	57.11	66.01	97.42	128.41	189.52	249.80	368.67	485.93	602.34	458.22	363.62	142.51							
40	3.43	8.27	16.09	38.78	65.27	75.44	111.34	146.75	216.59	285.48	421.34	555.35	688.02	559.83	254.20								
45	3.86	9.31	18.10	43.63	73.43	84.87	125.26	165.10	243.66	321.17	474.00	624.77	774.03	480.00									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#180 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	43	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800
11	0.70	1.69	3.30	7.95	13.39	15.47	22.83	30.10	44.41	58.54	86.40	110.60	79.14	60.20	47.78	39.10	32.77	27.98	24.25	21.28	16.89	13.83	11.59
12	0.77	1.85	3.60	8.67	14.60	16.88	24.91	32.83	48.46	63.86	94.26	124.24	90.17	68.60	54.44	44.56	37.34	31.88	27.64	24.25	19.25	15.75	13.20
13	0.84	2.01	3.90	9.40	15.82	18.28	26.99	35.57	52.49	69.19	102.11	134.59	101.68	77.34	61.38	50.24	42.10	35.95	31.16	27.34	21.70	17.76	
14	0.89	2.16	4.20	10.12	17.03	19.69	29.06	38.30	56.53	74.51	109.97	144.94	113.63	86.44	68.60	56.14	47.05	40.17	34.82	30.56	24.25	19.85	
15	0.96	2.31	4.50	10.84	18.25	21.10	31.13	41.04	60.57	79.83	117.82	155.30	126.02	95.87	76.08	62.27	52.18	44.56	38.62	33.89	26.90		
16	1.02	2.47	4.80	11.57	19.47	22.51	33.21	43.77	64.61	85.15	125.67	165.65	138.83	105.61	83.81	68.60	57.49	49.08	42.54	37.34	29.63		
17	1.09	2.62	5.10	12.29	20.69	23.91	35.29	46.51	68.64	90.48	133.53	176.00	152.05	115.67	91.79	75.13	62.96	53.76	46.60	40.89	32.45		
18	1.15	2.77	5.40	13.01	21.90	25.32	37.36	49.25	72.68	95.80	141.38	186.36	165.66	126.02	100.01	81.86	68.60	58.57	50.77	44.56			
19	1.22	2.93	5.70	13.74	23.12	26.72	39.44	51.98	76.72	101.12	149.24	196.71	179.65	136.66	108.45	88.77	74.39	63.52	55.06	48.32			
20	1.28	3.09	6.00	14.46	24.34	28.13	41.51	54.72	80.76	106.44	157.10	207.07	194.02	147.60	117.13	95.87	80.34	68.60	59.46	52.18			
21	1.34	3.24	6.30	15.18	25.56	29.54	43.59	57.46	84.79	111.77	164.95	217.42	208.75	158.80	126.02	103.15	86.44	73.80	63.97	56.14			
22	1.41	3.39	6.60	15.91	26.77	30.94	45.67	60.19	88.83	117.09	172.80	227.77	223.84	170.28	135.13	110.60	92.69	79.14	68.60				
23	1.47	3.55	6.90	16.63	27.99	32.35	47.74	62.92	92.87	122.41	180.66	238.12	239.27	182.03	144.44	118.22	99.08	84.60	73.32				
24	1.54	3.70	7.20	17.35	29.20	33.75	49.81	65.66	96.90	127.73	188.51	248.47	255.04	194.02	153.96	126.02	105.61	90.17	30.08				
25	1.60	3.86	7.50	18.08	30.42	35.16	51.89	68.40	100.95	133.06	196.37	258.83	271.15	206.28	163.69	133.98	112.28	95.87					
26	1.66	4.01	7.80	18.80	31.64	36.57	53.97	71.13	104.98	138.37	204.22	269.18	287.59	218.77	173.61	142.09	119.08	91.30					
28	1.79	4.32	8.40	20.25	34.07	39.38	58.12	76.61	113.06	149.02	219.93	289.89	321.40	244.49	194.02	158.80	133.09						
30	1.92	4.62	9.00	21.69	36.50	42.19	62.27	82.08	121.13	159.66	235.64	310.59	356.44	271.15	215.18	176.12	96.14						
32	2.05	4.94	9.60	23.13	38.94	45.00	66.42	87.55	129.21	170.31	251.35	331.30	392.67	298.71	237.05	194.02							
35	2.24	5.40	10.50	25.30	42.59	49.22	72.65	95.76	141.33	186.28	274.92	362.36	449.16	341.69	271.15	106.27							
40	2.56	6.17	12.00	28.92	48.67	56.26	83.03	109.43	161.51	212.88	314.19	414.12	513.06	417.47	189.56								
45	2.88	6.94	13.50	32.53	54.76	63.29	93.41	123.12	181.70	239.50	353.46	465.89	577.19	357.94									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Standard Series Horsepower Tables

#200 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	40	50	75	100	150	200	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600
11	1.25	3.02	5.88	14.16	22.23	27.54	40.65	53.58	79.08	104.24	129.14	153.84	161.36	115.46	87.83	69.70	57.05	47.81	40.82	35.38	31.05	24.64	20.17
12	1.37	3.29	6.41	15.45	24.25	30.05	44.35	58.45	86.27	113.71	140.88	167.82	183.86	131.56	100.08	79.42	65.00	54.48	46.51	40.32	35.38	28.08	22.98
13	1.48	3.57	6.94	16.73	26.28	32.55	48.04	63.33	93.46	123.19	152.62	181.81	207.31	148.34	112.85	89.55	73.30	61.43	52.45	45.46	39.90	31.66	
14	1.59	3.84	7.48	18.02	28.30	35.06	51.74	68.20	100.65	132.66	164.36	195.79	231.69	165.78	126.11	100.08	81.91	68.65	58.61	50.80	44.59	35.38	
15	1.71	4.12	8.01	19.31	30.32	37.56	55.43	73.07	107.84	142.14	176.09	209.78	256.95	183.86	139.87	110.99	90.85	76.13	65.00	56.34	49.45	37.46	
16	1.82	4.39	8.55	20.60	32.34	40.06	59.13	77.94	115.03	151.61	187.83	223.76	283.07	202.55	154.08	122.27	100.08	83.87	71.61	62.07	54.48		
17	1.94	4.67	9.08	21.88	34.36	42.57	62.83	82.81	122.22	161.09	199.57	237.75	310.02	221.83	168.75	133.91	109.61	91.86	78.43	67.98	59.66		
18	2.05	4.94	9.61	23.17	36.38	45.07	66.52	87.68	129.41	170.57	211.31	251.73	331.81	241.69	183.86	145.90	119.42	100.08	85.45	74.07	65.00		
19	2.16	5.22	10.15	24.46	38.40	47.58	70.22	92.55	136.59	180.04	223.05	265.72	350.24	262.11	199.39	158.23	129.51	108.53	92.67	80.32	2.22		
20	2.28	5.49	10.68	25.74	40.42	50.08	73.91	97.42	143.78	189.52	234.79	279.70	368.67	283.07	215.34	170.88	139.87	117.21	100.08	86.75			
21	2.39	5.77	11.22	27.03	42.45	52.59	77.61	102.29	150.97	198.99	246.53	293.69	387.11	304.56	231.69	183.86	150.49	126.11	107.68	32.68			
22	2.51	6.04	11.75	28.32	44.47	55.09	81.30	107.17	158.16	208.47	258.27	307.68	405.54	326.57	248.43	197.15	161.36	135.23	115.46				
23	2.62	6.31	12.28	29.61	46.49	57.59	85.00	112.04	165.35	217.95	270.01	321.66	423.97	349.09	265.56	210.74	172.49	144.55	104.48				
24	2.73	6.59	12.82	30.89	48.51	60.10	88.70	116.91	172.54	227.42	281.75	335.65	442.41	372.10	283.07	224.63	183.86	154.08	21.71				
25	2.85	6.86	13.35	32.18	50.53	62.60	92.39	121.78	179.73	236.90	293.49	349.63	460.84	395.60	300.94	238.82	195.47	163.81					
26	2.96	7.14	13.89	33.47	52.55	65.11	96.09	126.65	186.92	246.37	305.23	363.62	479.27	419.57	319.18	253.29	207.31	151.14					
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)								Type C (Oil Pump)										

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#200 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	40	50	75	100	150	200	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600
11	0.93	2.25	4.38	10.56	16.58	20.54	30.31	39.95	58.97	77.73	96.30	114.72	120.33	86.10	65.49	51.98	42.54	35.65	30.44	26.38	23.15	18.37	15.04
12	1.02	2.45	4.78	11.52	18.08	22.41	33.07	43.59	64.33	84.79	105.05	125.14	137.10	98.10	74.63	59.22	48.47	40.63	34.68	30.07	26.38	20.94	17.14
13	1.10	2.66	5.18	12.48	19.60	24.27	35.82	47.23	69.69	91.86	113.81	135.58	154.59	110.62	84.15	66.78	54.66	45.81	39.11	33.90	29.75	23.61	
14	1.19	2.86	5.58	13.44	21.10	26.14	38.58	50.86	75.05	98.92	122.56	146.00	172.77	123.62	94.04	74.63	61.08	51.19	43.71	37.88	33.25	26.38	
15	1.28	3.07	5.97	14.40	22.61	28.01	41.33	54.49	80.42	105.99	131.31	156.43	191.61	137.10	104.30	82.77	67.75	56.77	48.47	42.01	36.87	27.93	
16	1.36	3.27	6.38	15.36	24.12	29.87	44.09	58.12	85.78	113.06	140.06	166.86	211.09	151.04	114.90	91.18	74.63	62.54	53.40	46.29	40.63		
17	1.45	3.48	6.77	16.32	25.62	31.74	46.85	61.75	91.14	120.12	148.82	177.29	231.18	165.42	125.84	99.86	81.74	68.50	58.49	50.69	44.49		
18	1.53	3.68	7.17	17.28	27.13	33.61	49.60	65.38	96.50	127.19	157.57	187.72	247.43	180.23	137.10	108.80	89.05	74.63	63.72	55.23	48.47		
19	1.61	3.89	7.57	18.24	28.63	35.48	52.36	69.01	101.86	134.26	166.33	198.15	261.17	195.46	148.69	117.99	96.58	80.93	69.10	59.89	1.66		
20	1.70	4.09	7.96	19.19	30.14	37.34	55.11	72.65	107.22	141.33	175.08	208.57	274.92	211.09	160.58	127.43	104.30	87.40	74.63	64.69			
21	1.78	4.30	8.37	20.16	31.65	39.22	57.87	76.28	112.58	148.39	183.84	219.00	288.67	227.11	172.77	137.10	112.22	94.04	80.30	24.37			
22	1.87	4.50	8.76	21.12	33.16	41.08	60.63	79.92	117.94	155.46	192.59	229.44	302.41	243.52	185.25	147.01	120.33	100.84	86.10				
23	1.95	4.71	9.16	22.08	34.67	42.94	63.38	83.55	123.30	162.53	201.35	239.86	316.15	260.32	198.03	157.15	128.63	107.79	77.91				
24	2.04	4.91	9.56	23.03	36.17	44.82	66.14	87.18	128.66	169.59	210.10	250.29	329.91	277.47	211.09	167.51	137.10	114.90	16.19				
25	2.13	5.12	9.96	24.00	37.68	46.68	68.90	90.81	134.02	176.66	218.86	260.72	343.65	295.00	224.41	178.09	145.76	122.15					
26	2.21	5.32	10.36	24.96	39.19	48.55	71.65	94.44	139.39	183.72	227.61	271.15	357.39	312.87	238.01	188.88	154.59	112.71					
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)								Type C (Oil Pump)										

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Standard Series Horsepower Tables

#240 Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	36	50	75	100	150	200	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
11	2.02	4.86	9.46	22.81	32.36	44.36	65.47	86.30	127.37	167.88	207.99	247.77	186.70	133.59	101.63	80.65	66.01	55.32	47.23	40.94	35.93	31.87	28.51
12	2.20	5.31	10.32	24.88	35.31	48.40	71.43	94.15	138.95	183.14	226.89	270.30	212.73	152.22	115.80	91.89	75.21	63.03	53.82	46.65	40.94	36.31	2.11
13	2.39	5.75	11.18	26.95	38.25	52.43	77.38	101.99	150.53	198.41	245.80	292.82	239.87	171.64	130.57	103.61	84.81	71.07	60.68	52.60	46.16	38.13	
14	2.57	6.19	12.04	29.02	41.19	56.46	83.33	109.84	162.11	213.67	264.71	315.34	268.07	191.82	145.92	115.80	94.78	79.43	67.82	58.78	51.59		
15	2.75	6.63	12.90	31.10	44.13	60.50	89.28	117.68	173.68	228.93	283.62	337.87	297.30	212.73	161.83	128.42	105.11	88.09	75.21	65.19			
16	2.94	7.08	13.76	33.17	47.08	64.53	95.24	125.53	185.26	244.19	302.53	360.39	327.52	234.35	178.28	141.47	115.80	97.04	82.86	71.82			
17	3.12	7.52	14.62	35.24	50.02	68.56	101.19	133.37	196.84	259.45	321.43	382.92	358.70	256.66	195.25	154.94	126.82	106.28	90.74				
18	3.30	7.96	15.48	37.32	52.96	72.59	107.14	141.22	208.42	274.71	340.34	405.44	390.81	279.64	212.73	168.81	138.17	115.80	98.87				
19	3.49	8.40	16.34	39.39	55.90	76.63	113.09	149.06	220.00	289.98	359.25	427.97	423.82	303.26	230.70	183.08	149.84	125.58	3.20				
20	3.67	8.84	17.20	41.46	58.84	80.66	119.04	156.91	231.58	305.24	378.16	450.49	457.72	327.52	249.15	197.72	161.83	135.62					
21	3.85	9.29	18.07	43.54	61.79	84.69	125.00	164.76	243.16	320.50	397.07	473.02	492.48	352.39	268.07	212.73	174.12	109.86					
22	4.04	9.73	18.93	45.61	64.73	88.73	130.95	172.60	254.74	335.76	415.97	495.54	528.07	377.85	287.44	228.10	186.70						
23	4.22	10.17	19.79	47.68	67.67	92.76	136.90	180.45	266.32	351.02	434.88	518.07	564.48	403.91	307.26	243.83	199.57						
24	4.40	10.61	20.65	49.76	70.61	96.79	142.85	188.29	277.89	366.29	453.79	540.59	601.69	430.53	327.52	259.91	188.30						
25	4.59	11.06	21.51	51.83	73.55	100.83	148.81	196.14	289.47	381.55	472.70	563.12	639.68	457.72	348.20	276.32	73.47						
26	4.77	11.50	22.37	53.90	76.50	104.86	154.76	203.98	301.05	396.81	491.61	585.64	678.45	485.46	369.30	293.06							
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)								Type C (Oil Pump)										

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#240 Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	36	50	75	100	150	200	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
11	1.51	3.62	7.05	17.01	24.13	33.08	48.82	64.35	94.98	125.19	155.10	184.76	139.22	99.62	75.79	60.14	49.22	41.25	35.22	30.53	26.79	23.77	21.26
12	1.64	3.96	7.70	18.55	26.33	36.09	53.27	70.21	103.62	136.57	169.19	201.56	158.63	113.51	86.35	68.52	56.08	47.00	40.13	34.79	30.53	27.08	1.57
13	1.78	4.29	8.34	20.10	28.52	39.10	57.70	76.05	112.25	147.95	183.29	218.36	178.87	127.99	97.37	77.26	63.24	53.00	45.25	39.22	34.42	28.43	
14	1.92	4.62	8.98	21.64	30.72	42.10	62.14	81.91	120.89	159.33	197.39	235.15	199.90	143.04	108.81	86.35	70.68	59.23	50.57	43.83	38.47		
15	2.05	4.94	9.62	23.19	32.91	45.11	66.58	87.75	129.51	170.71	211.50	251.95	221.70	158.63	120.68	95.76	78.38	65.69	56.08	48.61			
16	2.19	5.28	10.26	24.73	35.11	48.12	71.02	93.61	138.15	182.09	225.60	268.74	244.23	174.75	132.94	105.49	86.35	72.36	61.79	53.56			
17	2.33	5.61	10.90	26.28	37.30	51.13	75.46	99.45	146.78	193.47	239.69	285.54	267.48	191.39	145.60	115.54	94.57	79.25	67.66				
18	2.46	5.94	11.54	27.83	39.49	54.13	79.89	105.31	155.42	204.85	253.79	302.34	291.43	208.53	158.63	125.88	103.03	86.35	73.73				
19	2.60	6.26	12.18	29.37	41.68	57.14	84.33	111.15	164.05	216.24	267.89	319.14	316.04	226.14	172.03	136.52	111.74	93.65	2.39				
20	2.74	6.59	12.83	30.92	43.88	60.15	88.77	117.01	172.69	227.62	281.99	335.93	341.32	244.23	185.79	147.44	120.68	101.13					
21	2.87	6.93	13.47	32.47	46.08	63.15	93.21	122.86	181.32	239.00	296.10	352.73	367.24	262.78	199.90	158.63	129.84	81.92					
22	3.01	7.26	14.12	34.01	48.27	66.17	97.65	128.71	189.96	250.38	310.19	369.52	393.78	281.76	214.34	170.09	139.22						
23	3.15	7.58	14.76	35.55	50.46	69.17	102.09	134.56	198.59	261.76	324.29	386.32	420.93	301.20	229.12	181.82	148.82						
24	3.28	7.91	15.40	37.11	52.65	72.18	106.52	140.41	207.22	273.14	338.39	403.12	448.68	321.05	244.23	193.81	140.42						
25	3.42	8.25	16.04	38.65	54.85	75.19	110.97	146.26	215.86	284.52	352.49	419.92	477.01	341.32	259.65	206.05	54.79						
26	3.56	8.58	16.68	40.19	57.05	78.19	115.40	152.11	224.49	295.90	366.59	436.71	505.92	362.01	275.39	218.53							
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)								Type C (Oil Pump)										

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Heavy Series Horsepower Tables

#60H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	90	100	200	300	400	500	600	800	1,000	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500
11	0.22	0.53	1.02	1.80	1.99	3.87	5.72	7.53	9.33	11.12	14.66	15.58	11.85	9.41	7.70	6.45	5.51	3.94	3.00	2.38	1.95	1.63	1.39	1.21
12	0.24	0.57	1.12	1.96	2.17	4.23	6.24	8.22	10.18	12.13	15.99	17.75	13.51	10.72	8.77	7.35	6.28	4.49	3.42	2.71	2.22	1.86	1.59	
13	0.26	0.62	1.21	2.13	2.35	4.58	6.76	8.90	11.03	13.14	17.32	20.02	15.23	12.08	9.89	8.29	7.08	5.06	3.85	3.06	2.50	2.10	1.79	
14	0.28	0.67	1.30	2.29	2.53	4.93	7.27	9.59	11.88	14.15	18.65	22.37	17.02	13.51	11.05	9.26	7.91	5.66	4.31	3.42	2.80	2.34		
15	0.30	0.72	1.40	2.45	2.71	5.28	7.79	10.27	12.73	15.16	19.99	24.76	18.87	14.98	12.26	10.27	8.77	6.28	4.77	3.79	3.10	2.60		
16	0.32	0.77	1.49	2.62	2.90	5.63	8.31	10.96	13.58	16.17	21.32	26.41	20.79	16.50	13.51	11.32	9.66	6.91	5.26	4.17	3.42			
17	0.34	0.81	1.58	2.78	3.08	5.99	8.83	11.64	14.43	17.18	22.65	28.06	22.77	18.07	14.79	12.40	10.58	7.57	5.76	4.57	3.74			
18	0.36	0.86	1.67	2.94	3.26	6.34	9.35	12.33	15.27	18.20	23.98	29.71	24.81	19.69	16.11	13.51	11.53	8.25	6.28	4.98	1.06			
19	0.38	0.91	1.77	3.11	3.44	6.69	9.87	13.01	16.12	19.21	25.32	31.36	26.91	21.35	17.48	14.65	12.50	8.95	6.81	5.40				
20	0.40	0.96	1.86	3.27	3.62	7.04	10.39	13.70	16.97	20.22	26.65	33.01	29.06	23.06	18.87	15.82	13.51	9.66	7.35	5.83				
21	0.42	1.00	1.95	3.44	3.80	7.39	10.91	14.38	17.82	21.23	27.98	34.66	31.26	24.81	20.31	17.02	14.53	10.40	7.91	4.87				
22	0.44	1.05	2.05	3.60	3.98	7.75	11.43	15.07	18.67	22.24	29.31	36.32	33.52	26.60	21.77	18.25	15.58	11.15	8.48					
23	0.46	1.10	2.14	3.76	4.16	8.10	11.95	15.75	19.52	23.25	30.65	37.97	35.84	28.44	23.28	19.51	16.66	11.92	9.07					
24	0.48	1.15	2.23	3.93	4.34	8.45	12.47	16.44	20.37	24.26	31.98	39.62	38.20	30.31	24.81	20.79	17.75	12.70	9.66					
25	0.50	1.20	2.33	4.09	4.52	8.80	12.99	17.12	21.21	25.27	33.31	41.27	40.61	32.23	26.38	22.11	18.87	13.51	10.27					
26	0.52	1.24	2.42	4.25	4.71	9.15	13.51	17.81	22.06	26.28	34.64	42.92	43.07	34.18	27.98	23.44	20.02	14.32	4.17					
28	0.56	1.34	2.61	4.58	5.07	9.86	14.55	19.18	23.76	28.30	37.31	46.22	48.14	38.20	31.26	26.20	22.37	16.01						
30	0.60	1.43	2.79	4.91	5.43	10.56	15.59	20.55	25.46	30.33	39.97	49.52	53.38	42.36	34.67	29.06	24.81	17.75						
32	0.64	1.53	2.98	5.23	5.79	11.27	16.63	21.92	27.15	32.35	42.64	52.82	58.81	46.67	38.20	32.01	27.33	11.45						
35	0.69	1.67	3.26	5.73	6.33	12.32	18.19	23.97	29.70	35.38	46.63	57.77	67.27	53.38	43.69	36.62	31.26							
40	0.79	1.91	3.72	6.54	7.24	14.08	20.79	27.40	33.94	40.43	53.30	66.03	78.66	65.22	53.38	44.74	29.65							
45	0.89	2.15	4.19	7.36	8.14	15.84	23.38	30.82	38.18	45.49	59.96	74.28	88.49	77.83	63.70	37.00								
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

