

SAPPHIRE[®]

BY DIAMOND



Sapphire Series Product Catalog

ASME/ANSI and ISO/British Standard Roller Chain

Diamond Chain

Dedicated To Producing The World's Best Roller Chain

Since its founding in 1890, Diamond 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 offers two series of roller chains, Diamond Series and Sapphire Series.
This catalog is focused on the Sapphire Series of ANSI and ISO/British Standard roller chains.



Industry-leading performance
and innovation for
demanding applications

SAPPHIRE[®]

Value chain offering
for general applications

Value Chain Offering For General Applications

Sapphire Series by Diamond specifically targets general purpose applications that can be more cost effectively serviced by a value roller chain. These applications can include those with relatively low demand (e.g. horsepower, load, speed), where the chain is regularly replaced as part of the maintenance cycle, or where downtime can be easily managed. Although positioned below Diamond Series, Sapphire Series roller chain delivers best in class performance for its respective peer group.

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Chain Selection Guide

Sapphire Roller Chain is available in multiple configurations to meet the needs of your specific application.

Application	Industrial Uses	Wet or Corrosive Environments	
	Nomenclature	Nickel Plated Carbon Steel Roller Chain	Stainless Steel Roller Chain
Overview	<p>The default material for industrial roller chain, carbon steel offers superior wear and fatigue performance over any other material. Sapphire roller chain is available in the following carbon steel configurations:</p> <ul style="list-style-type: none"> • Standard Series • Heavy Series • Double Pitch Power Transmission Series • Double Pitch Conveyor Series • Non-Standard Chain 	<p>Adding nickel plating to carbon steel roller chain provides protection against humidity and water washdowns while maintaining the wear and fatigue performance of the material.</p>	<p>Utilization of a stainless steel base material provides superior protection against moisture, humidity, and chemicals, making it the ideal material for food and beverage processing applications. However, stainless steel does offer lower wear and fatigue performance than carbon steel.</p>
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Application Specific	ISO/British Standard	Application
Application Specific Roller Chain	ISO/British Standard Roller Chain	Nomenclature
<p>Application Specific chain is designed for a particular use. Starting with a carbon steel or stainless steel base chain, attachments are added to provide specific functionality. Sapphire roller chain is available in the following application specific configurations:</p> <ul style="list-style-type: none"> • Agriculture Chain • Citrus Chain • Coupling Chain • Hollow Pin Chain • Material Transfer Chain 	<p>ISO/British Standard chain is produced to International Standards Organization metric dimensions (IS 606, BS228, DIN 8187) instead of ASME/ANSI. Commonly referred to as "ISO" or "British Standard" chain, it is available in the following configurations:</p> <ul style="list-style-type: none"> • Carbon Steel