#60H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	90	100	200	300	400	500	600	800	1,000	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500
11	0.16	0.40	0.76	1.34	1.48	2.89	4.27	5.62	6.96	8.29	10.93	11.62	8.84	7.02	5.74	4.81	4.11	2.94	2.24	1.77	1.45	1.22	1.04	0.90
12	0.18	0.43	0.84	1.46	1.62	3.15	4.65	6.13	7.59	9.05	11.92	13.24	10.07	7.99	6.54	5.48	4.68	3.35	2.55	2.02	1.66	1.39	1.19	
13	0.19	0.46	0.90	1.59	1.75	3.42	5.04	6.64	8.23	9.80	12.92	14.93	11.36	9.01	7.37	6.18	5.28	3.77	2.87	2.28	1.86	1.57	1.33	
14	0.21	0.50	0.97	1.71	1.89	3.68	5.42	7.15	8.86	10.55	13.91	16.68	12.69	10.07	8.24	6.91	5.90	4.22	3.21	2.55	2.09	1.74		
15	0.22	0.54	1.04	1.83	2.02	3.94	5.81	7.66	9.49	11.30	14.91	18.46	14.07	11.17	9.14	7.66	6.54	4.68	3.56	2.83	2.31	1.94		
16	0.24	0.57	1.11	1.95	2.16	4.20	6.20	8.17	10.13	12.06	15.90	19.69	15.50	12.30	10.07	8.44	7.20	5.15	3.92	3.11	2.55			
17	0.25	0.60	1.18	2.07	2.30	4.47	6.58	8.68	10.76	12.81	16.89	20.92	16.98	13.47	11.03	9.25	7.89	5.64	4.30	3.41	2.79			
18	0.27	0.64	1.25	2.19	2.43	4.73	6.97	9.19	11.39	13.57	17.88	22.15	18.50	14.68	12.01	10.07	8.60	6.15	4.68	3.71	0.79			
19	0.28	0.68	1.32	2.32	2.57	4.99	7.36	9.70	12.02	14.32	18.88	23.39	20.07	15.92	13.03	10.92	9.32	6.67	5.08	4.03				
20	0.30	0.72	1.39	2.44	2.70	5.25	7.75	10.22	12.65	15.08	19.87	24.62	21.67	17.20	14.07	11.80	10.07	7.20	5.48	4.35				
21	0.31	0.75	1.45	2.57	2.83	5.51	8.14	10.72	13.29	15.83	20.86	25.85	23.31	18.50	15.15	12.69	10.84	7.76	5.90	3.63				
22	0.33	0.78	1.53	2.68	2.97	5.78	8.52	11.24	13.92	16.58	21.86	27.08	25.00	19.84	16.23	13.61	11.62	8.31	6.32					
23	0.34	0.82	1.60	2.80	3.10	6.04	8.91	11.74	14.56	17.34	22.86	28.31	26.73	21.21	17.36	14.55	12.42	8.89	6.76					
24	0.36	0.86	1.66	2.93	3.24	6.30	9.30	12.26	15.19	18.09	23.85	29.54	28.49	22.60	18.50	15.50	13.24	9.47	7.20					
25	0.37	0.89	1.74	3.05	3.37	6.56	9.69	12.77	15.82	18.84	24.84	30.78	30.28	24.03	19.67	16.49	14.07	10.07	7.66					
26	0.39	0.92	1.80	3.17	3.51	6.82	10.07	13.28	16.45	19.60	25.83	32.01	32.12	25.49	20.86	17.48	14.93	10.68	3.11					
28	0.42	1.00	1.95	3.42	3.78	7.35	10.85	14.30	17.72	21.10	27.82	34.47	35.90	28.49	23.31	19.54	16.68	11.94						
30	0.45	1.07	2.08	3.66	4.05	7.87	11.63	15.32	18.99	22.62	29.81	36.93	39.81	31.59	25.85	21.67	18.50	13.24						
32	0.48	1.14	2.22	3.90	4.32	8.40	12.40	16.35	20.25	24.12	31.80	39.39	43.85	34.80	28.49	23.87	20.38	8.54						
35	0.51	1.25	2.43	4.27	4.72	9.19	13.56	17.87	22.15	26.38	34.77	43.08	50.16	39.81	32.58	27.31	23.31							
40	0.59	1.42	2.77	4.88	5.40	10.50	15.50	20.43	25.31	30.15	39.75	49.24	58.66	48.63	39.81	33.36	22.11							
45	0.66	1.60	3.12	5.49	6.07	11.81	17.43	22.98	28.47	33.92	44.71	55.39	65.99	58.04	47.50	27.59								
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

Heavy Series Horsepower Tables

#80H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	70	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500	4,000
11	0.49	1.19	2.31	3.19	4.50	8.75	12.91	17.02	21.08	25.12	29.12	27.41	22.97	19.61	17.00	14.92	11.84	9.69	8.12	6.93	4.96	3.77	3.00	2.45
12	0.54	1.30	2.52	3.48	4.91	9.54	14.09	18.57	23.00	27.40	31.77	31.23	26.17	22.35	19.37	17.00	13.49	11.04	9.25	7.90	5.65	4.30	3.41	2.79
13	0.58	1.40	2.73	3.77	5.31	10.34	15.26	20.11	24.92	29.68	34.42	35.22	29.51	25.20	21.84	19.17	15.21	12.45	10.43	8.91	6.37	4.85	3.85	3.15
14	0.63	1.51	2.94	4.06	5.72	11.13	16.43	21.66	26.83	31.97	37.07	39.36	32.98	28.16	24.41	21.42	17.00	13.91	11.66	9.96	7.12	5.42	4.30	2.02
15	0.67	1.62	3.15	4.35	6.13	11.93	17.61	23.21	28.75	34.25	39.71	43.65	36.58	31.23	27.07	23.76	18.85	15.43	12.93	11.04	7.90	6.01	4.77	
16	0.72	1.73	3.36	4.64	6.54	12.73	18.78	24.75	30.67	36.53	42.36	48.08	40.30	34.41	29.82	26.17	20.77	17.00	14.25	12.16	8.70	6.62		
17	0.76	1.84	3.57	4.94	6.95	13.52	19.95	26.30	32.59	38.82	45.01	51.17	44.13	37.68	32.66	28.66	22.75	18.62	15.60	13.32	9.53	7.25		
18	0.81	1.94	3.78	5.23	7.36	14.32	21.13	27.85	34.50	41.10	47.66	54.17	48.08	41.05	35.59	31.23	24.78	20.29	17.00	14.51	10.39	1.88		
19	0.85	2.05	3.99	5.52	7.77	15.11	22.30	29.40	36.42	43.38	50.30	57.18	52.15	44.52	38.59	33.87	26.88	22.00	18.44	15.74	11.26			
20	0.90	2.16	4.20	5.81	8.18	15.91	23.48	30.94	38.34	45.67	52.95	60.19	56.32	48.08	41.68	36.58	29.03	23.76	19.91	17.00	12.16			
21	0.94	2.27	4.41	6.10	8.59	16.70	24.65	32.49	40.25	47.95	55.60	63.20	60.59	51.73	44.84	39.36	31.23	25.56	21.42	18.29				
22	0.99	2.38	4.62	6.39	8.99	17.50	25.82	34.04	42.17	50.24	58.25	66.21	64.97	55.47	48.08	42.20	33.49	27.41	22.97	19.61				
23	1.03	2.48	4.83	6.68	9.40	18.29	27.00	35.58	44.09	52.52	60.89	69.22	69.45	59.30	51.40	45.11	35.80	29.30	24.55	20.97				
24	1.08	2.59	5.04	6.97	9.81	19.09	28.17	37.13	46.00	54.80	63.54	72.23	74.03	63.21	54.79	48.08	38.16	31.23	26.17	22.35				
25	1.12	2.70	5.25	7.26	10.22	19.88	29.35	38.68	47.92	57.09	66.19	75.24	78.70	67.20	58.25	51.12	40.57	33.20	27.83	23.76				
26	1.17	2.81	5.46	7.55	10.63	20.68	30.52	40.23	49.84	59.37	68.84	78.25	83.47	71.27	61.78	54.22	43.02	35.22	29.51	25.20				
28	1.26	3.03	5.88	8.13	11.45	22.27	32.87	43.32	53.67	63.94	74.13	84.27	93.29	79.65	69.04	60.59	48.08	39.36	32.98	28.16				
30	1.34	3.24	6.31	8.71	12.27	23.86	35.21	46.41	57.50	68.50	79.43	90.29	101.10	88.33	76.57	67.20	53.33	43.65	36.58	12.26				
32	1.43	3.46	6.73	9.29	13.08	25.45	37.56	49.51	61.34	73.07	84.72	96.31	107.84	97.31	84.35	74.03	58.75	48.08	39.43					
35	1.57	3.78	7.36	10.16	14.31	27.84	41.08	54.15	67.09	79.92	92.67	105.34	117.95	111.31	96.49	84.68	67.20	55.00	5.58					
40	1.79	4.32	8.41	11.61	16.35	31.81	46.95	61.89	76.67	91.34	105.90	120.39	134.80	136.00	117.88	103.46	82.10	14.36						
45	2.02	4.86	9.46	13.06	18.40	35.79	52.82	69.62	86.25	102.75	119.14	135.44	151.65	162.28	140.66	123.45	43.25							
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)							Type C (Oil Pump)													

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#80H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	70	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,500	3,000	3,500	4,000
11	0.37	0.89	1.72	2.38	3.36	6.52	9.63	12.69	15.72	18.73	21.71	20.44	17.13	14.62	12.68	11.13	8.83	7.23	6.06	5.17	3.70	2.81	2.24	1.83
12	0.40	0.97	1.88	2.60	3.66	7.11	10.51	13.85	17.15	20.43	23.69	23.29	19.51	16.67	14.44	12.68	10.06	8.23	6.90	5.89	4.21	3.21	2.54	2.08
13	0.43	1.04	2.04	2.81	3.96	7.71	11.38	15.00	18.58	22.13	25.67	26.26	22.01	18.79	16.29	14.30	11.34	9.28	7.78	6.64	4.75	3.62	2.87	2.35
14	0.47	1.13	2.19	3.03	4.27	8.30	12.25	16.15	20.01	23.84	27.64	29.35	24.59	21.00	18.20	15.97	12.68	10.37	8.69	7.43	5.31	4.04	3.21	1.51
15	0.50	1.21	2.35	3.24	4.57	8.90	13.13	17.31	21.44	25.54	29.61	32.55	27.28	23.29	20.19	17.72	14.06	11.51	9.64	8.23	5.89	4.48	3.56	
16	0.54	1.29	2.51	3.46	4.88	9.49	14.00	18.46	22.87	27.24	31.59	35.85	30.05	25.66	22.24	19.51	15.49	12.68	10.63	9.07	6.49	4.94		
17	0.57	1.37	2.66	3.68	5.18	10.08	14.88	19.61	24.30	28.95	33.56	38.16	32.91	28.10	24.35	21.37	16.96	13.88	11.63	9.93	7.11	5.41		
18	0.60	1.45	2.82	3.90	5.49	10.68	15.76	20.77	25.73	30.65	35.54	40.39	35.85	30.61	26.54	23.29	18.48	15.13	12.68	10.82	7.75	1.40		
19	0.63	1.53	2.98	4.12	5.79	11.27	16.63	21.92	27.16	32.35	37.51	42.64	38.89	33.20	28.78	25.26	20.04	16.41	13.75	11.74	8.40			
20	0.67	1.61	3.13	4.33	6.10	11.86	17.51	23.07	28.59	34.06	39.48	44.88	42.00	35.85	31.08	27.28	21.65	17.72	14.85	12.68	9.07			
21	0.70	1.69	3.29	4.55	6.41	12.45	18.38	24.23	30.01	35.76	41.46	47.13	45.18	38.58	33.44	29.35	23.29	19.06	15.97	13.64				
22	0.74	1.77	3.45	4.77	6.70	13.05	19.25	25.38	31.45	37.46	43.44	49.37	48.45	41.36	35.85	31.47	24.97	20.44	17.13	14.62				
23	0.77	1.85	3.60	4.98	7.01	13.64	20.13	26.53	32.88	39.16	45.41	51.62	51.79	44.22	38.33	33.64	26.70	21.85	18.31	15.64				
24	0.81	1.93	3.76	5.20	7.32	14.24	21.01	27.69	34.30	40.86	47.38	53.86	55.20	47.14	40.86	35.85	28.46	23.29	19.51	16.67				
25	0.84	2.01	3.91	5.41	7.62	14.82	21.89	28.84	35.73	42.57	49.36	56.11	58.69	50.11	43.44	38.12	30.25	24.76	20.75	17.72				
26	0.87	2.10	4.07	5.63	7.93	15.42	22.76	30.00	37.17	44.27	51.33	58.35	62.24	53.15	46.07	40.43	32.08	26.26	22.01	18.79				
28	0.94	2.26	4.38	6.06	8.54	16.61	24.51	32.30	40.02	47.68	55.28	62.84	69.57	59.40	51.48	45.18	35.85	29.35	24.59	21.00				
30	1.00	2.42	4.71	6.50	9.15	17.79	26.26	34.61	42.88	51.08	59.23	67.33	75.39	65.87	57.10	50.11	39.77	32.55	27.28	9.14				
32	1.07	2.58	5.02	6.93	9.75	18.98	28.01	36.92	45.74	54.49	63.18	71.82	80.42	72.56	62.90	55.20	43.81	35.85	29.40					
35	1.17	2.82	5.49	7.58	10.67	20.76	30.63	40.38	50.03	59.60	69.10	78.55	87.96	83.00	71.95	63.15	50.11	41.01	4.16					
40	1.33	3.22	6.27	8.66	12.19	23.72	35.01	46.15	57.17	68.11	78.97	89.77	100.52	101.42	87.90	77.15	61.22	10.71						
45	1.51	3.62	7.05	9.74	13.72	26.69	39.39	51.92	64.32	76.62	88.84	101.00	113.09	121.01	104.89	92.06	32.25							
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)							Type C (Oil Pump)													

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Heavy Series Horsepower Tables

100H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	58	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,700	3,000
11	0.93	2.23	4.34	5.01	8.45	16.43	24.25	31.96	39.60	47.18	40.03	32.77	27.46	23.45	20.32	17.84	14.15	11.58	9.71	8.29	7.19	6.31	5.28	4.51
12	1.01	2.44	4.74	5.46	9.21	17.93	26.46	34.87	43.20	51.46	45.61	37.33	31.29	26.71	23.16	20.32	16.13	13.20	11.06	9.45	8.19	7.19	6.02	5.14
13	1.09	2.64	5.13	5.92	9.98	19.42	28.66	37.78	46.80	55.75	51.43	42.10	35.28	30.12	26.11	22.92	18.18	14.88	12.47	10.65	9.23	8.10	6.79	5.80
14	1.18	2.84	5.53	6.37	10.75	20.91	30.86	40.68	50.40	60.04	57.48	47.05	39.43	33.66	29.18	25.61	20.32	16.63	13.94	11.90	10.32	9.05	7.59	
15	1.26	3.04	5.92	6.83	11.52	22.41	33.07	43.59	54.00	64.33	63.75	52.18	43.73	37.33	32.36	28.40	22.54	18.45	15.46	13.20	11.44	10.04	8.42	
16	1.35	3.25	6.32	7.28	12.29	23.90	35.27	46.49	57.60	68.62	70.23	57.48	48.17	41.13	35.65	31.29	24.83	20.32	17.03	14.54	12.60	11.06		
17	1.43	3.45	6.71	7.74	13.05	25.39	37.48	49.40	61.20	72.91	76.91	62.95	52.76	45.05	39.04	34.27	27.19	22.26	18.65	15.93	13.80	12.12		
18	1.52	3.65	7.11	8.19	13.82	26.89	39.68	52.31	64.80	77.20	83.80	68.59	57.48	49.08	42.54	37.33	29.63	24.25	20.32	17.35	15.04	2.94		
19	1.60	3.86	7.50	8.65	14.59	28.38	41.89	55.21	68.40	81.48	90.88	74.38	62.34	53.22	46.13	40.49	32.13	26.30	22.04	18.82	16.31			
20	1.68	4.06	7.89	9.10	15.36	29.88	44.09	58.12	72.00	85.77	98.15	80.33	67.32	57.48	49.82	43.73	34.70	28.40	23.80	20.32	7.77			
21	1.77	4.26	8.29	9.56	16.13	31.37	46.30	61.02	75.60	90.06	104.43	86.43	72.43	61.85	53.61	47.05	37.33	30.56	25.61	21.87				
22	1.85	4.46	8.68	10.01	16.89	32.86	48.50	63.93	79.20	94.35	109.40	92.68	77.67	66.31	57.48	50.45	40.03	32.77	27.46	21.67				
23	1.94	4.67	9.08	10.47	17.66	34.36	50.71	66.83	82.80	98.64	114.37	99.07	83.02	70.89	61.44	53.93	42.79	35.03	29.35	2.94				
24	2.02	4.87	9.47	10.92	18.43	35.85	52.91	69.74	86.40	102.93	119.34	105.60	88.50	75.56	65.49	57.48	45.61	37.33	31.29					
25	2.10	5.07	9.87	11.38	19.20	37.34	55.12	72.65	90.00	107.22	124.32	112.27	94.09	80.33	69.63	61.11	48.49	39.69	29.68					
26	2.19	5.28	10.26	11.83	19.97	38.84	57.32	75.55	93.60	111.51	129.29	119.07	99.79	85.20	73.85	64.81	51.43	42.10	11.58					
28	2.36	5.68	11.05	12.75	21.50	41.83	61.73	81.36	100.80	120.08	139.24	133.07	111.52	95.22	82.53	72.43	57.48	47.05						
30	2.53	6.09	11.84	13.66	23.04	44.81	66.14	87.18	108.00	128.66	149.18	147.58	123.68	105.60	91.53	80.33	63.75	19.16						
32	2.69	6.49	12.63	14.57	24.57	47.80	70.55	92.99	115.20	137.24	159.13	162.58	136.25	116.33	100.84	88.50	70.23							
35	2.95	7.10	13.82	15.93	26.88	52.28	77.16	101.71	126.00	150.10	174.04	185.97	155.85	133.07	115.34	101.23	33.74							
40	3.37	8.12	15.79	18.21	30.72	59.75	88.18	116.23	144.00	171.55	198.91	226.11	190.42	162.58	140.92	82.37								
45	3.79	9.13	17.76	20.48	34.55	67.22	99.21	130.76	162.00	192.99	223.77	254.38	227.21	194.00	85.51									
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)						Type C (Oil Pump)														

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#100H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	10	25	50	58	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,700	3,000
11	0.69	1.66	3.24	3.74	6.30	12.25	18.08	23.83	29.53	35.18	29.85	24.44	20.48	17.49	15.15	13.30	10.55	8.64	7.24	6.18	5.36	4.71	3.94	3.36
12	0.75	1.82	3.53	4.07	6.87	13.37	19.73	26.00	32.21	38.37	34.01	27.84	23.33	19.92	17.27	15.15	12.03	9.84	8.25	7.05	6.11	5.36	4.49	3.83
13	0.81	1.97	3.83	4.41	7.44	14.48	21.37	28.17	34.90	41.57	38.35	31.39	26.31	22.46	19.47	17.09	13.56	11.10	9.30	7.94	6.88	6.04	5.06	4.33
14	0.88	2.12	4.12	4.75	8.02	15.59	23.01	30.34	37.58	44.77	42.86	35.09	29.40	25.10	21.76	19.10	15.15	12.40	10.40	8.87	7.70	6.75	5.66	
15	0.94	2.27	4.41	5.09	8.59	16.71	24.66	32.51	40.27	47.97	47.54	38.91	32.61	27.84	24.13	21.18	16.81	13.76	11.53	9.84	8.53	7.49	6.28	
16	1.01	2.42	4.71	5.43	9.16	17.82	26.30	34.67	42.95	51.17	52.37	42.86	35.92	30.67	26.58	23.33	18.52	15.15	12.70	10.84	9.40	8.25		
17	1.07	2.57	5.00	5.77	9.73	18.93	27.95	36.84	45.64	54.37	57.35	46.94	39.34	33.59	29.11	25.56	20.28	16.60	13.91	11.88	10.29	9.04		
18	1.13	2.72	5.30	6.11	10.31	20.05	29.59	39.01	48.32	57.57	62.49	51.15	42.86	36.60	31.72	27.84	22.10	18.08	15.15	12.94	11.22	2.19		
19	1.19	2.88	5.59	6.45	10.88	21.16	31.24	41.17	51.01	60.76	67.77	55.47	46.49	39.69	34.40	30.19	23.96	19.61	16.44	14.03	12.16			
20	1.25	3.03	5.88	6.79	11.45	22.28	32.88	43.34	53.69	63.96	73.19	59.90	50.20	42.86	37.15	32.61	25.88	21.18	17.75	15.15	5.79			
21	1.32	3.18	6.18	7.13	12.03	23.39	34.53	45.50	56.37	67.16	77.87	64.45	54.01	46.12	39.98	35.09	27.84	22.79	19.10	16.31				
22	1.38	3.33	6.47	7.46	12.59	24.50	36.17	47.67	59.06	70.36	81.58	69.11	57.92	49.45	42.86	37.62	29.85	24.44	20.48	16.16				
23	1.45	3.48	6.77	7.81	13.17	25.62	37.81	49.84	61.74	73.56	85.29	73.88	61.91	52.86	45.82	40.22	31.91	26.12	21.89	2.19				
24	1.51	3.63	7.06	8.14	13.74	26.73	39.45	52.01	64.43	76.75	88.99	78.75	65.99	56.35	48.84	42.86	34.01	27.84	23.33					
25	1.57	3.78	7.36	8.49	14.32	27.84	41.10	54.18	67.11	79.95	92.71	83.72	70.16	59.90	51.92	45.57	36.16	29.60	22.13					
26	1.63	3.94	7.65	8.82	14.89	28.96	42.74	56.34	69.80	83.15	96.41	88.79	74.41	63.53	55.07	48.33	38.35	31.39	8.64					
28	1.76	4.24	8.24	9.51	16.03	31.19	46.03	60.67	75.17	89.54	103.83	99.23	83.16	71.01	61.54	54.01	42.86	35.09						
30	1.89	4.54	8.83	10.19	17.18	33.41	49.32	65.01	80.54	95.94	111.24	110.05	92.23	78.75	68.25	59.90	47.54	14.29						
32	2.01	4.84	9.42	10.86	18.32	35.64	52.61	69.34	85.90	102.34	118.66	121.24	101.60	86.75	75.20	65.99	52.37							
35	2.20	5.29	10.31	11.88	20.04	38.99	57.54	75.85	93.96	111.93	129.78	138.68	116.22	99.23	86.01	75.49	25.16							
40	2.51	6.06	11.77	13.58	22.91	44.56	65.76	86.67	107.38	127.92	148.33	168.61	142.00	121.24	105.08	61.42								
45	2.83	6.81	13.24	15.27	25.76	50.13	73.98	97.51	120.80	143.91	166.87	189.69	169.43	144.67	63.76									
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)						Type C (Oil Pump)														

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Heavy Series Horsepower Tables

#120H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	5	10	25	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,700
11	0.79	1.54	3.72	7.23	10.67	14.06	20.76	27.36	40.38	53.22	65.93	58.37	46.32	37.91	31.77	27.13	20.64	16.38	13.40	11.23	9.59	8.31	7.30	6.11
12	0.86	1.68	4.05	7.89	11.64	15.34	22.64	29.85	44.05	58.06	71.93	66.51	52.78	43.20	36.20	30.91	23.51	18.66	15.27	12.80	10.93	9.47	8.31	1.06
13	0.94	1.82	4.39	8.54	12.61	16.62	24.53	32.33	47.72	62.90	77.92	74.99	59.51	48.71	40.82	34.85	26.51	21.04	17.22	14.43	12.32	10.68	9.37	
14	1.01	1.96	4.73	9.20	13.58	17.90	26.42	34.82	51.39	67.73	83.92	83.81	66.51	54.44	45.62	38.95	29.63	23.51	19.25	16.13	13.77	11.94	4.55	
15	1.08	2.10	5.07	9.86	14.55	19.18	28.30	37.31	55.06	72.57	89.91	92.95	73.76	60.37	50.59	43.20	32.86	26.08	21.34	17.89	15.27	13.24		
16	1.15	2.24	5.41	10.52	15.52	20.46	30.19	39.79	58.73	77.41	95.90	102.39	81.26	66.51	55.74	47.59	36.20	28.73	23.51	19.71	16.83			
17	1.23	2.38	5.74	11.17	16.49	21.73	32.08	42.28	62.40	82.25	101.90	112.14	88.99	72.84	61.04	52.12	39.65	31.46	25.75	21.58	18.43			
18	1.30	2.52	6.08	11.83	17.46	23.01	33.96	44.77	66.07	87.09	107.89	122.18	96.96	79.36	66.51	56.78	43.20	34.28	28.06	23.51	4.23			
19	1.37	2.66	6.42	12.49	18.43	24.29	35.85	47.26	69.74	91.93	113.89	132.50	105.15	86.06	72.13	61.58	46.85	37.18	30.43	25.50				
20	1.44	2.80	6.76	13.14	19.40	25.57	37.74	49.74	73.41	96.76	119.88	142.81	113.56	92.95	77.89	66.51	50.59	40.15	32.86	24.58				
21	1.51	2.94	7.09	13.80	20.37	26.85	39.63	52.23	77.08	101.60	125.87	149.95	122.18	100.00	83.81	71.56	54.44	43.20	35.36					
22	1.59	3.08	7.43	14.46	21.34	28.13	41.51	54.72	80.75	106.44	131.87	157.09	131.01	107.23	89.87	76.73	58.37	46.32	37.91					
23	1.66	3.22	7.77	15.12	22.31	29.41	43.40	57.20	84.42	111.28	137.86	164.23	140.04	114.62	96.06	82.02	62.39	49.51	38.38					
24	1.73	3.36	8.11	15.77	23.28	30.68	45.29	59.69	88.10	116.12	143.86	171.37	149.28	122.18	102.39	87.43	66.51	52.78	12.24					
25	1.80	3.50	8.45	16.43	24.25	31.96	47.17	62.18	91.77	120.96	149.85	178.51	158.70	129.90	108.86	92.95	70.71	56.11						
26	1.87	3.64	8.78	17.09	25.22	33.24	49.06	64.66	95.44	125.79	155.84	185.65	168.32	137.77	115.46	98.58	74.99	59.51						
28	2.02	3.93	9.46	18.40	27.16	35.80	52.83	69.64	102.78	135.47	167.83	199.94	188.11	153.97	129.03	110.17	83.81	30.35						
30	2.16	4.21	10.14	19.72	29.10	38.36	56.61	74.61	110.12	145.15	179.82	214.22	208.62	170.75	143.10	122.18	92.95							
32	2.31	4.49	10.81	21.03	31.04	40.91	60.38	79.59	117.46	154.82	191.81	228.50	229.83	188.11	157.65	134.60	88.71							
35	2.52	4.91	11.82	23.00	33.95	44.75	66.04	87.05	128.47	169.34	209.79	249.92	262.89	215.17	180.33	153.97	12.54							
40	2.88	5.61	13.51	26.29	38.80	51.14	75.48	99.48	146.83	193.53	239.76	285.62	321.19	262.89	220.32	118.61								
45	3.24	6.31	15.20	29.58	43.65	57.53	84.91	111.92	165.18	217.72	269.73	321.32	372.57	278.98	148.03									
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#120H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	5	10	25	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,700
11	0.59	1.15	2.77	5.39	7.96	10.48	15.48	20.40	30.11	39.69	49.16	43.53	34.54	28.27	23.69	20.23	15.39	12.21	9.99	8.37	7.15	6.20	5.44	4.56
12	0.64	1.25	3.02	5.88	8.68	11.44	16.88	22.26	32.85	43.30	53.64	49.60	39.36	32.21	26.99	23.05	17.53	13.91	11.39	9.54	8.15	7.06	6.20	0.79
13	0.70	1.36	3.27	6.37	9.40	12.39	18.29	24.11	35.58	46.90	58.10	55.92	44.38	36.32	30.44	25.99	19.77	15.69	12.84	10.76	9.19	7.96	6.99	
14	0.75	1.46	3.53	6.86	10.13	13.35	19.70	25.97	38.32	50.51	62.58	62.50	49.60	40.60	34.02	29.05	22.10	17.53	14.35	12.03	10.27	8.90	3.39	
15	0.81	1.57	3.78	7.35	10.85	14.30	21.10	27.82	41.06	54.12	67.05	69.31	55.00	45.02	37.72	32.21	24.50	19.45	15.91	13.34	11.39	9.87		
16	0.86	1.67	4.03	7.84	11.57	15.26	22.51	29.67	43.79	57.72	71.51	76.35	60.60	49.60	41.57	35.49	26.99	21.42	17.53	14.70	12.55			
17	0.92	1.77	4.28	8.33	12.30	16.20	23.92	31.53	46.53	61.33	75.99	83.62	66.36	54.32	45.52	38.87	29.57	23.46	19.20	16.09	13.74			
18	0.97	1.88	4.53	8.82	13.02	17.16	25.32	33.38	49.27	64.94	80.45	91.11	72.30	59.18	49.60	42.34	32.21	25.56	20.92	17.53	3.15			
19	1.02	1.98	4.79	9.31	13.74	18.11	26.73	35.24	52.01	68.55	84.93	98.81	78.41	64.17	53.79	45.92	34.94	27.73	22.69	19.02				
20	1.07	2.09	5.04	9.80	14.47	19.07	28.14	37.09	54.74	72.15	89.39	106.49	84.68	69.31	58.08	49.60	37.72	29.94	24.50	18.33				
21	1.13	2.19	5.29	10.29	15.19	20.02	29.55	38.95	57.48	75.76	93.86	111.82	91.11	74.57	62.50	53.36	40.60	32.21	26.37					
22	1.19	2.30	5.54	10.78	15.91	20.98	30.95	40.80	60.22	79.37	98.34	117.14	97.69	79.96	67.02	57.22	43.53	34.54	28.27					
23	1.24	2.40	5.79	11.27	16.64	21.93	32.36	42.65	62.95	82.98	102.80	122.47	104.43	85.47	71.63	61.16	46.52	36.92	28.62					
24	1.29	2.51	6.05	11.76	17.36	22.88	33.77	44.51	65.70	86.59	107.28	127.79	111.32	91.11	76.35	65.20	49.60	39.36	9.13					
25	1.34	2.61	6.30	12.25	18.08	23.83	35.17	46.37	68.43	90.20	111.74	133.11	118.34	96.87	81.18	69.31	52.73	41.84						
26	1.39	2.71	6.55	12.74	18.81	24.79	36.58	48.22	71.17	93.80	116.21	138.44	125.52	102.74	86.10	73.51	55.92	44.38						
28	1.51	2.93	7.05	13.72	20.25	26.70	39.40	51.93	76.64	101.02	125.15	149.10	140.27	114.82	96.22	82.15	62.50	22.63						
30	1.61	3.14	7.56	14.71	21.70	28.61	42.21	55.64	82.12	108.24	134.09	159.74	155.57	127.33	106.71	91.11	69.31							
32	1.72	3.35	8.06	15.68	23.15	30.51	45.03	59.35	87.59	115.45	143.03	170.39	171.38	140.27	117.56	100.37	66.15							
35	1.88	3.66	8.81	17.15	25.32	33.37	49.25	64.91	95.80	126.28	156.44	186.37	196.04	160.45	134.47	114.82	9.35							
40	2.15	4.18	10.07	19.60	28.93	38.14	56.29	74.18	109.49	144.32	178.79	212.99	239.51	196.04	164.29	88.45								
45	2.42	4.71	11.33	22.06	32.55	42.90	63.32	83.46	123.17	162.35	201.14	239.61	277.83	208.04	110.39									
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x
5 strands or more: please contact Diamond Chain technical support

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Heavy Series Horsepower Tables

#140H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	5	10	25	44	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400
11	1.21	2.36	5.69	9.79	11.07	16.34	21.54	31.79	41.90	61.84	81.50	86.80	66.03	52.40	42.89	35.94	30.69	23.35	18.53	15.16	12.71	10.85	9.40	8.25
12	1.32	2.58	6.21	10.68	12.08	17.83	23.50	34.68	45.71	67.46	88.91	98.90	75.24	59.70	48.87	40.95	34.97	26.60	21.11	17.28	14.48	12.36	10.72	
13	1.43	2.79	6.73	11.57	13.08	19.31	25.45	37.57	49.52	73.08	96.32	111.52	84.83	67.32	55.10	46.18	39.43	29.99	23.80	19.48	16.33	13.94		
14	1.55	3.01	7.24	12.46	14.09	20.80	27.41	40.46	53.32	78.70	103.73	124.63	94.81	75.24	61.58	51.61	44.06	33.52	26.60	21.77	18.25	15.58		
15	1.66	3.22	7.76	13.35	15.10	22.28	29.37	43.35	57.13	84.32	111.14	137.69	105.15	83.44	68.29	57.23	48.87	37.17	29.50	24.15	20.24			
16	1.77	3.44	8.28	14.24	16.10	23.77	31.33	46.24	60.94	89.94	118.55	146.87	115.83	91.92	75.24	63.05	53.83	40.95	32.50	26.60	22.29			
17	1.88	3.65	8.80	15.13	17.11	25.25	33.29	49.13	64.75	95.56	125.96	156.05	126.86	100.67	82.40	69.05	58.96	44.85	35.59	29.13				
18	1.99	3.86	9.31	16.02	18.12	26.74	35.24	52.02	68.56	101.19	133.37	165.23	138.22	109.68	89.77	75.24	64.24	48.87	38.78	31.74				
19	2.10	4.08	9.83	16.92	19.12	28.22	37.20	54.90	72.37	106.81	140.78	174.41	149.89	118.95	97.36	81.59	69.66	53.00	42.06	33.55				
20	2.21	4.29	10.35	17.81	20.13	29.71	39.16	57.79	76.18	112.43	148.19	183.59	161.88	128.46	105.15	88.12	75.24	57.23	45.42					
21	2.32	4.51	10.87	18.70	21.14	31.20	41.12	60.68	79.99	118.05	155.60	192.77	174.17	138.22	113.13	94.81	80.95	61.58	48.87					
22	2.43	4.72	11.38	19.59	22.14	32.68	43.08	63.57	83.80	123.67	163.01	201.95	186.76	148.21	121.30	101.66	86.80	66.03	52.40					
23	2.54	4.94	11.90	20.48	23.15	34.17	45.03	66.46	87.60	129.29	170.42	211.13	199.64	158.43	129.67	108.67	92.78	70.58	29.48					
24	2.65	5.15	12.42	21.37	24.16	35.65	46.99	69.35	91.41	134.91	177.83	220.31	212.80	168.87	138.22	115.83	98.90	75.24						
25	2.76	5.37	12.94	22.26	25.16	37.14	48.95	72.24	95.22	140.54	185.24	229.49	226.24	179.53	146.94	123.15	105.15	79.99						
26	2.87	5.58	13.45	23.15	26.17	38.62	50.91	75.13	99.03	146.16	192.65	238.67	239.95	190.41	155.85	130.61	111.52	84.83						
28	3.09	6.01	14.49	24.93	28.18	41.59	54.82	80.91	106.65	157.40	207.47	257.03	268.16	212.80	174.17	145.97	124.63	41.32						
30	3.31	6.44	15.52	26.71	30.20	44.56	58.74	86.69	114.27	168.64	222.28	275.39	297.40	236.00	193.16	161.88	138.22							
32	3.53	6.87	16.56	28.49	32.21	47.54	62.66	92.47	121.88	179.89	237.10	293.74	327.63	259.99	212.80	178.34	152.27							
35	3.86	7.51	18.11	31.16	35.23	51.99	68.53	101.14	133.31	196.75	259.33	321.28	374.76	297.40	243.41	203.99	66.13							
40	4.41	8.59	20.70	35.61	40.26	59.42	78.32	115.59	152.36	224.86	296.38	367.18	437.42	363.35	264.26	74.76								
45	4.97	9.66	23.28	40.06	45.29	66.85	88.11	130.04	171.40	252.96	333.43	413.08	492.09	352.89	132.45									
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#140H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	5	10	25	44	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400
11	0.90	1.76	4.24	7.30	8.25	12.18	16.06	23.71	31.24	46.11	60.77	64.73	49.24	39.07	31.98	26.80	22.89	17.41	13.82	11.30	9.48	8.09	7.01	6.15
12	0.98	1.92	4.63	7.96	9.01	13.30	17.52	25.86	34.09	50.30	66.30	73.75	56.11	44.52	36.44	30.54	26.08	19.84	15.74	12.89	10.80	9.22	7.99	
13	1.07	2.08	5.02	8.63	9.75	14.40	18.98	28.02	36.93	54.50	71.83	83.16	63.26	50.20	41.09	34.44	29.40	22.36	17.75	14.53	12.18	10.40		
14	1.16	2.24	5.40	9.29	10.51	15.51	20.44	30.17	39.76	58.69	77.35	92.94	70.70	56.11	45.92	38.49	32.86	25.00	19.84	16.23	13.61	11.62		
15	1.24	2.40	5.79	9.96	11.26	16.61	21.90	32.33	42.60	62.88	82.88	102.68	78.41	62.22	50.92	42.68	36.44	27.72	22.00	18.01	15.09			
16	1.32	2.57	6.17	10.62	12.01	17.73	23.36	34.48	45.44	67.07	88.40	109.52	86.37	68.54	56.11	47.02	40.14	30.54	24.24	19.84	16.62			
17	1.40	2.72	6.56	11.28	12.76	18.83	24.82	36.64	48.28	71.26	93.93	116.37	94.60	75.07	61.45	51.49	43.97	33.44	26.54	21.72				
18	1.48	2.88	6.94	11.95	13.51	19.94	26.28	38.79	51.13	75.46	99.45	123.21	103.07	81.79	66.94	56.11	47.90	36.44	28.92	23.67				
19	1.57	3.04	7.33	12.62	14.26	21.04	27.74	40.94	53.97	79.65	104.98	130.06	111.77	88.70	72.60	60.84	51.95	39.52	31.36	25.02				
20	1.65	3.20	7.72	13.28	15.01	22.15	29.20	43.09	56.81	83.84	110.51	136.90	120.71	95.79	78.41	65.71	56.11	42.68	33.87					
21	1.73	3.36	8.11	13.94	15.76	23.27	30.66	45.25	59.65	88.03	116.03	143.75	129.88	103.07	84.36	70.70	60.36	45.92	36.44					
22	1.81	3.52	8.49	14.61	16.51	24.37	32.12	47.40	62.49	92.22	121.56	150.59	139.27	110.52	90.45	75.81	64.73	49.24	39.07					
23	1.89	3.68	8.87	15.27	17.26	25.48	33.58	49.56	65.32	96.41	127.08	157.44	148.87	118.14	96.69	81.04	69.19	52.63	21.98					
24	1.98	3.84	9.26	15.94	18.02	26.58	35.04	51.71	68.16	100.60	132.61	164.29	158.68	125.93	103.07	86.37	73.75	56.11						
25	2.06	4.00	9.65	16.60	18.76	27.70	36.50	53.87	71.01	104.80	138.13	171.13	168.71	133.88	109.57	91.83	78.41	59.65						
26	2.14	4.16	10.03	17.26	19.51	28.80	37.96	56.02	73.85	108.99	143.66	177.98	178.93	141.99	116.22	97.40	83.16	63.26						
28	2.30	4.48	10.81	18.59	21.01	31.01	40.88	60.33	79.53	117.37	154.71	191.67	199.97	158.68	129.88	108.85	92.94	30.81						
30	2.47	4.80	11.57	19.92	22.52	33.23	43.80	64.64	85.21	125.75	165.75	205.36	221.77	175.99	144.04	120.71	103.07							
32	2.63	5.12	12.35	21.24	24.02	35.45	46.73	68.95	90.89	134.14	176.81	219.04	244.31	193.87	158.68	132.99	113.55							
35	2.88	5.60	13.50	23.24	26.27	38.77	51.10	75.42	99.41	146.72	193.38	239.58	279.46	221.77	181.51	152.12	49.31							
40	3.29	6.41	15.44	26.55	30.02	44.31	58.40	86.20	113.61	167.68	221.01	273.81	326.18	270.95	197.06	55.75								
45	3.71	7.20	17.36	29.87	33.77	49.85	65.70	96.97	127.81	188.63	248.64	308.03	366.95	263.15	98.77									
Lubrication	Type A (Manual or Drip)			Type B (Oil Bath or Slinger)								Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Heavy Series Horsepower Tables

#160H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	2	5	10	25	40	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000
11	0.73	1.75	3.40	8.19	12.86	15.94	23.52	31.00	45.75	60.31	89.00	117.32	96.58	73.47	58.31	47.72	39.99	34.15	29.60	25.98	20.61	16.87	14.14	12.07
12	0.79	1.91	3.71	8.94	14.03	17.39	25.66	33.82	49.91	65.79	97.10	127.98	110.05	83.72	66.44	54.38	45.57	38.91	33.73	29.60	23.49	19.22	16.11	12.02
13	0.86	2.07	4.02	9.68	15.20	18.83	27.80	36.64	54.07	71.27	105.19	138.65	124.09	94.40	74.91	61.31	51.38	43.87	38.03	33.37	26.48	21.68	18.17	
14	0.92	2.22	4.33	10.43	16.37	20.28	29.93	39.46	58.23	76.75	113.28	149.31	138.68	105.50	83.72	68.52	57.43	49.03	42.50	37.30	29.60	24.23	8.08	
15	0.99	2.38	4.64	11.17	17.54	21.73	32.07	42.27	62.39	82.24	121.37	159.98	153.80	117.00	92.85	75.99	63.69	54.38	47.13	41.37	32.83	26.87		
16	1.05	2.54	4.94	11.92	18.71	23.18	34.21	45.09	66.55	87.72	129.46	170.64	169.43	128.89	102.28	83.72	70.16	59.90	51.92	45.57	36.16	29.60		
17	1.12	2.70	5.25	12.66	19.88	24.63	36.35	47.91	70.71	93.20	137.55	181.31	185.56	141.16	112.02	91.69	76.84	65.61	56.87	49.91	39.61			
18	1.19	2.86	5.56	13.41	21.05	26.08	38.49	50.73	74.87	98.68	145.64	191.97	202.17	153.80	122.05	99.90	83.72	71.48	61.96	54.38	43.15			
19	1.25	3.02	5.87	14.15	22.22	27.53	40.63	53.55	79.03	104.17	153.74	202.64	219.25	166.79	132.36	108.33	90.79	77.52	67.19	58.97	43.82			
20	1.32	3.18	6.18	14.89	23.39	28.98	42.76	56.37	83.19	109.65	161.83	213.30	236.79	180.13	142.95	117.00	98.05	83.72	72.57	63.69				
21	1.38	3.34	6.49	15.64	24.56	30.42	44.90	59.18	87.35	115.13	169.92	223.97	254.77	193.81	153.80	125.88	105.50	90.07	78.08	68.52				
22	1.45	3.49	6.80	16.38	25.73	31.87	47.04	62.00	91.51	120.61	178.01	234.63	273.18	207.82	164.91	134.98	113.12	96.58	83.72	73.47				
23	1.52	3.65	7.11	17.13	26.90	33.32	49.18	64.82	95.67	126.10	186.10	245.30	292.02	222.15	176.29	144.29	120.92	103.24	89.49	68.24				
24	1.58	3.81	7.42	17.87	28.07	34.77	51.32	67.64	99.83	131.58	194.19	255.96	311.27	236.79	187.91	153.80	128.89	110.05	95.39	21.76				
25	1.65	3.97	7.73	18.62	29.23	36.22	53.45	70.46	103.99	137.06	202.28	266.63	330.32	251.74	199.77	163.51	137.03	117.00	101.41					
26	1.71	4.13	8.03	19.36	30.40	37.67	55.59	73.28	108.14	142.54	210.37	277.29	343.53	267.00	211.88	173.42	145.33	124.09	67.09					
28	1.85	4.45	8.65	20.85	32.74	40.57	59.87	78.91	116.46	153.51	226.56	298.62	369.96	298.39	236.79	193.81	162.42	135.17						
30	1.98	4.77	9.27	22.34	35.08	43.46	64.15	84.55	124.78	164.47	242.74	319.95	396.38	330.92	262.61	214.94	180.13	49.06						
32	2.11	5.08	9.89	23.83	37.42	46.36	68.42	90.18	133.10	175.44	258.92	341.28	422.81	364.56	289.30	236.79	157.70							
35	2.31	5.56	10.82	26.07	40.93	50.71	74.84	98.64	145.58	191.88	283.20	373.28	462.45	417.01	330.92	270.86	22.30							
40	2.64	6.35	12.36	29.79	46.78	57.95	85.53	112.73	166.38	219.30	323.65	426.60	528.51	509.49	345.15	57.42								
45	2.97	7.15	13.91	33.51	52.62	65.19	96.22	126.82	187.17	246.71	364.11	479.93	594.58	495.96	173.00									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#160H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																							
	2	5	10	25	40	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800	2,000
11	0.54	1.30	2.54	6.11	9.59	11.89	17.54	23.12	34.12	44.97	66.37	87.49	72.02	54.79	43.48	35.58	29.82	25.47	22.07	19.37	15.37	12.58	10.54	9.00
12	0.59	1.42	2.77	6.67	10.46	12.97	19.13	25.22	37.22	49.06	72.41	95.43	82.06	62.43	49.54	40.55	33.98	29.02	25.15	22.07	17.52	14.33	12.01	8.96
13	0.64	1.54	3.00	7.22	11.33	14.04	20.73	27.32	40.32	53.15	78.44	103.39	92.53	70.39	55.86	45.72	38.31	32.71	28.36	24.88	19.75	16.17	13.55	
14	0.69	1.66	3.23	7.78	12.21	15.12	22.32	29.43	43.42	57.23	84.47	111.34	103.41	78.67	62.43	51.10	42.83	36.56	31.69	27.81	22.07	18.07	6.03	
15	0.74	1.77	3.46	8.33	13.08	16.20	23.91	31.52	46.52	61.33	90.51	119.30	114.69	87.25	69.24	56.67	47.49	40.55	35.14	30.85	24.48	20.04		
16	0.78	1.89	3.68	8.89	13.95	17.29	25.51	33.62	49.63	65.41	96.54	127.25	126.34	96.11	76.27	62.43	52.32	44.67	38.72	33.98	26.96	22.07		
17	0.84	2.01	3.91	9.44	14.82	18.37	27.11	35.73	52.73	69.50	102.57	135.20	138.37	105.26	83.53	68.37	57.30	48.93	42.41	37.22	29.54			
18	0.89	2.13	4.15	10.00	15.70	19.45	28.70	37.83	55.83	73.59	108.60	143.15	150.76	114.69	91.01	74.50	62.43	53.30	46.20	40.55	32.18			
19	0.93	2.25	4.38	10.55	16.57	20.53	30.30	39.93	58.93	77.68	114.64	151.11	163.49	124.38	98.70	80.78	67.70	57.81	50.10	43.97	32.68			
20	0.98	2.37	4.61	11.10	17.44	21.61	31.89	42.04	62.03	81.77	120.68	159.06	176.57	134.32	106.60	87.25	73.12	62.43	54.12	47.49				
21	1.03	2.49	4.84	11.66	18.31	22.68	33.48	44.13	65.14	85.85	126.71	167.01	189.98	144.52	114.69	93.87	78.67	67.17	58.22	51.10				
22	1.08	2.60	5.07	12.21	19.19	23.77	35.08	46.23	68.24	89.94	132.74	174.96	203.71	154.97	122.97	100.65	84.35	72.02	62.43	54.79				
23	1.13	2.72	5.30	12.77	20.06	24.85	36.67	48.34	71.34	94.03	138.77	182.92	217.76	165.66	131.46	107.60	90.17	76.99	66.73	50.89				
24	1.18	2.84	5.53	13.33	20.93	25.93	38.27	50.44	74.44	98.12	144.81	190.87	232.11	176.57	140.12	114.69	96.11	82.06	71.13	16.23				
25	1.23	2.96	5.76	13.88	21.80	27.01	39.86	52.54	77.55	102.21	150.84	198.83	246.32	187.72	148.97	121.93	102.18	87.25	75.62					
26	1.28	3.08	5.99	14.44	22.67	28.09	41.45	54.64	80.64	106.29	156.87	206.78	256.17	199.10	158.00	129.32	108.37	92.53	50.03					
28	1.38	3.32	6.45	15.55	24.41	30.25	44.65	58.84	86.84	114.47	168.95	222.68	275.88	222.51	176.57	144.52	121.12	100.80						
30	1.48	3.56	6.91	16.66	26.16	32.41	47.84	63.05	93.05	122.65	181.01	238.59	295.58	246.77	195.83	160.28	134.32	36.58						
32	1.57	3.79	7.37	17.77	27.90	34.57	51.02	67.25	99.25	130.83	193.08	254.49	315.29	271.85	215.73	176.57	117.60							
35	1.72	4.15	8.07	19.44	30.52	37.81	55.81	73.56	108.56	143.08	211.18	278.35	344.85	310.96	246.77	201.98	16.63							
40	1.97	4.74	9.22	22.21	34.88	43.21	63.78	84.06	124.07	163.53	241.35	318.12	394.11	379.93	257.38	42.82								
45	2.21	5.33	10.37	24.99	39.24	48.61	71.75	94.57	139.57	183.97	271.52	357.88	443.38	369.84	129.01									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)												

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x
4 strands: 3.3x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Heavy Series Horsepower Tables

180H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	37	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800
11	0.99	2.40	4.66	11.24	16.38	21.87	32.27	42.54	62.78	82.75	122.13	148.32	106.13	80.73	64.07	52.44	43.95	37.52	32.52	28.54	22.65	18.54	15.54
12	1.09	2.62	5.09	12.26	17.87	23.86	35.21	46.41	68.49	90.28	133.24	169.00	120.92	91.99	73.00	59.75	50.07	42.75	37.06	32.52	25.81	21.12	2.40
13	1.18	2.83	5.51	13.29	19.36	25.84	38.14	50.28	74.20	97.80	144.34	190.25	136.35	103.72	82.31	67.37	56.46	48.21	41.79	36.67	29.10	23.82	
14	1.27	3.05	5.94	14.31	20.85	27.83	41.08	54.14	79.91	105.32	155.44	204.89	152.38	115.92	91.99	75.29	63.10	53.87	46.70	40.98	32.52	10.23	
15	1.36	3.27	6.36	15.33	22.33	29.82	44.01	58.01	85.61	112.85	166.55	219.52	169.00	128.56	102.02	83.50	69.98	59.75	51.79	45.45	36.07		
16	1.45	3.49	6.78	16.35	23.82	31.81	46.94	61.88	91.32	120.37	177.65	234.16	186.17	141.63	112.39	91.99	77.09	65.82	57.05	50.07	39.74		
17	1.54	3.71	7.21	17.37	25.31	33.80	49.88	65.74	97.03	127.89	188.75	248.79	203.90	155.11	123.09	100.75	84.43	72.09	62.49	54.84			
18	1.63	3.92	7.63	18.40	26.80	35.78	52.81	69.61	102.74	135.42	199.86	263.43	222.15	169.00	134.11	109.77	91.99	78.54	68.08	59.75			
19	1.72	4.14	8.06	19.42	28.29	37.77	55.75	73.48	108.45	142.94	210.96	278.06	240.92	183.27	145.44	119.04	99.76	85.18	73.83	64.80			
20	1.81	4.36	8.48	20.44	29.78	39.76	58.68	77.35	114.15	150.46	222.06	292.70	260.19	197.93	157.07	128.56	107.74	91.99	79.74	55.31			
21	1.90	4.58	8.90	21.46	31.27	41.75	61.62	81.21	119.86	157.99	233.17	307.33	279.94	212.96	169.00	138.32	115.92	98.97	85.79				
22	1.99	4.80	9.33	22.48	32.76	43.74	64.55	85.08	125.57	165.51	244.27	321.97	300.17	228.35	181.21	148.32	124.30	106.13	87.35				
23	2.08	5.01	9.75	23.50	34.25	45.72	67.48	88.95	131.28	173.03	255.37	336.60	320.87	244.10	193.70	158.54	132.87	113.45	29.32				
24	2.17	5.23	10.18	24.53	35.74	47.71	70.42	92.82	136.98	180.56	266.48	351.24	342.02	260.19	206.47	169.00	141.63	120.92					
25	2.26	5.45	10.60	25.55	37.22	49.70	73.35	96.68	142.69	188.08	277.58	365.87	363.62	276.62	219.51	179.67	150.57	96.16					
26	2.35	5.67	11.03	26.57	38.71	51.69	76.29	100.55	148.40	195.60	288.68	380.51	385.66	293.38	232.81	190.55	159.69	37.53					
28	2.53	6.10	11.87	28.61	41.69	55.66	82.15	108.28	159.81	210.65	310.89	409.77	431.00	327.87	260.19	212.96	146.32						
30	2.71	6.54	12.72	30.66	44.67	59.64	88.02	116.02	171.23	225.69	333.09	439.04	477.99	363.62	288.56	236.18	30.96						
32	2.89	6.98	13.57	32.70	47.65	63.62	93.89	123.75	182.64	240.74	355.30	468.31	526.58	400.58	317.89	199.60							
35	3.17	7.63	14.84	35.77	52.11	69.58	102.69	135.36	199.77	263.31	388.61	512.22	602.34	458.22	363.62	28.22							
40	3.62	8.72	16.96	40.88	59.56	79.52	117.36	154.69	228.31	300.93	444.13	585.39	725.24	559.83	123.60								
45	4.07	9.81	19.08	45.99	67.00	89.46	132.03	174.03	256.84	338.54	499.64	658.57	750.00	333.00									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#180H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	37	50	75	100	150	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600	1,800
11	0.74	1.79	3.47	8.38	12.21	16.31	24.06	31.72	46.82	61.71	91.07	110.60	79.14	60.20	47.78	39.10	32.77	27.98	24.25	21.28	16.89	13.83	11.59
12	0.81	1.95	3.80	9.14	13.33	17.79	26.26	34.61	51.07	67.32	99.36	126.02	90.17	68.60	54.44	44.56	37.34	31.88	27.64	24.25	19.25	15.75	1.79
13	0.88	2.11	4.11	9.91	14.44	19.27	28.44	37.49	55.33	72.93	107.63	141.87	101.68	77.34	61.38	50.24	42.10	35.95	31.16	27.34	21.70	17.76	
14	0.95	2.27	4.43	10.67	15.55	20.75	30.63	40.37	59.59	78.54	115.91	152.79	113.63	86.44	68.60	56.14	47.05	40.17	34.82	30.56	24.25	7.63	
15	1.01	2.44	4.74	11.43	16.65	22.24	32.82	43.26	63.84	84.15	124.20	163.70	126.02	95.87	76.08	62.27	52.18	44.56	38.62	33.89	26.90		
16	1.08	2.60	5.06	12.19	17.76	23.72	35.00	46.14	68.10	89.76	132.47	174.61	138.83	105.61	83.81	68.60	57.49	49.08	42.54	37.34	29.63		
17	1.15	2.77	5.38	12.95	18.87	25.20	37.20	49.02	72.36	95.37	140.75	185.52	152.05	115.67	91.79	75.13	62.96	53.76	46.60	40.89			
18	1.22	2.92	5.69	13.72	19.98	26.68	39.38	51.91	76.61	100.98	149.04	196.44	165.66	126.02	100.01	81.86	68.60	58.57	50.77	44.56			
19	1.28	3.09	6.01	14.48	21.10	28.17	41.57	54.79	80.87	106.59	157.31	207.35	179.65	136.66	108.45	88.77	74.39	63.52	55.06	48.32			
20	1.35	3.25	6.32	15.24	22.21	29.65	43.76	57.68	85.12	112.20	165.59	218.27	194.02	147.60	117.13	95.87	80.34	68.60	59.46	41.24			
21	1.42	3.42	6.64	16.00	23.32	31.13	45.95	60.56	89.38	117.81	173.87	229.18	208.75	158.80	126.02	103.15	86.44	73.80	63.97				
22	1.48	3.58	6.96	16.76	24.43	32.62	48.13	63.44	93.64	123.42	182.15	240.09	223.84	170.28	135.13	110.60	92.69	79.14	65.14				
23	1.55	3.74	7.27	17.52	25.54	34.09	50.32	66.33	97.90	129.03	190.43	251.00	239.27	182.03	144.44	118.22	99.08	84.60	21.86				
24	1.62	3.90	7.59	18.29	26.65	35.58	52.51	69.22	102.15	134.64	198.71	261.92	255.04	194.02	153.96	126.02	105.61	90.17					
25	1.69	4.06	7.90	19.05	27.75	37.06	54.70	72.09	106.40	140.25	206.99	272.83	271.15	206.28	163.69	133.98	112.28	71.71					
26	1.75	4.23	8.23	19.81	28.87	38.55	56.89	74.98	110.66	145.86	215.27	283.75	287.59	218.77	173.61	142.09	119.08	27.99					
28	1.89	4.55	8.85	21.33	31.09	41.51	61.26	80.74	119.17	157.08	231.83	305.57	321.40	244.49	194.02	158.80	109.11						
30	2.02	4.88	9.49	22.86	33.31	44.47	65.64	86.52	127.69	168.30	248.39	327.39	356.44	271.15	215.18	176.12	23.09						
32	2.16	5.20	10.12	24.38	35.53	47.44	70.01	92.28	136.19	179.52	264.95	349.22	392.67	298.71	237.05	148.84							
35	2.36	5.69	11.07	26.67	38.86	51.89	76.58	100.94	148.97	196.35	289.79	381.96	449.16	341.69	271.15	21.04							
40	2.70	6.50	12.65	30.48	44.41	59.30	87.52	115.35	170.25	224.40	331.19	436.53	540.81	417.47	92.17								
45	3.03	7.32	14.23	34.29	49.96	66.71	98.45	129.77	191.53	252.45	372.58	491.10	559.28	248.32									
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Heavy Series Horsepower Tables

#200H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	33	50	75	100	150	200	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600
11	1.37	3.31	6.44	15.51	20.25	30.17	44.53	58.70	86.63	114.18	141.46	168.52	161.36	115.46	87.83	69.70	57.05	47.81	40.82	35.38	31.05	24.64	20.17
12	1.50	3.61	7.02	16.92	22.09	32.92	48.58	64.03	94.51	124.57	154.32	183.84	183.86	131.56	100.08	79.42	65.00	54.48	46.51	40.32	35.38	28.08	18.78
13	1.62	3.91	7.61	18.33	23.93	35.66	52.63	69.37	102.38	134.95	167.18	199.16	207.31	148.34	112.85	89.55	73.30	61.43	52.45	45.46	39.90	31.66	
14	1.75	4.21	8.19	19.74	25.77	38.40	56.68	74.71	110.26	145.33	180.04	214.48	231.69	165.78	126.11	100.08	81.91	68.65	58.61	50.80	44.59	35.38	
15	1.87	4.51	8.78	21.15	27.61	41.15	60.73	80.04	118.13	155.71	192.90	229.80	256.95	183.86	139.87	110.99	90.85	76.13	65.00	56.34	49.45		
16	2.00	4.81	9.36	22.56	29.45	43.89	64.77	85.38	126.01	166.09	205.76	245.12	283.07	202.55	154.08	122.27	100.08	83.87	71.61	62.07	54.48		
17	2.12	5.11	9.95	23.97	31.29	46.63	68.82	90.71	133.88	176.47	218.62	260.44	310.02	221.83	168.75	133.91	109.61	91.86	78.43	67.98	59.66		
18	2.25	5.41	10.53	25.38	33.13	49.38	72.87	96.05	141.76	186.85	231.48	275.76	337.77	241.69	183.86	145.90	119.42	100.08	85.45	74.07	11.75		
19	2.37	5.71	11.12	26.79	34.97	52.12	76.92	101.39	149.63	197.23	244.35	291.08	366.30	262.11	199.39	158.23	129.51	108.53	92.67	80.32			
20	2.50	6.02	11.70	28.20	36.82	54.86	80.97	106.72	157.51	207.61	257.21	306.40	395.60	283.07	215.34	170.88	139.87	117.21	100.08	31.07			
21	2.62	6.32	12.29	29.61	38.66	57.60	85.02	112.06	165.38	217.99	270.07	321.72	425.64	304.56	231.69	183.86	150.49	126.11	107.68				
22	2.75	6.62	12.87	31.02	40.50	60.35	89.07	117.40	173.26	228.37	282.93	337.04	456.40	326.57	248.43	197.15	161.36	135.23	86.70				
23	2.87	6.92	13.46	32.43	42.34	63.09	93.11	122.73	181.14	238.75	295.79	352.36	464.44	349.09	265.56	210.74	172.49	144.55	11.76				
24	3.00	7.22	14.04	33.84	44.18	65.83	97.16	128.07	189.01	249.13	308.65	367.68	484.64	372.10	283.07	224.63	183.86	154.08					
25	3.12	7.52	14.63	35.25	46.02	68.58	101.21	133.40	196.89	259.51	321.51	383.00	504.83	395.60	300.94	238.82	195.47	118.72					
26	3.24	7.82	15.21	36.66	47.86	71.32	105.26	138.74	204.76	269.89	334.37	398.32	525.02	419.57	319.18	253.29	207.31	46.33					
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)								Type C (Oil Pump)										

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#200H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	33	50	75	100	150	200	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,400	1,600
11	1.02	2.47	4.80	11.57	15.10	22.50	33.21	43.77	64.60	85.14	105.49	125.67	120.33	86.10	65.49	51.98	42.54	35.65	30.44	26.38	23.15	18.37	15.04
12	1.12	2.69	5.23	12.62	16.47	24.55	36.23	47.75	70.48	92.89	115.08	137.09	137.10	98.10	74.63	59.22	48.47	40.63	34.68	30.07	26.38	20.94	14.00
13	1.21	2.92	5.67	13.67	17.84	26.59	39.25	51.73	76.34	100.63	124.67	148.51	154.59	110.62	84.15	66.78	54.66	45.81	39.11	33.90	29.75	23.61	
14	1.30	3.14	6.11	14.72	19.22	28.63	42.27	55.71	82.22	108.37	134.26	159.94	172.77	123.62	94.04	74.63	61.08	51.19	43.71	37.88	33.25	26.38	
15	1.39	3.36	6.55	15.77	20.59	30.69	45.29	59.69	88.09	116.11	143.85	171.36	191.61	137.10	104.30	82.77	67.75	56.77	48.47	42.01	36.87		
16	1.49	3.59	6.98	16.82	21.96	32.73	48.30	63.67	93.97	123.85	153.44	182.79	211.09	151.04	114.90	91.18	74.63	62.54	53.40	46.29	40.63		
17	1.58	3.81	7.42	17.87	23.33	34.77	51.32	67.64	99.83	131.59	163.02	194.21	231.18	165.42	125.84	99.86	81.74	68.50	58.49	50.69	44.49		
18	1.68	4.03	7.85	18.93	24.71	36.82	54.34	71.62	105.71	139.33	172.61	205.63	251.88	180.23	137.10	108.80	89.05	74.63	63.72	55.23	8.76		
19	1.77	4.26	8.29	19.98	26.08	38.87	57.36	75.61	111.58	147.07	182.21	217.06	273.15	195.46	148.69	117.99	96.58	80.93	69.10	59.89			
20	1.86	4.49	8.72	21.03	27.46	40.91	60.38	79.58	117.46	154.81	191.80	228.48	295.00	211.09	160.58	127.43	104.30	87.40	74.63	23.17			
21	1.95	4.71	9.16	22.08	28.83	42.95	63.40	83.56	123.32	162.56	201.39	239.91	317.40	227.11	172.77	137.10	112.22	94.04	80.30				
22	2.05	4.94	9.60	23.13	30.20	45.00	66.42	87.55	129.20	170.30	210.98	251.33	340.34	243.52	185.25	147.01	120.33	100.84	64.65				
23	2.14	5.16	10.04	24.18	31.57	47.05	69.43	91.52	135.08	178.04	220.57	262.75	346.33	260.32	198.03	157.15	128.63	107.79	8.77				
24	2.24	5.38	10.47	25.23	32.95	49.09	72.45	95.50	140.94	185.78	230.16	274.18	361.40	277.47	211.09	167.51	137.10	114.90					
25	2.33	5.61	10.91	26.29	34.32	51.14	75.47	99.48	146.82	193.52	239.75	285.60	376.45	295.00	224.41	178.09	145.76	88.53					
26	2.42	5.83	11.34	27.34	35.69	53.18	78.49	103.46	152.69	201.26	249.34	297.03	391.51	312.87	238.01	188.88	154.59	34.55					
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)								Type C (Oil Pump)										

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Heavy Series Horsepower Tables

#240H Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	27	50	75	100	150	200	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
11	2.33	5.62	10.93	26.33	28.35	51.23	75.60	99.65	147.07	193.85	240.16	286.10	186.70	133.59	101.63	80.65	66.01	55.32	47.23	40.94	35.93	31.87	28.51
12	2.54	6.13	11.92	28.73	30.93	55.88	82.48	108.71	160.44	211.48	262.00	312.11	212.73	152.22	115.80	91.89	75.21	63.03	53.82	46.65	40.94	36.31	
13	2.75	6.64	12.91	31.12	33.51	60.54	89.35	117.77	173.81	229.10	283.83	338.12	239.87	171.64	130.57	103.61	84.81	71.07	60.68	52.60	46.16		
14	2.97	7.15	13.91	33.52	36.09	65.20	96.22	126.83	187.18	246.72	305.66	364.13	268.07	191.82	145.92	115.80	94.78	79.43	67.82	58.78	18.18		
15	3.18	7.66	14.90	35.91	38.66	69.85	103.10	135.89	200.55	264.35	327.50	390.14	297.30	212.73	161.83	128.42	105.11	88.09	75.21	65.19			
16	3.39	8.17	15.89	38.30	41.24	74.51	109.97	144.95	213.92	281.97	349.33	416.15	327.52	234.35	178.28	141.47	115.80	97.04	82.86				
17	3.60	8.68	16.89	40.70	43.82	79.17	116.84	154.01	227.29	299.59	371.16	442.16	358.70	256.66	195.25	154.94	126.82	106.28	90.74				
18	3.81	9.19	17.88	43.09	46.40	83.83	123.72	163.07	240.66	317.21	392.99	468.17	390.81	279.64	212.73	168.81	138.17	115.80	16.92				
19	4.03	9.70	18.87	45.48	48.97	88.48	130.59	172.13	254.03	334.84	414.83	494.18	423.82	303.26	230.70	183.08	149.84	125.58					
20	4.24	10.21	19.87	47.88	51.55	93.14	137.46	181.18	267.40	352.46	436.66	520.19	457.72	327.52	249.15	197.72	161.83	98.33					
21	4.45	10.72	20.86	50.27	54.13	97.80	144.33	190.24	280.78	370.08	458.49	546.19	492.48	352.39	268.07	212.73	174.12						
22	4.66	11.23	21.85	52.67	56.71	102.45	151.21	199.30	294.15	387.71	480.33	572.20	528.07	377.85	287.44	228.10	186.70						
23	4.87	11.74	22.85	55.06	59.28	107.11	158.08	208.36	307.52	405.33	502.16	598.21	564.48	403.91	307.26	243.83	153.53						
24	5.09	12.26	23.84	57.45	61.86	111.77	164.95	217.42	320.89	422.95	523.99	624.22	601.69	430.53	327.52	259.91	48.97						
25	5.30	12.77	24.83	59.85	64.44	116.42	171.83	226.48	334.26	440.58	545.83	650.23	639.68	457.72	348.20	276.32							
26	5.51	13.28	25.83	62.24	67.02	121.08	178.70	235.54	347.63	458.20	567.66	676.24	678.45	485.46	369.30	293.06							
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

#240H Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																						
	2	5	10	25	27	50	75	100	150	200	250	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
11	1.74	4.19	8.15	19.63	21.14	38.20	56.37	74.31	109.67	144.55	179.09	213.34	139.22	99.62	75.79	60.14	49.22	41.25	35.22	30.53	26.79	23.77	21.26
12	1.89	4.57	8.89	21.42	23.06	41.67	61.51	81.07	119.64	157.70	195.37	232.74	158.63	113.51	86.35	68.52	56.08	47.00	40.13	34.79	30.53	27.08	
13	2.05	4.95	9.63	23.21	24.99	45.14	66.63	87.82	129.61	170.84	211.65	252.14	178.87	127.99	97.37	77.26	63.24	53.00	45.25	39.22	34.42		
14	2.21	5.33	10.37	25.00	26.91	48.62	71.75	94.58	139.58	183.98	227.93	271.53	199.90	143.04	108.81	86.35	70.68	59.23	50.57	43.83	13.56		
15	2.37	5.71	11.11	26.78	28.83	52.09	76.88	101.33	149.55	197.13	244.22	290.93	221.70	158.63	120.68	95.76	78.38	65.69	56.08	48.61			
16	2.53	6.09	11.85	28.56	30.75	55.56	82.00	108.09	159.52	210.27	260.50	310.32	244.23	174.75	132.94	105.49	86.35	72.36	61.79				
17	2.68	6.47	12.59	30.35	32.68	59.04	87.13	114.85	169.49	223.40	276.77	329.72	267.48	191.39	145.60	115.54	94.57	79.25	67.66				
18	2.84	6.85	13.33	32.13	34.60	62.51	92.26	121.60	179.46	236.54	293.05	349.11	291.43	208.53	158.63	125.88	103.03	86.35	12.62				
19	3.01	7.23	14.07	33.91	36.52	65.98	97.38	128.36	189.43	249.69	309.34	368.51	316.04	226.14	172.03	136.52	111.74	93.65					
20	3.16	7.61	14.82	35.70	38.44	69.45	102.50	135.11	199.40	262.83	325.62	387.91	341.32	244.23	185.79	147.44	120.68	73.32					
21	3.32	7.99	15.56	37.49	40.36	72.93	107.63	141.86	209.38	275.97	341.90	407.29	367.24	262.78	199.90	158.63	129.84						
22	3.47	8.37	16.29	39.28	42.29	76.40	112.76	148.62	219.35	289.12	358.18	426.69	393.78	281.76	214.34	170.09	139.22						
23	3.63	8.75	17.04	41.06	44.21	79.87	117.88	155.37	229.32	302.25	374.46	446.09	420.93	301.20	229.12	181.82	114.49						
24	3.80	9.14	17.78	42.84	46.13	83.35	123.00	162.13	239.29	315.39	390.74	465.48	448.68	321.05	244.23	193.81	36.52						
25	3.95	9.52	18.52	44.63	48.05	86.81	128.13	168.89	249.26	328.54	407.03	484.88	477.01	341.32	259.65	206.05							
26	4.11	9.90	19.26	46.41	49.98	90.29	133.26	175.64	259.23	341.68	423.30	504.27	505.92	362.01	275.39	218.53							
Lubrication	Type A (Manual or Drip)				Type B (Oil Bath or Slinger)							Type C (Oil Pump)											

Note: If using multiple strand chain, multiply horsepower rating by the following:
2 strands: 1.7x
3 strands: 2.5x

For optimum results, contact Diamond Chain technical support for drives operating in the shaded area

Double Pitch Series Horsepower Tables

#2040 Double Pitch Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																			
	25	50	100	150	200	250	300	350	400	450	500	550	600	700	800	900	1,000	1,100	1,200	1,300
6	0.10	0.17																		
7	0.12	0.21	0.36	0.47	0.55															
8	0.14	0.26	0.45	0.64	0.73	0.82	0.90													
9	0.16	0.30	0.53	0.72	0.89	1.03	1.14	1.24	1.32											
10	0.18	0.34	0.61	0.84	1.04	1.22	1.37	1.50	1.62	1.71	1.79	1.86								
11	0.20	0.38	0.69	0.96	1.19	1.40	1.59	1.76	1.90	2.03	2.14	2.24	2.32							
12	0.22	0.42	0.77	1.07	1.34	1.58	1.80	2.00	2.17	2.33	2.47	2.60	2.70	2.88						
13	0.24	0.46	0.84	1.18	1.48	1.76	2.01	2.23	2.44	2.62	2.79	2.94	3.07	3.30	3.47					
14	0.26	0.50	0.92	1.29	1.62	1.93	2.20	2.46	2.69	2.90	3.09	3.27	3.43	3.70	3.91	4.07				
15	0.28	0.54	0.99	1.39	1.76	2.09	2.40	2.68	2.94	3.17	3.39	3.59	3.77	4.08	4.33	4.52	4.66			
16	0.30	0.57	1.06	1.50	1.89	2.25	2.59	2.89	3.17	3.43	3.67	3.89	4.09	4.44	4.73	4.96	5.13			
17	0.32	0.61	1.13	1.60	2.02	2.41	2.77	3.10	3.41	3.69	3.95	4.19	4.41	4.79	5.11	5.37	5.57	5.72		
18	0.34	0.65	1.20	1.70	2.15	2.57	2.95	3.30	3.63	3.93	4.21	4.47	4.71	5.13	5.48	5.77	5.99	6.16		
19	0.36	0.68	1.27	1.80	2.28	2.72	3.12	3.50	3.85	4.17	4.47	4.75	5.01	5.46	5.83	6.14	6.39	6.58	6.71	
20	0.38	0.72	1.34	1.89	2.40	2.87	3.30	3.70	4.07	4.41	4.73	5.02	5.29	5.77	6.17	6.51	6.77	6.97	7.11	
21	0.40	0.76	1.41	1.99	2.52	3.01	3.47	3.89	4.28	4.64	4.97	5.28	5.57	6.07	6.50	6.85	7.13	7.35	7.50	
22	0.42	0.79	1.47	2.09	2.64	3.16	3.63	4.07	4.48	4.86	5.21	5.53	5.83	6.37	6.81	7.18	7.48	7.70	7.87	
23	0.44	0.83	1.54	2.18	2.76	3.30	3.80	4.26	4.68	5.08	5.44	5.78	6.09	6.60	7.12	7.50	7.81	8.04	8.21	8.31
24	0.46	0.87	1.61	2.27	2.88	3.44	3.96	4.43	4.88	5.29	5.67	6.02	6.35	6.92	7.41	7.80	8.12	8.36	8.53	8.64
25	0.48	0.90	1.67	2.36	3.00	3.58	4.11	4.61	5.07	5.50	5.89	6.26	6.59	7.19	7.69	8.10	8.42	8.67	8.84	8.94
30	0.57	1.08	1.99	2.81	3.56	4.24	4.87	5.45	5.98	6.47	6.93	7.34	7.80	8.39	8.94	9.39	9.72	9.96	10.11	10.10
35	0.66	1.25	2.30	3.24	4.09	4.86	5.57	6.21	6.81	7.35	7.85	8.30	8.72	9.43	9.99	10.43	10.73	10.93	11.01	
40	0.75	1.41	2.60	3.65	4.59	5.44	6.22	6.93	7.57	8.15	8.68	9.16	9.59	10.31	10.86	11.20	11.50	11.61		
45	0.84	1.58	2.89	4.04	5.07	6.00	6.83	7.59	8.27	8.88	9.43	9.92	10.30	11.00	11.56	11.88	12.03			
50	0.93	1.74	3.17	4.42	5.53	6.52	7.41	8.20	8.91	9.54	10.10	10.59	11.01	11.67	12.11	12.33				
55	1.01	1.90	3.44	4.79	5.97	7.02	7.95	8.77	9.50	10.20	10.70	11.17	11.58	12.18						
60	1.10	2.05	3.71	5.14	6.39	7.49	8.46	9.31	10.00	10.68	11.23	11.69	12.06							
Lubrication	Type A: Manual (4-10 drops/ min) or Oil Bath			Type B: Rapid Drip (20 drops/min) or Oil Bath or Slinger				Type C: Continuous with Oil Slinger or Oil Stream												

#2040 Double Pitch Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																			
	25	50	100	150	200	250	300	350	400	450	500	550	600	700	800	900	1,000	1,100	1,200	1,300
6	0.07	0.13																		
7	0.09	0.16	0.27	0.35	0.41															
8	0.10	0.19	0.34	0.48	0.54	0.61	0.67													
9	0.12	0.22	0.40	0.54	0.66	0.77	0.85	0.92	0.98											
10	0.13	0.25	0.45	0.63	0.78	0.91	1.02	1.12	1.21	1.28	1.33	1.39								
11	0.15	0.28	0.51	0.72	0.89	1.04	1.19	1.31	1.42	1.51	1.60	1.67	1.73							
12	0.16	0.31	0.57	0.80	1.00	1.18	1.34	1.49	1.62	1.74	1.84	1.94	2.01	2.15						
13	0.18	0.34	0.63	0.88	1.10	1.31	1.50	1.66	1.82	1.95	2.08	2.19	2.29	2.46	2.59					
14	0.19	0.37	0.69	0.96	1.21	1.44	1.64	1.83	2.01	2.16	2.30	2.44	2.56	2.76	2.92	3.03				
15	0.21	0.40	0.74	1.04	1.31	1.56	1.79	2.00	2.19	2.36	2.53	2.68	2.81	3.04	3.23	3.37	3.47			
16	0.22	0.43	0.79	1.12	1.41	1.68	1.93	2.16	2.36	2.56	2.74	2.90	3.05	3.31	3.53	3.70	3.83			
17	0.24	0.45	0.84	1.19	1.51	1.80	2.07	2.31	2.54	2.75	2.95	3.12	3.29	3.57	3.81	4.00	4.15	4.27		
18	0.25	0.48	0.89	1.27	1.60	1.92	2.20	2.46	2.71	2.93	3.14	3.33	3.51	3.83	4.09	4.30	4.47	4.59		
19	0.27	0.51	0.95	1.34	1.70	2.03	2.33	2.61	2.87	3.11	3.33	3.54	3.74	4.07	4.35	4.58	4.77	4.91	5.00	
20	0.28	0.54	1.00	1.41	1.79	2.14	2.46	2.76	3.03	3.29	3.53	3.74	3.94	4.30	4.60	4.85	5.05	5.20	5.30	
21	0.30	0.57	1.05	1.48	1.88	2.24	2.59	2.90	3.19	3.46	3.71	3.94	4.15	4.53	4.85	5.11	5.32	5.48	5.59	
22	0.31	0.59	1.10	1.56	1.97	2.36	2.71	3.03	3.34	3.62	3.89	4.12	4.35	4.75	5.08	5.35	5.58	5.74	5.87	
23	0.33	0.62	1.15	1.63	2.06	2.46	2.83	3.18	3.49	3.79	4.06	4.31	4.54	4.92	5.31	5.59	5.82	6.00	6.12	6.20
24	0.34	0.65	1.20	1.69	2.15	2.57	2.95	3.30	3.64	3.94	4.23	4.49	4.74	5.16	5.53	5.82	6.06	6.23	6.36	6.44
25	0.36	0.67	1.25	1.76	2.24	2.67	3.06	3.44	3.78	4.10	4.39	4.67	4.91	5.36	5.73	6.04	6.28	6.47	6.59	6.67
30	0.43	0.81	1.48	2.10	2.65	3.16	3.63	4.06	4.46	4.82	5.17	5.47	5.82	6.26	6.67	7.00	7.25	7.43	7.54	7.53
35	0.49	0.93	1.72	2.42	3.05	3.62	4.15	4.63	5.08	5.48	5.85	6.19	6.50	7.03	7.45	7.78	8.00	8.15	8.21	
40	0.56	1.05	1.94	2.72	3.42	4.06	4.64	5.17	5.64	6.08	6.47	6.83	7.15	7.69	8.10	8.35	8.58	8.66		
45	0.63	1.18	2.16	3.01	3.78	4.47	5.09	5.66	6.17	6.62	7.03	7.40	7.68	8.20	8.62	8.86	8.97			
50	0.69	1.30	2.36	3.30	4.12	4.86	5.53	6.11	6.64	7.11	7.53	7.90	8.21	8.70	9.03	9.19				
55	0.75	1.42	2.57	3.57	4.45	5.23	5.93	6.54	7.08	7.61	7.98	8.33	8.64	9.08						
60	0.82	1.53	2.77	3.83	4.77	5.59	6.31	6.94	7.46	7.96	8.37	8.72	8.99							
Lubrication	Type A: Manual (4-10 drops/ min) or Oil Bath			Type B: Rapid Drip (20 drops/min) or Oil Bath or Slinger				Type C: Continuous with Oil Slinger or Oil Stream												

Double Pitch Series Horsepower Tables

#2050 Double Pitch Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																			
	25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950
6	0.18	0.31																		
7	0.22	0.40	0.66																	
8	0.27	0.48	0.83	1.09	1.29															
9	0.31	0.56	0.99	1.33	1.60	1.83	2.00													
10	0.35	0.64	1.14	1.56	1.90	2.20	2.44	2.64	2.80											
11	0.39	0.72	1.29	1.78	2.19	2.55	2.86	3.12	3.34	3.53										
12	0.43	0.80	1.44	1.99	2.47	2.89	3.26	3.58	3.86	4.10	4.30									
13	0.47	0.87	1.59	2.20	2.75	3.23	3.65	4.03	4.36	4.65	4.90	5.11	5.29							
14	0.51	0.95	1.73	2.41	3.01	3.55	4.03	4.45	4.83	5.17	5.47	5.73	5.95	6.09						
15	0.54	1.02	1.87	2.61	3.27	3.86	4.39	4.87	5.29	5.68	6.02	6.32	6.58	6.75	6.94					
16	0.58	1.09	2.01	2.81	3.52	4.16	4.74	5.27	5.74	6.16	6.54	6.88	7.18	7.39	7.61	779.00				
17	0.62	1.17	2.14	3.00	3.77	4.46	5.09	5.65	6.17	6.63	7.05	7.42	7.75	7.99	8.24	8.46	8.62			
18	0.66	1.24	2.27	3.19	4.01	4.75	5.42	6.03	6.58	7.09	7.54	7.94	8.31	8.56	8.84	9.08	9.28			
19	0.69	1.31	2.41	3.38	4.25	5.03	5.75	6.40	6.99	7.52	8.01	8.45	8.84	9.12	9.42	9.68	9.90	10.08		
20	0.73	1.38	2.54	3.56	4.48	5.31	6.07	6.76	7.38	7.95	8.47	8.93	9.35	9.65	9.97	10.25	10.49	10.69		
21	0.77	1.45	2.67	3.74	4.71	5.59	6.38	7.11	7.77	8.37	8.91	9.40	9.84	10.16	10.50	10.80	11.06	11.28	11.44	
22	0.81	1.52	2.79	3.92	4.93	5.85	6.69	7.45	8.14	8.77	9.34	9.85	10.31	10.65	11.01	11.32	11.59	11.83	12.00	
23	0.84	1.59	2.92	4.10	5.16	6.12	6.99	7.78	8.50	9.16	9.75	10.29	10.77	11.12	11.50	11.82	12.10	12.35	12.53	
24	0.88	1.66	3.04	4.27	5.37	6.37	7.28	8.11	8.86	9.54	10.16	10.71	11.21	11.57	11.97	12.30	12.59	12.85	13.03	
25	0.91	1.72	3.17	4.44	5.59	6.63	7.57	8.43	9.20	9.91	10.55	11.12	11.64	12.01	12.42	12.75	13.05	13.33	13.50	13.57
30	1.09	2.06	3.77	5.28	6.62	7.84	8.93	9.93	10.82	11.63	12.35	13.00	13.57	13.96	14.39	14.76	15.06	15.30	15.48	
35	1.27	2.38	4.35	6.07	7.59	8.96	10.18	11.28	12.27	13.14	13.92	14.60	15.20	15.58	16.00	16.35	16.62	16.82	16.94	
40	1.44	2.70	4.90	6.82	8.51	10.01	11.34	12.52	13.56	14.48	15.29	15.98	16.56	16.92	17.29	17.58	17.78			
45	1.61	3.00	5.44	7.54	9.37	10.98	12.40	13.65	14.73	15.67	16.47	17.15	17.70	17.96	18.29	18.49				
50	1.78	3.31	5.96	8.23	10.19	11.90	13.39	14.67	15.78	16.71	17.49	18.08	18.62	18.80						
55	1.95	3.60	6.45	8.90	10.95	12.75	14.30	15.60	16.67	17.57	18.37	18.91								
60	2.11	3.90	6.95	9.52	11.70	13.55	15.12	16.45	17.54											
Lubrication	Type A: Manual (4-10 drops/min) or Oil Bath		Type B: Rapid Drip (20 drops/min) or Oil Bath or Slinger				Type C: Continuous with Oil Slinger or Oil Stream													

#2050 Double Pitch Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																			
	25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950
6	0.13	0.23																		
7	0.16	0.30	0.49																	
8	0.20	0.36	0.62	0.81	0.96															
9	0.23	0.42	0.74	0.99	1.19	1.36	1.49													
10	0.26	0.48	0.85	1.16	1.42	1.64	1.82	1.97	2.09											
11	0.29	0.54	0.96	1.33	1.63	1.90	2.13	2.33	2.49	2.63										
12	0.32	0.60	1.07	1.48	1.84	2.16	2.43	2.67	2.88	3.06	3.21									
13	0.35	0.65	1.19	1.64	2.05	2.41	2.72	3.01	3.25	3.47	3.65	3.81	3.94							
14	0.38	0.71	1.29	1.80	2.24	2.65	3.01	3.32	3.60	3.86	4.08	4.27	4.44	4.54						
15	0.40	0.76	1.39	1.95	2.44	2.88	3.27	3.63	3.94	4.24	4.49	4.71	4.91	5.03	5.18					
16	0.43	0.81	1.50	2.10	2.62	3.10	3.53	3.93	4.28	4.59	4.88	5.13	5.35	5.51	5.67	580.90				
17	0.46	0.87	1.60	2.24	2.81	3.33	3.80	4.21	4.60	4.94	5.26	5.53	5.78	5.96	6.14	6.31	6.43			
18	0.49	0.92	1.69	2.38	2.99	3.54	4.04	4.50	4.91	5.29	5.62	5.92	6.20	6.38	6.59	6.77	6.92			
19	0.51	0.98	1.80	2.52	3.17	3.75	4.29	4.77	5.21	5.61	5.97	6.30	6.59	6.80	7.02	7.22	7.38	7.52		
20	0.54	1.03	1.89	2.65	3.34	3.96	4.53	5.04	5.50	5.93	6.32	6.66	6.97	7.20	7.43	7.64	7.82	7.97		
21	0.57	1.08	1.99	2.79	3.51	4.17	4.76	5.30	5.79	6.24	6.64	7.01	7.34	7.58	7.83	8.05	8.25	8.41	8.53	
22	0.60	1.13	2.08	2.92	3.68	4.36	4.99	5.56	6.07	6.54	6.96	7.35	7.69	7.94	8.21	8.44	8.64	8.82	8.95	
23	0.63	1.19	2.18	3.06	3.85	4.56	5.21	5.80	6.34	6.83	7.27	7.67	8.03	8.29	8.58	8.81	9.02	9.21	9.34	
24	0.66	1.24	2.27	3.18	4.00	4.75	5.43	6.05	6.61	7.11	7.58	7.99	8.36	8.63	8.93	9.17	9.39	9.58	9.72	
25	0.68	1.28	2.36	3.31	4.17	4.94	5.64	6.29	6.86	7.39	7.87	8.29	8.68	8.96	9.26	9.51	9.73	9.94	10.07	10.12
30	0.81	1.54	2.81	3.94	4.94	5.85	6.66	7.40	8.07	8.67	9.21	9.69	10.12	10.41	10.73	11.01	11.23	11.41	11.54	
35	0.95	1.77	3.24	4.53	5.66	6.68	7.59	8.41	9.15	9.80	10.38	10.89	11.33	11.62	11.93	12.19	12.39	12.54	12.63	
40	1.07	2.01	3.65	5.09	6.35	7.46	8.46	9.34	10.11	10.80	11.40	11.92	12.35	12.62	12.89	13.11	13.26			
45	1.20	2.24	4.06	5.62	6.99	8.19	9.25	10.18	10.98	11.69	12.28	12.79	13.20	13.39	13.64	13.79				
50	1.33	2.47	4.44	6.14	7.60	8.87	9.98	10.94	11.77	12.46	13.04	13.48	13.88	14.02						
55	1.45	2.68	4.81	6.64	8.17	9.51	10.66	11.63	12.43	13.10	13.70	14.10								
60	1.57	2.91	5.18	7.10	8.72	10.10	11.27	12.27	13.08											
Lubrication	Type A: Manual (4-10 drops/min) or Oil Bath		Type B: Rapid Drip (20 drops/min) or Oil Bath or Slinger				Type C: Continuous with Oil Slinger or Oil Stream													

Double Pitch Series Horsepower Tables

#2060 Double Pitch Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																			
	25	50	75	100	125	150	175	200	225	250	275	300	350	400	450	500	550	600	650	700
6	0.30																			
7	0.38	0.66	0.88	1.06																
8	0.45	0.80	1.10	1.35	1.57	1.75	1.90													
9	0.52	0.94	1.31	1.63	1.91	2.16	2.38	2.57	2.74											
10	0.59	1.08	1.51	1.90	2.24	2.55	2.83	3.09	3.31	3.51	3.69	3.85								
11	0.66	1.22	1.71	2.16	2.56	2.93	3.27	3.58	3.86	4.12	4.35	4.57	4.93							
12	0.73	1.35	1.90	2.41	2.87	3.30	3.69	4.05	4.39	4.70	4.98	5.25	5.71	6.09						
13	0.79	1.48	2.09	2.65	3.17	3.65	4.10	4.51	4.90	5.26	5.59	5.90	6.45	6.92	7.25					
14	0.86	1.60	2.28	2.90	3.47	4.00	4.50	4.96	5.39	5.80	6.18	6.53	7.16	7.71	8.10	8.51				
15	0.93	1.73	2.46	3.13	3.76	4.34	4.88	5.39	5.87	6.32	6.74	7.14	7.85	8.48	8.92	9.40				
16	0.99	1.85	2.64	3.37	4.04	4.67	5.26	5.82	6.34	6.83	7.29	7.73	8.52	9.21	9.71	10.25	10.70			
17	1.06	1.98	2.82	3.59	4.32	5.00	5.63	6.23	6.79	7.33	7.83	8.30	9.16	9.92	10.47	11.06	11.59	11.99		
18	1.12	2.10	2.99	3.82	4.59	5.32	6.00	6.64	7.24	7.81	8.34	8.85	9.78	10.60	11.21	11.84	12.42	12.88		
19	1.18	2.22	3.17	4.04	4.86	5.63	6.35	7.03	7.67	8.28	8.85	9.39	10.38	11.26	11.93	12.60	13.22	13.73	14.14	
20	1.25	2.34	3.34	4.26	5.09	5.94	6.70	7.42	8.10	8.74	9.35	9.92	10.97	11.86	12.62	13.34	13.99	14.54	14.99	
21	1.31	2.46	3.51	4.48	5.39	6.24	7.04	7.80	8.51	9.19	9.83	10.43	11.54	12.47	13.28	14.05	14.73	15.31	15.80	
22	1.37	2.57	3.67	4.69	5.65	6.54	7.38	8.17	8.92	9.63	10.30	10.93	12.09	13.06	13.92	14.73	15.44	16.05	16.57	
23	1.44	2.69	3.84	4.90	5.90	6.83	7.71	8.54	9.32	10.06	10.76	11.42	12.63	13.63	14.54	15.39	16.12	16.76	17.30	17.78
24	1.50	2.81	4.00	5.11	6.15	7.12	8.04	8.90	9.72	10.49	11.21	11.90	13.16	14.18	15.15	16.03	16.77	17.44	18.00	18.40
25	1.56	2.92	4.17	5.32	6.36	7.41	8.36	9.26	10.10	10.90	11.65	12.37	13.58	14.72	15.75	16.65	17.40	18.09	18.67	19.09
30	1.86	3.48	4.96	6.33	7.60	8.79	9.86	10.95	11.85	12.76	13.74	14.56	15.98	17.28	18.40	19.40	20.22	20.92	21.32	22.00
35	2.16	4.03	5.72	7.29	8.73	10.08	11.29	12.53	13.59	14.67	15.64	16.54	18.09	19.49	20.67	21.73	22.55	23.20	23.78	
40	2.45	4.56	6.46	8.21	9.82	11.31	12.65	14.00	15.16	16.33	17.37	18.34	19.95	21.42	22.62	23.68	24.42	25.08		
45	2.74	5.08	7.18	9.09	10.85	12.48	13.93	15.38	16.62	17.86	18.92	19.98	21.60	23.12	24.29	25.28	25.90			
50	3.02	5.58	7.87	9.95	11.80	13.59	15.13	16.67	17.98	19.28	20.37	21.47	23.12	24.59	25.69					
55	3.30	6.08	8.54	10.77	12.72	14.65	16.26	17.89	19.23	20.59	21.70	22.82	24.45	25.82						
60	3.57	6.56	9.20	11.57	13.60	15.66	17.34	19.03	20.41	21.80	22.92	24.04								
Lubrication	Type A: Manual (4-10 drops/ min) or Oil Bath			Type B: Rapid Drip (20 drops/min) or Oil Bath or Slinger					Type C: Continuous with Oil Slinger or Oil Stream											

#2060 Double Pitch Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																			
	25	50	75	100	125	150	175	200	225	250	275	300	350	400	450	500	550	600	650	700
6	0.22																			
7	0.28	0.49	0.66	0.79																
8	0.34	0.60	0.82	1.01	1.17	1.30	1.42													
9	0.39	0.70	0.98	1.22	1.42	1.61	1.77	1.92	2.04											
10	0.44	0.81	1.13	1.42	1.67	1.90	2.11	2.30	2.47	2.62	2.75	2.87								
11	0.49	0.91	1.28	1.61	1.91	2.18	2.44	2.67	2.88	3.07	3.24	3.41	3.68							
12	0.54	1.01	1.42	1.80	2.14	2.46	2.75	3.02	3.27	3.50	3.71	3.91	4.26	4.54						
13	0.59	1.10	1.56	1.98	2.36	2.72	3.06	3.36	3.65	3.92	4.17	4.40	4.81	5.16	5.41					
14	0.64	1.19	1.70	2.16	2.59	2.98	3.36	3.70	4.02	4.33	4.61	4.87	5.34	5.75	6.04	6.35				
15	0.69	1.29	1.83	2.33	2.80	3.24	3.64	4.02	4.38	4.71	5.03	5.32	5.85	6.32	6.65	7.01				
16	0.74	1.38	1.97	2.51	3.01	3.48	3.92	4.34	4.73	5.09	5.44	5.76	6.35	6.87	7.24	7.64	7.98			
17	0.79	1.48	2.10	2.68	3.22	3.73	4.20	4.65	5.06	5.47	5.84	6.19	6.83	7.40	7.81	8.25	8.64	8.94		
18	0.84	1.57	2.23	2.85	3.42	3.97	4.47	4.95	5.40	5.82	6.22	6.60	7.29	7.90	8.36	8.83	9.26	9.60		
19	0.88	1.66	2.36	3.01	3.62	4.20	4.74	5.24	5.72	6.17	6.60	7.00	7.74	8.40	8.90	9.40	9.86	10.24	10.54	
20	0.93	1.74	2.49	3.18	3.80	4.43	5.00	5.53	6.04	6.52	6.97	7.40	8.18	8.84	9.41	9.95	10.43	10.84	11.18	
21	0.98	1.83	2.62	3.34	4.02	4.65	5.25	5.82	6.35	6.85	7.33	7.78	8.61	9.30	9.90	10.48	10.98	11.42	11.78	
22	1.02	1.92	2.74	3.50	4.21	4.88	5.50	6.09	6.65	7.18	7.68	8.15	9.02	9.74	10.38	10.98	11.51	11.97	12.36	
23	1.07	2.01	2.86	3.65	4.40	5.09	5.75	6.37	6.95	7.50	8.02	8.52	9.42	10.16	10.84	11.48	12.02	12.50	12.90	13.26
24	1.12	2.10	2.98	3.81	4.59	5.31	6.00	6.64	7.25	7.82	8.36	8.87	9.81	10.57	11.30	11.95	12.51	13.01	13.42	13.72
25	1.16	2.18	3.11	3.97	4.74	5.53	6.23	6.91	7.53	8.13	8.69	9.22	10.13	10.98	11.74	12.42	12.98	13.49	13.92	14.24
30	1.39	2.60	3.70	4.72	5.67	6.55	7.35	8.17	8.84	9.52	10.25	10.86	11.92	12.89	13.72	14.47	15.08	15.60	15.90	16.41
35	1.61	3.01	4.27	5.44	6.51	7.52	8.42	9.34	10.13	10.94	11.66	12.33	13.49	14.53	15.41	16.20	16.82	17.30	17.73	
40	1.83	3.40	4.82	6.12	7.32	8.43	9.43	10.44	11.30	12.18	12.95	13.68	14.88	15.97	16.87	17.66	18.21	18.70		
45	2.04	3.79	5.35	6.78	8.09	9.31	10.39	11.47	12.39	13.32	14.11	14.90	16.11	17.24	18.11	18.85	19.31			
50	2.25	4.16	5.87	7.42	8.80	10.13	11.28	12.43	13.41	14.38	15.19	16.01	17.24	18.34	19.16	0.00				
55	2.46	4.53	6.37	8.03	9.49	10.92	12.13	13.34	14.34	15.35	16.18	17.02	18.23	19.25						
60	2.66	4.89	6.86	8.63	10.14	11.68	12.93	14.19	15.22	16.26	17.09	17.93								
Lubrication	Type A: Manual (4-10 drops/ min) or Oil Bath			Type B: Rapid Drip (20 drops/min) or Oil Bath or Slinger					Type C: Continuous with Oil Slinger or Oil Stream											

Double Pitch Series Horsepower Tables

#2080 Double Pitch Roller Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																			
	10	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	300	350	400	450
6	0.32	0.56	0.77																	
7	0.39	0.71	0.98	1.23	1.44	1.64	1.81													
8	0.46	0.84	1.19	1.50	1.79	2.05	2.29	2.51	2.71	2.90										
9	0.53	0.98	1.39	1.77	2.12	2.45	2.75	3.04	3.30	3.55	4.11	4.57								
10	0.59	1.11	1.59	2.03	2.44	2.83	3.20	3.54	3.87	4.18	4.88	5.48	6.01							
11	0.66	1.24	1.78	2.28	2.76	3.20	3.63	4.03	4.41	4.78	5.62	6.36	7.02	7.56	8.07					
12	0.72	1.37	1.97	2.53	3.06	3.57	4.05	4.51	4.94	5.36	6.33	7.21	7.95	8.66	9.27	9.82				
13	0.79	1.50	2.16	2.78	3.36	3.92	4.46	4.97	5.46	5.93	7.03	8.02	8.89	9.75	10.42	11.08				
14	0.85	1.62	2.34	3.02	3.66	4.28	4.86	5.43	5.97	6.49	7.71	8.82	9.83	10.76	11.53	12.29	13.60			
15	0.92	1.75	2.52	3.26	3.95	4.62	5.26	5.87	6.46	7.03	8.37	9.59	10.71	11.74	12.60	13.46	14.94			
16	0.98	1.87	2.70	3.49	4.24	4.96	5.65	6.31	6.95	7.56	9.01	10.34	11.57	12.69	13.63	14.59	16.24	17.65		
17	1.05	1.99	2.88	3.72	4.52	5.29	6.03	6.74	7.43	8.09	9.64	11.08	12.36	13.62	14.63	15.69	17.50	19.04		
18	1.11	2.11	3.06	3.95	4.80	5.62	6.41	7.17	7.90	8.60	10.26	11.80	13.21	14.52	15.60	16.76	18.72	20.38	21.77	
19	1.17	2.23	3.23	4.18	5.08	5.95	6.78	7.58	8.36	9.11	10.87	12.50	14.01	15.40	16.55	17.80	19.90	21.67	23.18	
20	1.23	2.35	3.40	4.40	5.36	6.27	7.15	8.00	8.81	9.60	11.47	13.19	14.78	16.26	17.48	18.81	21.04	22.91	24.52	
21	1.30	2.47	3.58	4.63	5.63	6.59	7.51	8.40	9.26	10.09	12.05	13.87	15.54	17.10	18.39	19.79	22.14	24.11	25.80	
22	1.36	2.59	3.75	4.85	5.90	6.90	7.87	8.81	9.67	10.58	12.63	14.53	16.29	17.92	19.28	20.74	23.20	25.27	27.03	
23	1.42	2.71	3.92	5.07	6.16	7.21	8.19	9.20	10.10	11.05	13.20	15.18	17.02	18.72	20.15	21.66	24.23	26.40	28.22	
24	1.48	2.82	4.05	5.28	6.43	7.52	8.54	9.59	10.53	11.52	13.76	15.83	17.74	19.51	21.01	22.55	25.23	27.50	29.38	30.98
25	1.54	2.94	4.20	5.50	6.69	7.83	8.89	9.94	10.95	11.99	14.31	16.46	18.44	20.28	21.86	23.42	26.20	28.57	30.52	32.16
30	1.84	3.51	5.02	6.55	7.97	9.32	10.62	11.74	12.97	14.23	16.96	19.47	21.78	23.92	25.73	27.52	30.70	33.56	35.52	37.26
35	2.14	4.07	5.82	7.58	9.20	10.75	12.23	13.48	14.92	16.35	19.44	22.27	24.86	27.24	29.24	31.21	34.65	37.57	39.66	
40	2.44	4.62	6.60	8.57	10.39	12.09	13.79	15.17	16.80	18.36	21.78	24.88	27.71	30.28	32.42	34.52	38.09	40.96	43.07	
45	2.73	5.16	7.37	9.54	11.55	13.46	15.25	16.82	18.61	20.29	23.99	27.33	30.35	33.07	35.30	37.50	41.10	43.81		
50	3.01	5.69	8.13	10.49	12.68	14.76	16.69	18.43	20.35	22.12	26.09	29.64	32.81	35.65	37.92	40.16	43.70			
55	3.30	6.21	8.90	11.41	13.78	16.01	18.08	20.00	22.02	23.88	28.08	31.80	35.10	38.01	40.30	42.52				
60	3.58	6.73	9.62	12.32	14.85	17.24	19.43	21.53	23.65	25.57	29.97	33.83	37.22	40.14						
Lubrication	Type A: Manual (4-10 drops/min) or Oil Bath						Type B: Rapid Drip (20 drops/min) or Oil Bath or Slinger						Type C: Continuous with Oil Slinger or Oil Stream							

#2080 Double Pitch Roller Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket																			
	10	20	30	40	50	60	70	80	90	100	125	150	175	200	225	250	300	350	400	450
6	0.24	0.42	0.57																	
7	0.29	0.53	0.73	0.92	1.07	1.22	1.35													
8	0.34	0.63	0.89	1.12	1.33	1.53	1.71	1.87	2.02	2.16										
9	0.40	0.73	1.04	1.32	1.58	1.83	2.05	2.27	2.46	2.65	3.06	3.41								
10	0.44	0.83	1.19	1.51	1.82	2.11	2.39	2.64	2.89	3.12	3.64	4.09	4.48							
11	0.49	0.92	1.33	1.70	2.06	2.39	2.71	3.01	3.29	3.56	4.19	4.74	5.23	5.64	6.02					
12	0.54	1.02	1.47	1.89	2.28	2.66	3.02	3.36	3.68	4.00	4.72	5.38	5.93	6.46	6.91	7.32				
13	0.59	1.12	1.61	2.07	2.51	2.92	3.33	3.71	4.07	4.42	5.24	5.98	6.63	7.27	7.77	8.26				
14	0.63	1.21	1.74	2.25	2.73	3.19	3.62	4.05	4.45	4.84	5.75	6.58	7.33	8.02	8.60	9.16	10.14			
15	0.69	1.30	1.88	2.43	2.95	3.45	3.92	4.38	4.82	5.24	6.24	7.15	7.99	8.75	9.40	10.04	11.14			
16	0.73	1.39	2.01	2.60	3.16	3.70	4.21	4.71	5.18	5.64	6.72	7.71	8.63	9.46	10.16	10.88	12.11	13.16		
17	0.78	1.48	2.15	2.77	3.37	3.94	4.50	5.03	5.54	6.03	7.19	8.26	9.22	10.16	10.91	11.70	13.05	14.20		
18	0.83	1.57	2.28	2.95	3.58	4.19	4.78	5.35	5.89	6.41	7.65	8.80	9.85	10.83	11.63	12.50	13.96	15.20	16.23	
19	0.87	1.66	2.41	3.12	3.79	4.44	5.06	5.65	6.23	6.79	8.11	9.32	10.45	11.48	12.34	13.27	14.84	16.16	17.29	
20	0.92	1.75	2.54	3.28	4.00	4.68	5.33	5.97	6.57	7.16	8.55	9.84	11.02	12.13	13.03	14.03	15.69	17.08	18.28	
21	0.97	1.84	2.67	3.45	4.20	4.91	5.60	6.26	6.91	7.52	8.99	10.34	11.59	12.75	13.71	14.76	16.51	17.98	19.24	
22	1.01	1.93	2.80	3.62	4.40	5.15	5.87	6.57	7.21	7.89	9.42	10.84	12.15	13.36	14.38	15.47	17.30	18.84	20.16	
23	1.06	2.02	2.92	3.78	4.59	5.38	6.11	6.86	7.53	8.24	9.84	11.32	12.69	13.96	15.03	16.15	18.07	19.69	21.04	
24	1.10	2.10	3.02	3.94	4.79	5.61	6.37	7.15	7.85	8.59	10.26	11.80	13.23	14.55	15.67	16.82	18.81	20.51	21.91	23.10
25	1.15	2.19	3.13	4.10	4.99	5.84	6.63	7.41	8.17	8.94	10.67	12.27	13.75	15.12	16.30	17.46	19.54	21.30	22.76	23.98
30	1.37	2.62	3.74	4.88	5.94	6.95	7.92	8.75	9.67	10.61	12.65	14.52	16.24	17.84	19.19	20.52	22.89	25.03	26.49	27.78
35	1.60	3.03	4.34	5.65	6.86	8.02	9.12	10.05	11.13	12.19	14.50	16.61	18.54	20.31	21.80	23.27	25.84	28.02	29.57	
40	1.82	3.45	4.92	6.39	7.75	9.02	10.28	11.31	12.53	13.69	16.24	18.55	20.66	22.58	24.18	25.74	28.40	30.54	32.12	
45	2.04	3.85	5.50	7.11	8.61	10.04	11.37	12.54	13.88	15.13	17.89	20.38	22.63	24.66	26.32	27.96	30.65	32.67		
50	2.24	4.24	6.06	7.82	9.46	11.01	12.45	13.74	15.17	16.49	19.46	22.10	24.47	26.58	28.28	29.95	32.59			
55	2.46	4.63	6.64	8.51	10.28	11.94	13.48	14.91	16.42	17.81	20.94	23.71	26.17	28.34	30.05	31.71				
60	2.67	5.02	7.17	9.19	11.07	12.86	14.49	16.05	17.64	19.07	22.35	25.23	27.75	29.93						
Lubrication	Type A: Manual (4-10 drops/min) or Oil Bath						Type B: Rapid Drip (20 drops/min) or Oil Bath or Slinger						Type C: Continuous with Oil Slinger or Oil Stream							

RING LEADER O-Ring (XLO) Series Horsepower Tables

#50 O-Ring Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket											
	50	100	200	300	400	500	700	900	1,200	1,400	1,800	2,000
9	0.36	0.67	1.26	1.81	2.35	2.87	3.89	4.88	6.32	6.02	4.13	3.52
10	0.41	0.76	1.41	2.03	2.63	3.22	4.36	5.46	7.08	7.05	4.83	4.13
11	0.45	0.84	1.56	2.25	2.92	3.57	4.83	6.06	7.85	8.13	5.58	4.76
12	0.49	0.92	1.72	2.47	3.21	3.92	5.31	6.65	8.62	9.26	6.35	5.42
13	0.54	1.00	1.87	2.70	3.50	4.27	5.78	7.25	9.40	10.44	7.16	6.12
14	0.58	1.09	2.03	2.92	3.79	4.63	6.27	7.86	10.18	11.67	8.01	6.84
15	0.63	1.17	2.19	3.15	4.08	4.99	6.75	8.47	10.97	12.60	8.88	7.58
16	0.67	1.26	2.34	3.38	4.37	5.35	7.24	9.08	11.76	13.51	9.78	8.35
17	0.72	1.34	2.50	3.61	4.67	5.71	7.73	9.69	12.55	14.42	10.71	
18	0.76	1.43	2.66	3.83	4.97	6.07	8.22	10.31	13.35	15.34	11.67	
19	0.81	1.51	2.82	4.07	5.27	6.44	8.72	10.93	14.16	16.26	12.66	
20	0.86	1.60	2.98	4.30	5.57	6.80	9.21	11.55	14.96	17.19	13.67	
21	0.90	1.69	3.14	4.53	5.87	7.17	9.71	12.17	15.77	18.12	14.71	
22	0.95	1.77	3.31	4.76	6.17	7.54	10.21	12.80	16.58	19.05		
23	1.00	1.86	3.47	5.00	6.47	7.91	10.71	13.43	17.40	19.99		
24	1.04	1.95	3.63	5.23	6.78	8.29	11.22	14.06	18.22	20.93		
25	1.09	2.03	3.80	5.47	7.08	8.66	11.72	14.70	19.04	21.87		
26	1.14	2.12	3.96	5.70	7.39	9.03	12.23	15.33	19.86	22.82		
28	1.23	2.30	4.29	6.18	8.01	9.79	13.25	16.61	21.52			
30	1.33	2.48	4.62	6.66	8.63	10.54	14.27	17.90	23.18			
32	1.42	2.66	4.96	7.14	9.25	11.30	15.30	19.19	24.86			
35	1.57	2.93	5.46	7.86	10.19	12.45	16.86	21.14				
40	1.81	3.38	6.31	9.08	11.77	14.39	19.47	24.42				
45	2.06	3.84	7.16	10.32	13.36	16.34	22.12					

#50 O-Ring Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket											
	50	100	200	300	400	500	700	900	1,200	1,400	1,800	2,000
9	0.27	0.50	0.94	1.35	1.75	2.14	2.90	3.64	4.71	4.49	3.08	2.62
10	0.31	0.57	1.05	1.51	1.96	2.40	3.25	4.07	5.28	5.26	3.60	3.08
11	0.34	0.63	1.16	1.68	2.18	2.66	3.60	4.52	5.85	6.06	4.16	3.55
12	0.37	0.69	1.28	1.84	2.39	2.92	3.96	4.96	6.43	6.91	4.74	4.04
13	0.40	0.75	1.39	2.01	2.61	3.18	4.31	5.41	7.01	7.79	5.34	4.56
14	0.43	0.81	1.51	2.18	2.83	3.45	4.68	5.86	7.59	8.70	5.97	5.10
15	0.47	0.87	1.63	2.35	3.04	3.72	5.03	6.32	8.18	9.40	6.62	5.65
16	0.50	0.94	1.74	2.52	3.26	3.99	5.40	6.77	8.77	10.07	7.29	6.23
17	0.54	1.00	1.86	2.69	3.48	4.26	5.76	7.23	9.36	10.75	7.99	
18	0.57	1.07	1.98	2.86	3.71	4.53	6.13	7.69	9.96	11.44	8.70	
19	0.60	1.13	2.10	3.03	3.93	4.80	6.50	8.15	10.56	12.13	9.44	
20	0.64	1.19	2.22	3.21	4.15	5.07	6.87	8.61	11.16	12.82	10.19	
21	0.67	1.26	2.34	3.38	4.38	5.35	7.24	9.08	11.76	13.51	10.97	
22	0.71	1.32	2.47	3.55	4.60	5.62	7.61	9.54	12.36	14.21		
23	0.75	1.39	2.59	3.73	4.82	5.90	7.99	10.01	12.98	14.91		
24	0.78	1.45	2.71	3.90	5.06	6.18	8.37	10.48	13.59	15.61		
25	0.81	1.51	2.83	4.08	5.28	6.46	8.74	10.96	14.20	16.31		
26	0.85	1.58	2.95	4.25	5.51	6.73	9.12	11.43	14.81	17.02		
28	0.92	1.72	3.20	4.61	5.97	7.30	9.88	12.39	16.05			
30	0.99	1.85	3.45	4.97	6.44	7.86	10.64	13.35	17.29			
32	1.06	1.98	3.70	5.32	6.90	8.43	11.41	14.31	18.54			
35	1.17	2.18	4.07	5.86	7.60	9.28	12.57	15.76				
40	1.35	2.52	4.71	6.77	8.78	10.73	14.52	18.21				
45	1.54	2.86	5.34	7.70	9.96	12.18	16.49					

RING LEADER O-Ring (XLO) Series Horsepower Tables

#60 O-Ring Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket													
	50	100	150	200	300	400	500	600	700	900	1,000	1,200	1,400	1,500
9	0.62	1.16	1.67	2.16	3.12	4.04	4.94	5.82	6.68	8.38	9.21	8.77	6.96	6.28
10	0.70	1.30	1.87	2.43	3.49	4.53	5.53	6.52	7.49	9.39	10.32	10.27	8.15	7.35
11	0.77	1.44	2.07	2.69	3.87	5.02	6.13	7.23	8.30	10.41	11.44	11.85	9.41	8.48
12	0.85	1.58	2.28	2.95	4.25	5.51	6.74	7.94	9.12	11.43	12.57	13.51	10.72	9.66
13	0.92	1.73	2.49	3.22	4.64	6.01	7.34	8.65	9.94	12.46	13.70	15.23	12.08	10.90
14	1.00	1.87	2.69	3.49	5.02	6.51	7.96	9.37	10.77	13.50	14.85	17.02	13.51	12.18
15	1.08	2.01	2.90	3.76	5.41	7.01	8.57	10.10	11.60	14.55	15.99	18.85	14.98	13.51
16	1.16	2.16	3.11	4.03	5.80	7.52	9.19	10.83	12.44	15.60	17.15	20.21	16.50	14.88
17	1.24	2.31	3.32	4.30	6.20	8.03	9.81	11.56	13.28	16.65	18.31	21.58	18.07	
18	1.31	2.45	3.53	4.58	6.59	8.54	10.44	12.30	14.13	17.71	19.48	22.95	19.69	
19	1.39	2.60	3.74	4.85	6.99	9.05	11.06	13.04	14.98	18.78	20.65	24.33	21.35	
20	1.47	2.75	3.96	5.13	7.38	9.57	11.69	13.78	15.83	19.85	21.82	25.71	23.06	
21	1.55	2.90	4.17	5.40	7.78	10.08	12.33	14.53	16.69	20.92	23.00	27.11		
22	1.63	3.05	4.39	5.68	8.19	10.60	12.96	15.27	17.55	22.00	24.19	28.50		
23	1.71	3.19	4.60	5.96	8.59	11.13	13.60	16.03	18.41	23.08	25.38	29.90		
24	1.79	3.35	4.82	6.24	8.99	11.65	14.24	16.78	19.28	24.17	26.57	31.31		
25	1.87	3.50	5.04	6.52	9.40	12.17	14.88	17.54	20.14	25.26	27.77			
26	1.95	3.65	5.25	6.81	9.80	12.70	15.53	18.29	21.02	26.35	28.97			
28	2.12	3.95	5.69	7.37	10.62	13.76	16.82	19.82	22.77	28.55	31.39			
30	2.28	4.26	6.13	7.94	11.44	14.82	18.12	21.35	24.53	30.75				
32	2.45	4.56	6.57	8.52	12.27	15.89	19.43	22.89	26.30	32.97				
35	2.69	5.03	7.24	9.38	13.50	17.50	21.40	25.20	29.00					
40	3.11	5.81	8.37	10.80	15.60	20.20	24.70	29.10	33.50					
45	3.53	6.60	9.50	12.30	17.70	23.00	28.10	33.10						

#60 O-Ring Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket													
	50	100	150	200	300	400	500	600	700	900	1,000	1,200	1,400	1,500
9	0.46	0.87	1.25	1.61	2.33	3.01	3.68	4.34	4.98	6.25	6.87	6.54	5.19	4.68
10	0.52	0.97	1.39	1.81	2.60	3.38	4.12	4.86	5.59	7.00	7.70	7.66	6.08	5.48
11	0.57	1.07	1.54	2.01	2.89	3.74	4.57	5.39	6.19	7.76	8.53	8.84	7.02	6.32
12	0.63	1.18	1.70	2.20	3.17	4.11	5.03	5.92	6.80	8.52	9.37	10.07	7.99	7.20
13	0.69	1.29	1.86	2.40	3.46	4.48	5.47	6.45	7.41	9.29	10.22	11.36	9.01	8.13
14	0.75	1.39	2.01	2.60	3.74	4.85	5.94	6.99	8.03	10.07	11.07	12.69	10.07	9.08
15	0.81	1.50	2.16	2.80	4.03	5.23	6.39	7.53	8.65	10.85	11.92	14.06	11.17	10.07
16	0.87	1.61	2.32	3.01	4.33	5.61	6.85	8.08	9.28	11.63	12.79	15.07	12.30	11.10
17	0.92	1.72	2.48	3.21	4.62	5.99	7.32	8.62	9.90	12.42	13.65	16.09	13.47	
18	0.98	1.83	2.63	3.42	4.91	6.37	7.79	9.17	10.54	13.21	14.53	17.11	14.68	
19	1.04	1.94	2.79	3.62	5.21	6.75	8.25	9.72	11.17	14.00	15.40	18.14	15.92	
20	1.10	2.05	2.95	3.83	5.50	7.14	8.72	10.28	11.80	14.80	16.27	19.17	17.20	
21	1.16	2.16	3.11	4.03	5.80	7.52	9.19	10.84	12.45	15.60	17.15	20.22		
22	1.22	2.27	3.27	4.24	6.11	7.90	9.66	11.39	13.09	16.41	18.04	21.25		
23	1.28	2.38	3.43	4.44	6.41	8.30	10.14	11.95	13.73	17.21	18.93	22.30		
24	1.33	2.50	3.59	4.65	6.70	8.69	10.62	12.51	14.38	18.02	19.81	23.35		
25	1.39	2.61	3.76	4.86	7.01	9.08	11.10	13.08	15.02	18.84	20.71			
26	1.45	2.72	3.91	5.08	7.31	9.47	11.58	13.64	15.67	19.65	21.60			
28	1.58	2.95	4.24	5.50	7.92	10.26	12.54	14.78	16.98	21.29	23.41			
30	1.70	3.18	4.57	5.92	8.53	11.05	13.51	15.92	18.29	22.93				
32	1.83	3.40	4.90	6.35	9.15	11.85	14.49	17.07	19.61	24.59				
35	2.01	3.75	5.40	6.99	10.07	13.05	15.96	18.79	21.63					
40	2.32	4.33	6.24	8.05	11.63	15.06	18.42	21.70	24.98					
45	2.63	4.92	7.08	9.17	13.20	17.15	20.95	24.68						

RING LEADER O-Ring (XLO) Series Horsepower Tables

#80 O-Ring Chain - Imperial Units (Horsepower)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket										
	50	100	150	200	300	400	500	700	900	1,000	1,100
9	1.45	2.71	3.90	5.05	7.28	9.43	11.53	15.60	17.00	14.51	12.58
10	1.63	3.03	4.37	5.66	8.16	10.57	12.92	17.48	19.91	17.00	14.74
11	1.80	3.36	4.84	6.28	9.04	11.71	14.32	19.38	22.97	19.61	17.00
12	1.98	3.69	5.32	6.89	9.93	12.87	15.73	21.29	26.17	22.35	19.37
13	2.16	4.03	5.80	7.52	10.83	14.03	17.15	23.21	29.10	25.20	21.84
14	2.34	4.36	6.29	8.14	11.73	15.20	18.58	25.15	31.53	28.16	24.41
15	2.52	4.70	6.77	8.77	12.64	16.37	20.01	27.09	33.97	31.23	27.07
16	2.70	5.04	7.26	9.41	13.55	17.55	21.46	29.05	36.42	34.41	
17	2.88	5.38	7.75	10.04	14.47	18.74	22.91	31.01	38.88	37.68	
18	3.07	5.72	8.25	10.68	15.39	19.93	24.37	32.99	41.36	41.05	
19	3.25	6.07	8.74	11.33	16.31	21.13	25.83	34.97	43.85		
20	3.44	6.41	9.24	11.97	17.24	22.34	27.31	36.96	46.34		
21	3.62	6.76	9.74	12.62	18.17	23.55	28.78	38.96			
22	3.81	7.11	10.24	13.27	19.11	24.76	30.27	40.97			
23	4.00	7.46	10.75	13.92	20.05	25.98	31.75	42.98			
24	4.19	7.81	11.25	14.58	20.99	27.20	33.25	45.01			
25	4.37	8.16	11.76	15.23	21.94	28.42	34.75	47.04			
26	4.56	8.52	12.27	15.89	22.89	29.65	36.25				
28	4.94	9.23	13.29	17.22	24.80	32.13	39.27				
30	5.33	9.94	14.32	18.55	26.72	34.61	42.31				
32	5.71	10.66	15.35	19.89	28.64	37.11	45.36				
35	6.29	11.74	16.91	21.91	31.55	40.88	49.97				
40	7.27	13.56	19.53	25.31	36.45	47.22					
45	8.25	15.40	22.18	28.74	41.39	53.63					

#80 O-Ring Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket										
	50	100	150	200	300	400	500	700	900	1,000	1,100
9	1.08	2.02	2.91	3.77	5.43	7.03	8.60	11.63	12.68	10.82	9.38
10	1.22	2.26	3.26	4.22	6.08	7.88	9.63	13.03	14.85	12.68	10.99
11	1.34	2.51	3.61	4.68	6.74	8.73	10.68	14.45	17.13	14.62	12.68
12	1.48	2.75	3.97	5.14	7.40	9.60	11.73	15.88	19.51	16.67	14.44
13	1.61	3.01	4.33	5.61	8.08	10.46	12.79	17.31	21.70	18.79	16.29
14	1.74	3.25	4.69	6.07	8.75	11.33	13.86	18.75	23.51	21.00	18.20
15	1.88	3.50	5.05	6.54	9.43	12.21	14.92	20.20	25.33	23.29	20.19
16	2.01	3.76	5.41	7.02	10.10	13.09	16.00	21.66	27.16	25.66	
17	2.15	4.01	5.78	7.49	10.79	13.97	17.08	23.12	28.99	28.10	
18	2.29	4.27	6.15	7.96	11.48	14.86	18.17	24.60	30.84	30.61	
19	2.42	4.53	6.52	8.45	12.16	15.76	19.26	26.08	32.70		
20	2.57	4.78	6.89	8.93	12.86	16.66	20.37	27.56	34.56		
21	2.70	5.04	7.26	9.41	13.55	17.56	21.46	29.05			
22	2.84	5.30	7.64	9.90	14.25	18.46	22.57	30.55			
23	2.98	5.56	8.02	10.38	14.95	19.37	23.68	32.05			
24	3.12	5.82	8.39	10.87	15.65	20.28	24.79	33.56			
25	3.26	6.08	8.77	11.36	16.36	21.19	25.91	35.08			
26	3.40	6.35	9.15	11.85	17.07	22.11	27.03				
28	3.68	6.88	9.91	12.84	18.49	23.96	29.28				
30	3.97	7.41	10.68	13.83	19.93	25.81	31.55				
32	4.26	7.95	11.45	14.83	21.36	27.67	33.82				
35	4.69	8.75	12.61	16.34	23.53	30.48	37.26				
40	5.42	10.11	14.56	18.87	27.18	35.21					
45	6.15	11.48	16.54	21.43	30.86	39.99					

RING LEADER O-Ring (XLO) Series Horsepower Tables

#100 O-Ring Chain - Imperial Units (Horsepower)

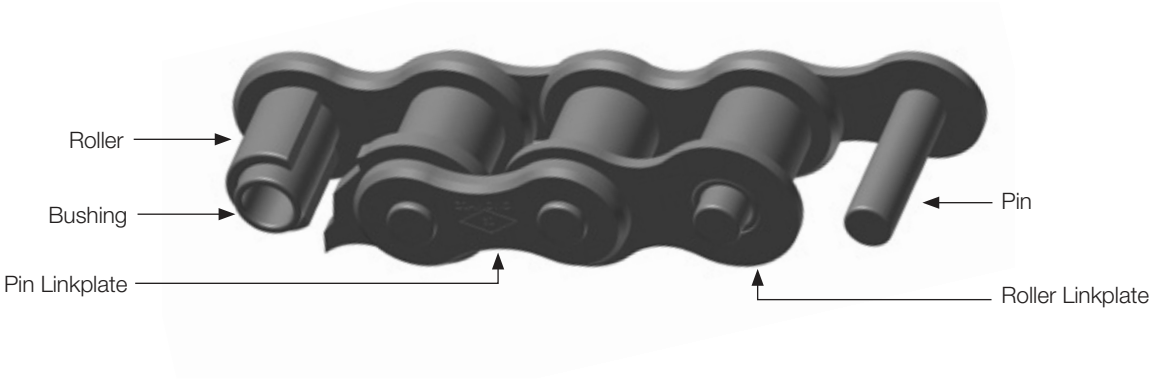
# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket									
	25	50	100	150	200	300	400	500	600	700
9	1.49	2.78	5.19	7.47	9.68	13.94	18.06	22.08	26.02	29.63
10	1.67	3.11	5.81	8.37	10.85	15.62	20.24	24.74	29.15	33.49
11	1.85	3.45	6.44	9.28	12.02	17.32	22.43	27.42	32.31	37.12
12	2.03	3.79	7.08	10.19	13.21	19.02	24.64	30.12	35.49	40.78
13	2.22	4.13	7.72	11.11	14.40	20.74	26.87	32.84	38.70	44.46
14	2.40	4.48	8.36	12.04	15.60	22.47	29.11	35.58	41.92	48.16
15	2.59	4.83	9.01	12.97	16.80	24.20	31.36	38.33	45.17	51.89
16	2.77	5.17	9.66	13.91	18.02	25.95	33.62	41.10	48.43	55.64
17	2.96	5.52	10.31	14.85	19.24	27.71	35.90	43.88	51.70	59.40
18	3.15	5.88	10.96	15.79	20.46	29.47	38.18	46.67	55.00	
19	3.34	6.23	11.62	16.74	21.69	31.24	40.48	49.48	58.30	
20	3.53	6.58	12.29	17.70	22.93	33.02	42.78	52.30	61.63	
21	3.72	6.94	12.95	18.65	24.17	34.81	45.10	55.13		
22	3.91	7.30	13.62	19.62	25.41	36.60	47.42	57.97		
23	4.10	7.66	14.29	20.58	26.66	38.40	49.75	60.82		
24	4.30	8.02	14.96	21.55	27.92	40.21	52.09	63.68		
25	4.49	8.38	15.63	22.52	29.18	42.02	54.44			
26	4.68	8.74	16.31	23.49	30.44	43.84	56.80			
28	5.07	9.47	17.67	25.45	32.97	47.50	61.53			
30	5.47	10.20	19.04	27.42	35.52	51.17	66.29			
32	5.86	10.94	20.41	29.40	38.09	54.86				
35	6.46	12.05	22.49	32.39	41.96	60.44				
40	7.46	13.92	25.97	37.41	48.47	69.81				
45	8.47	15.81	29.50	42.49	55.04					

#100 O-Ring Chain - Metric Units (Kilowatts)

# of teeth in small sprocket	Revolutions Per Minute – Small Sprocket									
	25	50	100	150	200	300	400	500	600	700
9	1.11	2.07	3.87	5.57	7.22	10.40	13.47	16.47	19.40	22.10
10	1.25	2.32	4.33	6.24	8.09	11.65	15.09	18.45	21.74	24.97
11	1.38	2.57	4.80	6.92	8.96	12.92	16.73	20.45	24.09	27.68
12	1.51	2.83	5.28	7.60	9.85	14.18	18.37	22.46	26.46	30.41
13	1.66	3.08	5.76	8.28	10.74	15.47	20.04	24.49	28.86	33.15
14	1.79	3.34	6.23	8.98	11.63	16.76	21.71	26.53	31.26	35.91
15	1.93	3.60	6.72	9.67	12.53	18.05	23.39	28.58	33.68	38.69
16	2.07	3.86	7.20	10.37	13.44	19.35	25.07	30.65	36.11	41.49
17	2.21	4.12	7.69	11.07	14.35	20.66	26.77	32.72	38.55	44.29
18	2.35	4.38	8.17	11.77	15.26	21.98	28.47	34.80	41.01	
19	2.49	4.65	8.67	12.48	16.17	23.30	30.19	36.90	43.47	
20	2.63	4.91	9.16	13.20	17.10	24.62	31.90	39.00	45.96	
21	2.77	5.18	9.66	13.91	18.02	25.96	33.63	41.11		
22	2.92	5.44	10.16	14.63	18.95	27.29	35.36	43.23		
23	3.06	5.71	10.66	15.35	19.88	28.63	37.10	45.35		
24	3.21	5.98	11.16	16.07	20.82	29.98	38.84	47.49		
25	3.35	6.25	11.66	16.79	21.76	31.33	40.60			
26	3.49	6.52	12.16	17.52	22.70	32.69	42.36			
28	3.78	7.06	13.18	18.98	24.59	35.42	45.88			
30	4.08	7.61	14.20	20.45	26.49	38.16	49.43			
32	4.37	8.16	15.22	21.92	28.40	40.91				
35	4.82	8.99	16.77	24.15	31.29	45.07				
40	5.56	10.38	19.37	27.90	36.14	52.06				
45	6.32	11.79	22.00	31.68	41.04					

Chain Components

Chain Terminology and Single Strand Component Identification





Pitch - The distance from the center of one pin to the center of the next. General measure of the "size" of the chain.



Pin Linkplate ("PLP") - The outside plate of a roller chain, usually stamped with the Diamond logo and ANSI size.



Roller Linkplate ("RLP") - The inside plate of a roller chain. RLPs are slightly larger than PLPs and contain larger pitch holes for the bushings. Image includes bushings.



Roller - A short, hollow cylinder that fits loosely over the bushing and rotates as it comes into contact with the sprocket.



Bushing - A hollow cylinder that is press fit into the roller linkplates. Pins in the pin linkplate are free to rotate within the bushing, while rollers rotate freely outside the bushing.



Roller Link - An assembly made up of two rollers assembled over two bushings that are press fit onto two roller linkplates. Roller links are a chain subassembly component.



Pin Link - An assembly made up of two pins press fit into a pin linkplate. There are three types of pin links (riveted, cottered, grooved), dependent on the type of pins used. Pin links are a chain subassembly component.



Pin - A long solid cylinder that is press fit into the pin linkplate. The bushing fits over the pin, allowing flexibility of the chain joint. Pins may either be riveted, cottered or grooved.

Connecting and Offset Links

Single and Multiple Strand Chain



Spring Clip Connecting Link - Standard connecting link for up to ANSI 60 chain. The cover linkplate is held in place by a spring clip, split at one end to permit easy installation and removal. Slip fit cover plate standard, press fit cover plate optional and recommended for heavy duty applications. Open-ended spring clip standard, closed-end spring clip optional.



Cottered Connecting Link - Standard connecting link for ANSI 80 and larger chain, the cover linkplate is held in place by cotter pins. Slip fit cover plate standard, press fit cover plate optional.



Riveted Connecting Link - Optional connecting link for all roller chain sizes. Press fit cover plate standard; pins should be riveted or peened on the ends once cover linkplate installed.



BCL Multi-Strand Connecting Link - For press fit constructed multi-strand chain, BCL connecting links utilize Bushed Center Linkplates for press fit performance with slip fit ease of assembly. Press fit cover plate, cottered construction only.



Single-Pitch Offset Link - Links which can be added using a slip fit bolt and cotter key to add a single pitch length to the chain. Available for single and multiple strand chains.



Two-Pitch Offset Link - Similar to a single-pitch offset link except assembled into the chain. Press fit construction increases rigidity, reliability, and durability and is recommended over the single-pitch offset link. Available for single and multiple strand chains.



Four-Pitch Press fit Offset Link Assembly - For use when needing to shorten a multi-strand chain. Special ordering instructions apply. Reference “Four Pitch Offset Link FAQ” datasheet.

Multiple Strand Chain

Multiple strand chain is available with two different center plate constructions - slip fit and press fit. Slip fit multiple strand chain can be disassembled and repaired in the field (using a grinder for the sidemash and standard pin removal tools), but are less resistant to fatigue failures. Slip fit construction is standard on cotter type multiple strand chain. Press fit multi-strand chain is designed for severe drive conditions and have excellent fatigue resistance, but cannot be modified in the field. Press fit construction is standard on riveted type multiple strand chain.

Tools, Troubleshooting

Chain Assembly and Disassembly Tools

Connecting Tools



CT35
Connecting Tool - Small
For use with ANSI 35 through 60H roller chain.



CT80
Connecting Tool - Large
For use with ANSI 80 through 240 single strand chain and most conveyor and engineered chains with a width of 5/8" or wider between the inside links. For multi-strand chains, a second connecting tool will aid in the alignment of the chain.



CT80-Cable
Cable Connecting Tool - Large
For use with ANSI 80 through 240 single strand, multi-strand and double-pitch chain, and most conveyor and engineered chains with a width of 5/8" or wider between the inside links. This tool holds the ends of a chain together during the connection process.

Pin Extractor Tools



PE113
Pin Extractor - Small
For use with ANSI 25 through 60H roller chain.



PE135
Pin Extractor - Large
For use with ANSI 80 through 100H roller chain.



PERE157
Pin Extractor - Extra Large
For use with ANSI 120 through 160 roller chain.



PE-MAX
Pin Extractor - High Speed
For use with ANSI 25 through 80 or ISO/British Standard 05B through 16B.

Using the Assembly and Disassembly Tools

Connecting Tools

CT35 & CT80

Hook the two arms of the connecting tool onto each end of the chain. Turn the screw clockwise to bring the two ends of chain towards each other. Insert the connecting link and complete assembly. Note: This tool is not made to stretch chain, only to hold it in place for assembly.

CT80-CABLE

Place the hooks of the connecting tool on the rollers past the link or links to be removed or replaced. The slack in the cable should be taken up with a wrench until the chain between the hooks is relieved of tension. This will allow for the removal of the link with a roller chain pin extractor. A new master or replacement link can then be inserted. The cable can then be released with the lock lever and the tool can be removed.

Pin Extractors

PE113, PE135 & PERE157

Begin by grinding the desired side-mashed (aka "spun") pin heads flush with the linkplate to ensure that the chain bushing will not be damaged during pin extraction. Place the jaws of the tool over the roller with the push-out tip centered on the chain pin. Tighten down by turning the top handle clockwise until the chain pin loosens, driving it partially through the linkplate. Follow the same procedure on the adjacent pin. Return to the original pin and force completely through the pin linkplate. Do the same on second pin, freeing linkplate from the pins. Remove disassembled pin link from the chain.

PE-MAX

Begin by grinding the desired side-mashed (aka "spun") pin heads flush with the linkplate to ensure that the chain bushing will not be damaged during pin extraction. Then, select the correct chain model on the carousel and insert the chain at the point you wish to remove the pin link. Ensure that the pressure pins are resting on the center of each chain pin. Next, pull the lever down and use continuous pressure to force the pins from the chain. Once the pins have been removed, replace the lever to the upright position and remove the chain.

When Assembling or Disassembling Chain:



Reference www.timken.com/warnings for a complete list of cautions and warnings.

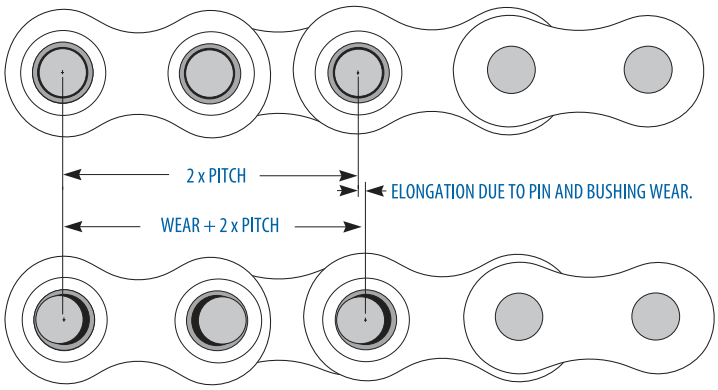
1. Follow your lock-out tag-out and power off procedures before installing, removing, lubricating, or servicing a chain system.
2. Always wear appropriate Personal Protective Equipment, including safety glasses, shoes, clothing, and gloves.
3. Support the chain and equipment to prevent uncontrolled movement of the chain or equipment.
4. Do not attempt to connect or disconnect chain without an understanding of chain construction.

Roller Chain Wear

Chain does not "stretch"; rather, elongation is caused when material is removed from the pins and bushings.

The individual joints in a roller chain articulate as they enter and exit the sprockets. This articulation results in wear on the pins and bushings. As material is worn away from these surfaces, the chain will gradually elongate.

For a free plastic chain wear gauge, please contact The Diamond Chain Company at marketing@diamondchain.com



Elongation Control

Elongation is normal and may be minimized through proper lubrication and drive maintenance. The rate of wear is dependent upon the load and the amount of bearing area between pin and bushing, the material and surface condition of the bearing surfaces, the adequacy of lubrication, and the frequency and degree of articulation between pins and bushings. The latter is determined by the quantity of sprockets in the drive, their speeds, the number of teeth, and the length of the chain in pitches.

Check Chain Wear

Roller chains should be replaced when worn (typically an elongation beyond 3%) or when the chain rollers begin to "ride high" near the tips of the teeth on relatively large sprockets. Do not connect or splice a new section to a worn chain. Do not continue to run a chain worn in excess of 3% (or less in some applications), the chain will not engage the sprockets properly and increased damage to the sprockets may occur.

Chain Wear Elongation Limits

ANSI Chain No.	Chain Pitch		Measured Length				
			Pitches	Nominal		At 3% Wear	
	Inch	MM		Inch	MM	Inch	MM
25	.250	6.35	48	12.00	305	12.375	314
35	.375	9.52	32	12.00	305	12.375	314
41	.500	12.70	24	12.00	305	12.375	314
40	.500	12.70	24	12.00	305	12.375	314
50	.625	15.88	20	12.50	318	12.875	327
60	.750	19.05	16	12.00	305	12.375	314
80	1.000	25.40	12	12.00	305	12.375	314
100	1.250	31.75	20	25.00	635	25.750	654
120	1.500	38.10	16	24.00	610	24.719	628
140	1.750	44.45	14	24.50	622	25.250	641
160	2.000	50.80	12	24.00	610	24.719	628
180	2.250	57.15	12	27.00	686	27.812	706
200	2.500	63.50	10	25.00	635	27.750	654
240	3.000	76.20	8	24.00	610	24.719	628

How To Measure Chain Wear

1 - As a safety precaution, shut off power and lock out gears and sprockets before attempting to measure chain wear.

2 - Determine the pitch of the chain. This is typically stamped on the outer linkplates of the chain. It can also be determined by measuring the distance from the center of one pin to the center of the next pin. Refer to the previous pages in this catalog for a list of ANSI standard chain models and correlating pitch measurements or visit www.diamondchain.com.

3 - For reliable linear measurement, a taut span of chain must be used. Using slack chain will result in inaccurate measurements.

4 - Choose either a 1.5% or 3% wear elongation limit to check your span of chain. Each percentage correlates to a different side of the scale. The maximum allowable wear elongation is typically 3% for most industrial applications, depending upon sprocket design. In drives having fixed center distances, chains running in parallel, or where smoother operation is required, chain wear should be limited to approximately 1.5%.

Example: Using ASME/ANSI 60 roller chain, 13 pitches would measure 9.75 inches for nominal length (13 pitches x .75 pitch). A maximum wear calculation of 3% would be 1.03 x 9.75 or 10.0425 inches. A maximum wear calculation of 1.5% would be 1.015 x 9.75 or 9.896 inches.

5 - Refer to the table on the wear gauge for the number of pitches to inspect.

Example: For ASME/ANSI 60 roller chain, 13 pitches will be measured.

6 - Place the inside corner of the wear scale around one pin, using that pin as “0”, or your starting point.

7 - Starting at “0”, count the number of pins/pitches to be measured for your chain's length.

Example: Count from 0 to 13 for ASME/ANSI 60 roller chain.

8 - If the center of the indicated pin does not reach the wear line for the corresponding chain size, the chain has not reached the wear limit.

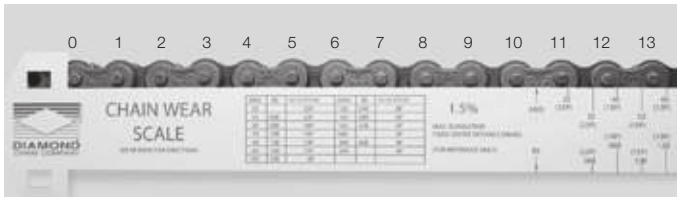
Example: For ASME/ANSI 60 roller chain, if the center of the 13th pin does not reach the # 60 wear mark, the chain remains usable.

9 - If the center of the indicated pin is at or beyond the indicated line, the chain is worn to the wear limit (1.5% or 3%, depending on the scale used) and should be replaced.

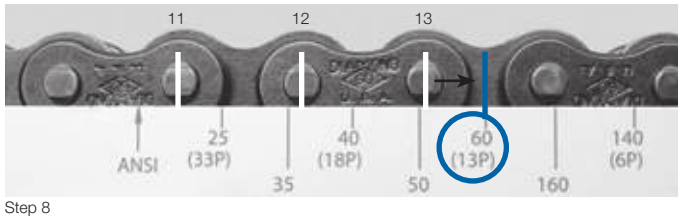
Example: For ASME/ANSI 60 roller chain, if the center of the 13th pin reaches or exceeds the # 60 wear mark, the chain should be replaced.

ANSI	BS	No. of Pitches	ANSI	BS	No. of Pitches
25		33P	120	24B	8P
35	06B	23P	140	28B	6P
40	08B	18P	160	32B	5P
50	10B	15P	180		5P
60	12B	13P	200	40B	5P
80	16B	11P	240		4P
100	20B	9P			

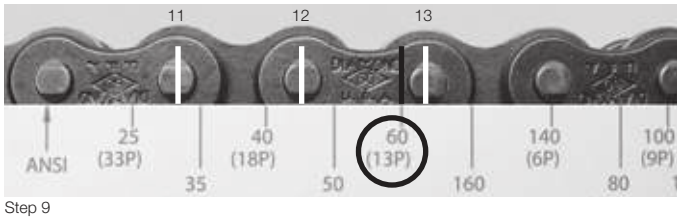

Step 6



Step 7

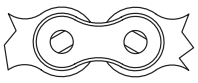
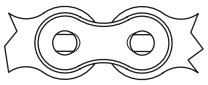
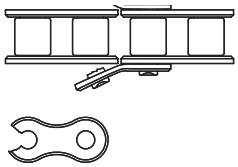
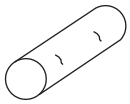


Step 8

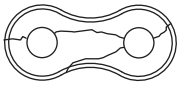
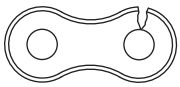
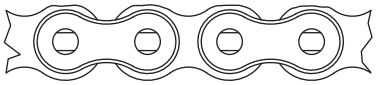
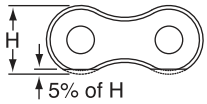


Step 9

Troubleshooting Guide

CONDITION/SYMPTOM	POSSIBLE CAUSE	WHAT TO DO
Tight Joints 	Dirt or foreign material in chain joints.	Clean and re-lubricate chain.
	Inadequate lubrication.	Replace chain. Re-establish proper lubrication.
	Misalignment.	Replace sprockets and chain if needed. Realign sprockets.
	Internal corrosion or rust.	Replace chain. Eliminate cause of corrosion or protect chain.
	Overload bends pins or spreads roller linkplates.	Replace chain. Eliminate cause of overload.
Rusted Chain	Exposed to moisture.	Replace chain. Protect from moisture.
	Water in lubricant.	Change lubricant. Protect lubrication system from water. Replace chain.
	Inadequate lubrication.	Provide or re-establish proper lubrication. Replace chain if needed.
Turned Pins 	Overload.	Replace chain. Eliminate cause of overload.
	Inadequate lubrication.	Replace chain. Re-establish proper lubrication.
Enlarged Holes 	Overload.	Replace chain. Eliminate cause of overload.
Broken Pins Broken Linkplates 	Extreme Overload.	Replace chain. Replace sprockets if indicated. Eliminate cause of overload or redesign drive for larger pitch chain.
Broken, Cracked or Deformed Rollers 	Speed too high.	Replace chain. Reduce speed.
	Sprockets too small.	Replace chain. Use larger sprockets, or possibly redesign drive for smaller pitch chain.
	Chain riding too high on sprocket teeth.	Replace chain. Re-tension chain more often.
Pin Galling 	Speed or load too high.	Reduce speed or load. Possibly redesign drive for smaller pitch chain.
	Inadequate lubrication.	Provide or re-establish proper lubrication.
Chain Climbs Sprocket Teeth	Excess chain slack.	Re-tension chain.
	Excessive chain wear.	Replace and re-tension chain.
	Excessive sprocket wear.	Replace sprockets and chain.
	Excessive overload.	Replace chain. Eliminate cause of overload.

Troubleshooting Guide

CONDITION/SYMPTOM	POSSIBLE CAUSE	WHAT TO DO
Missing or Broken Cotters	Cotters installed improperly.	Install new cotters per manufacturer's instructions.
	Vibration.	Replace chain. Reduce vibration. Use larger sprockets.
	Excessively high speed.	Replace chain. Reduce speed. Redesign drive for smaller pitch chain.
Exposed Chain Surfaces Corroded or Pitted	Exposure to corrosive environment.	Replace chain. Protect from hostile environment.
Cracked Linkplates (Stress Corrosion) 	Exposure to corrosive environment combined with stress from press fits.	Exposure to corrosive environment combined with stress from press fits.
Cracked Linkplates (Fatigue) 	Load is greater than chain's dynamic capacity.	Replace chain. Reduce dynamic loading or redesign drive for larger chain.
Battered Linkplate Edges 	Chain striking an obstruction.	Replace chain. Eliminate interference.
Worn Linkplate Contours 	Chain rubbing on casing, guide, or obstruction.	Replace chain if 5% or more of height worn away. Re-tension chain. Eliminate interference.
Excessive Noise	Chain striking an obstruction.	Replace chain. Eliminate interference.
	Loose casing or shaft mounts.	Tighten fasteners.
	Excess chain slack.	Re-tension chain.
	Excessive sprocket wear.	Replace and re-tension chain.
	Sprocket misalignment.	Replace chain and sprockets, if needed. Realign sprockets.
	Inadequate lubrication.	Replace chain if needed. Re-establish proper lubrication.
	Chain pitch too large	Redesign drive for smaller pitch chain.
	Too few sprocket teeth.	Check to see if larger sprockets can be used. If not, redesign drive.
Wear on Inside of Roller Linkplates and One Side of Sprockets	Sprocket misalignment.	Replace sprockets and chain if needed. Realign drive. Re-tension chain.
Chain Clings to Sprocket	Excessive sprocket wear.	Replace sprockets and chain.
	Sprocket misalignment.	Replace sprockets and chain if needed. Realign sprockets.

Ordering Information

Ordering Information

Important Addresses, Emails & Phone Numbers

Americas - Corporate Headquarters
402 Kentucky Avenue
Indianapolis, IN 46225 USA

quotes@diamondchain.com
customerservice@diamondchain.com

317.638.6431
800.872.4246
317.613.2243 (fax)

Europe, Asia, Middle East, Africa
Tundry Way
Chainbridge Industrial Estate
Blaydon on Tyne
Tyne & Wear
NE21 5SJ
United Kingdom

sales@diamondchain.co.uk

+44-191-414-8822

China
Litong Plaza Room 2204
No. 1350 North Sichuan Rd.
Hongkou District, Shanghai, 200080, China

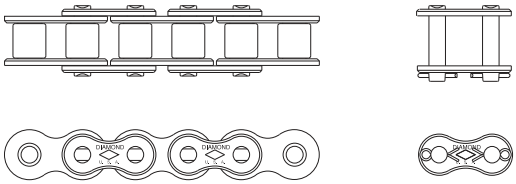
salescn@diamondchain.com

+86-512-6265-3075

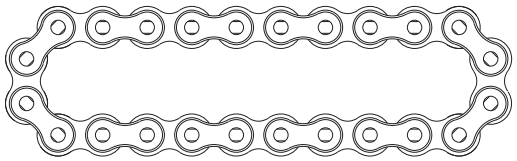
For additional information, including Terms and Conditions, please visit www.diamondchain.com

Ordering Terminology

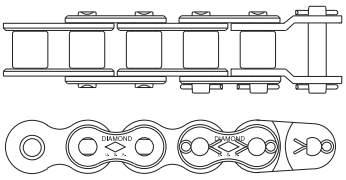
Chain-6 pitches long, including connecting link.



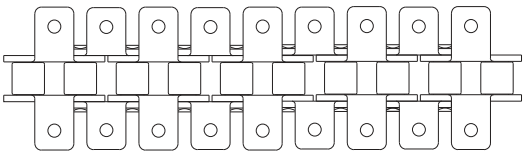
Chain-24 pitches long, riveted endless with no connecting link.



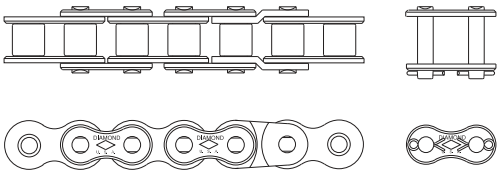
Chain-5 pitches long, including connecting link and one-pitch offset.



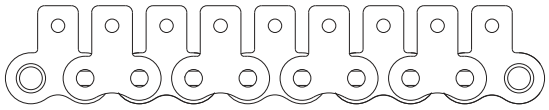
Chain-9 pitches long, with bent attachments, both sides of chain, every pitch.



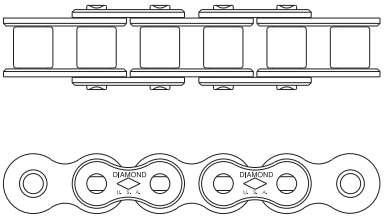
Chain-7 pitches long, including two-pitch offset and connecting link.



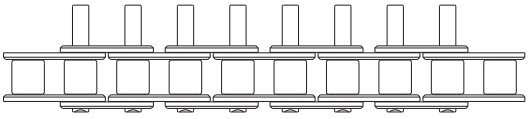
Chain-9 pitches long, with straight attachments, every pitch.



Chain-5 pitches long, roller link each end.



Chain-9 pitches long, with all pins extended.



Ordering Information

Ordering Examples

#60-2 riveted chain, press fit center plate, 168 pitches including connecting link.

#35 riveted chain, 100 foot reel.

#60 cottered chain, 56 pitches including connecting link.

#50 riveted chain, 57 pitches including two pitch offset and connecting link.

#80 riveted chain, 36 pitches with straight attachments, one side of chain on pin links at four-pitch spacing, class 1 matched pair.

Ordering Details

All chains are furnished with connecting links unassembled unless otherwise specified.

Spring clip slip fit connecting links are standard for ASME/ANSI #60 and smaller.

Cottered slip fit connecting links are standard for ASME/ANSI #80 and larger.

Double-pitch conveyor roller chains with oversized rollers use same connecting links as chains with standard rollers.

Duralube LIVE chains use same connecting links as standard series chain.

Pitch size does not allow ANSI #140 chain to be supplied in 10 foot lengths; instead it is provided in 10.21 foot lengths (3,112 mm) (70 pitches).

Pitch size does not allow ANSI #180 chain to be supplied in 10 foot lengths; instead it is provided in 10.13 foot lengths (3,088 mm) (54 pitches).

ASME/ANSI Number	Pitch (fraction)	Pitch (Decimal)	Pitches per foot
47		0.147	81.36
25	1/4	0.250	48
35	3/8	0.375	32
40-41	1/2	0.500	24
50	5/8	0.625	19.20
60	3/4	0.750	16
80	1	1.000	12
100	1 1/4	1.250	9.6
120	1 1/2	1.500	8
140	1 3/4	1.750	6.86
160	2	2.000	6
180	2 1/4	2.250	5.33
200	2 1/2	2.500	4.80
240	3	3.000	4

Instructions
Divide # pitches in chain by pitches per foot for length in feet.
Multiple length in feet by 30.48 to convert to cm.

Example
Convert 84 pitches of #160 chain to feet.
84 pitches ÷ 6 pitches/foot = 14 feet.
14 feet * 30.48 cm/foot = 426.7 cm.

Standard and Optional Lubrication

	Standard Lubrication	Optional Lubrication/Notes
Most Carbon Steel Chain (exceptions below)	Standard lubrication, rated 32°F to 350°F (0°C to 177°).	High temperature lubrication, rated 100°F to 450°F (38°C to 232°C). Specify as "high temperature lubrication."
		Low temperature lubrication, -40°F to 104°F (-40°C to 40°C). Specify as "low temperature lubrication."
Stainless Steel Chain	None (provided dry). For use up to 600°F (316°C) all sizes, up to 900°F (482°C) ANSI #60 and larger.	Low temperature food grade lubrication, rated -65°F to 0°F (-54°C to -18°C). Specify as "low temperature food grade lubrication."
		Food grade lubricant, rated 20°F-130°F (-7°C to 54°C). Specify as "standard food grade lubrication."
Duralube LIVE	Duralube lubricant, rated up to 120°F (49°C).	-
Duralube LIVE Food Grade	Duralube food grade lubricant, rated 20°F to 120°F (-7° to 49°C).	-
RINGLEADER "XLO" O-Ring Chain	O-ring chain lubricant, rated to 450°F (232°C).	NOTE: chain requires high-temperature Viton o-rings for operation above 150°F (66°C). Specify as "high temperature o-rings."
Pin Oven Chain	High temperature lubrication, rated 100°F to 450°F (38°C to 232°C).	-

Standard Packaged Roller Chain Weights

The table below contain the weights of standard packaged roller chain. Additional lengths available upon request.

ASME/ANSI or Diamond Number	10 ft (3.05m) Boxes		50 ft (15.2m) Reel		100 ft (30.5m) Reel	
	lbs	kg	lbs	kg	lbs	kg
Single Strand Chain						
47 (micropitch)	0	0.2	2	0.9		
25	1.0	0.5	5	2.4	11	5.0
35	2.2	1.0	13	5.9	23	10.4
41	3.0	1.4	16	7.3	29	13.2
40	4	1.8	22	10.0	43	19.5
50	7	3.2	37	16.8	71	32.2
60	10	4.5	51	23.1	112	50.8
80	17	7.7	97	44.0	170	77.0
100	25	11.3	126	57.2	252	114.1
120	37	16.8				
140*	51	23.1				
160	66	29.9				
180**	87	39.5				
200	105	47.6				
240	170	77.1				
Double Strand Chain						
25-2						
35-2	5	2.0	23	10		
40-2	8	3.7	41	19	83	37.5
50-2	14	6.1	67	30	135	61.2
60-2	20	9.1	100	45		
80-2	34	15.4	163	74		
100-2	51	23.1				
120-2	75	34.0				
140-2*	100	45.4				
160-2	132	59.9				
180-2**	180	81.6				
200-2	215	97.5				
Triple Strand Chain						
35-3	7	3.2				
40-3	12	5.4				
50-3	20	9.1				
60-3	29	13.2				
80-3	51	23.1				
100-3	76	34.5				
120-3	112	50.8				
140-3*	148	67.1				
160-3	192	87.1				
180-3**	265	120.2				
200-3	323	146.5				
Quadruple Strand Chain						
60-4	40	18.1				
80-4	66	29.9				
100-4	100	45.4				
120-4	148	67.1				
140-4	195	88.5				
160-4	258	117.0				
Double Pitch Single Strand Chain						
2040	3	1.4				
C2040	3	1.5				
2050	5	2.3				
C2050	6	2.7				
2060	8	3.4			74	33.6
C2060H	11	5.0			107	48.5
C2080H	15	6.6				
Non-Standard Chains						
65 x 1/8	2	0.9				
867 x 5/16	4	2.0				
148 x 1/4	6	2.8				
148 x 5/16	7	3.0				
435 x 1/2	13	5.9				

*Default container for 140 chain is 10.2' (3.1m) boxes.
*Default container for 180 chain is 10.1' (3.1m) boxes.

Standard Packaged Roller Chain Parts

The table below contain the weights of standard packaged roller chain parts.
Weights are for product and container only, and do not include any accompanying overpack, pallets, etc…

ASME/ANSI or Diamond Number	Connecting Links						Roller Links			Single Pitch Offset Links		
	Spring Clip Type			Cotter Pin Type								
	Qty/box	Wt (lbs)	Wt (kgs)	Qty/box	Wt (lbs)	Wt (kgs)	Qty/box	Wt (lbs)	Wt (kgs)	Qty/box	Wt (lbs)	Wt (kgs)
Single Strand Chain												
47 (micropitch)	**50[t]**	**0.3**	0.1				**50**	**0.3**	0.1			
25	**50[t]**	**0.3**	0.1				**50**	**0.3**	0.1	**50**	**0.5**	0.2
35	**50[t]**	**0.8**	0.4				**50**	**0.8**	0.4	**50**	**0.8**	0.4
41	**50[t]**	**0.8**	0.4				**50**	**0.8**	0.4	**50**	**0.8**	0.4
40	**50[t]**	**1.0**	0.5				**50**	**1.3**	0.6	**50**	**1.3**	0.6
50	**50[t]**	**2.0**	0.9				**50**	**2.5**	1.1	**50**	**2.5**	1.1
60	**50**	**3.0**	1.4	**50**	**3.0**	1.4	**50**	**4.0**	1.8	**25**	**2.0**	0.9
80	**50**	**7.5**	3.4	**50**	**7.5**	3.4	**50**	**9.0**	4.1	**25**	**4.5**	2.0
100				**1**	**0.3**	0.1	**1**	**0.3**	0.1	**1**	**0.3**	0.1
120				**1**	**0.4**	0.2	**1**	**0.5**	0.2	**1**	**0.5**	0.2
140				**1**	**0.6**	0.3	**1**	**0.8**	0.4	**1**	**0.8**	0.4
160				**1**	**0.9**	0.4	**1**	**1.3**	0.6	**1**	**1.3**	0.6
180				**1**	**1.5**	0.7	**1**	**2.0**	0.9	**1**	**2.0**	0.9
200				**1**	**1.9**	0.9	**1**	**2.5**	1.1	**1**	**2.4**	1.1
240												
65 x 1/8	**50[t]**	**0.8**	0.4				**50**	**0.8**	0.4	**50**	**0.8**	0.4
867 x 5/16	**50**	**0.4**	0.2				**20**	**0.5**	0.2	**20**	**0.5**	0.2
Double Strand Chain												
25-2	**50[t]**	**0.5**	0.2							**1**	**0.1**	0.0
35-2	**50[t]**	**0.5**	0.2							**1**	**0.1**	0.0
40-2	**50[t]**	**1.5**	0.7							**1**	**0.1**	0.0
50-2	**50[t]**	**3.0**	1.4							**1**	**0.1**	0.0
60-2				**25**	**2.5**	1.1				**1**	**0.2**	0.1
80-2				**25**	**5.5**	2.5				**1**	**0.3**	0.1
100-2				**1**	**0.5**	0.2				**1**	**0.6**	0.3
120-2				**1**	**0.8**	0.4				**1**	**1.0**	0.5
140-2				**1**	**1.2**	0.5				**1**	**1.6**	0.7
160-2				**1**	**1.8**	0.8				**1**	**2.4**	1.1
180-2				**1**	**2.8**	1.3				**1**	**3.6**	1.6
200-2				**1**	**3.7**	1.7				**1**	**4.7**	2.1
Triple Strand Chain												
35-3	**1**	**0.02**	0.009							**1**	**0.1**	0.0
40-3	**1**	**0.04**	0.018							**1**	**0.1**	0.0
50-3	**1**	**0.10**	0.045							**1**	**0.1**	0.0
60-3				**1**	**0.2**	0.1				**1**	**0.2**	0.1
80-3				**1**	**0.4**	0.2				**1**	**0.4**	0.2
100-3				**1**	**0.7**	0.3				**1**	**0.9**	0.4
120-3				**1**	**1.1**	0.5				**1**	**1.5**	0.7
140-3				**1**	**1.8**	0.8				**1**	**3.6**	1.6
160-3												
180-3												
200-3				**1**	**5.4**	2.4				**1**	**7.0**	3.2
Quadruple Strand Chain												
35-4	**1**	**0.03**	0.014							**1**	**0.1**	0.0
40-4	**1**	**0.10**	0.045							**1**	**0.1**	0.0
50-4	**1**	**0.10**	0.045							**1**	**0.2**	0.1
60-4				**1**	**0.2**	0.1				**1**	**0.3**	0.1
80-4				**1**	**0.4**	0.2				**1**	**0.6**	0.3
100-4				**1**	**0.9**	0.4				**1**	**1.1**	0.5
120-4				**1**	**1.5**	0.7				**1**	**2.0**	0.9
140-4				**1**	**2.4**	1.1				**1**	**3.1**	1.4
160-4				**1**	**3.5**	1.6				**1**	**4.8**	2.2
Double Pitch Single Strand Chain												
2040	**50[t]**	**1.3**	0.6	**50t**	**1.3**	0.6	**50**	**1.3**	0.6	**50**	**1.3**	0.6
C2040	**50[t]**	**1.3**	0.6	**50t**	**1.3**	0.6				**50**	**1.3**	0.6
2050	**50[t]**	**2.5**	1.1	**50t**	**2.5**	1.1	**50**	**2.5**	1.1	**50**	**2.5**	1.1
C2050	**50[t]**	**3.0**	1.4	**50t**	**3.0**	1.4				**50**	**3.0**	1.4
2060	**25**	**2.0**	0.9	**25**	**2.0**	0.9	**50**	**4.5**	2.0	**25**	**2.0**	0.9
C2060H	**25**	**3.3**	1.5	**25**	**3.3**	1.5				**25**	**3.3**	1.5
C2080H												
Non-Standard Chains												
65 x 1/8	**50[t]**	**0.8**	0.4				**50**	**0.8**	0.4	**50**	**0.8**	0.4
867 x 5/16	**50**	**0.4**	0.2				**20**	**0.5**	0.2	**20**	**0.5**	0.2
148 x 1/4												
148 x 5/16												
435 x 1/2												

t: One connecting link per poly bag in box of 50

Notes

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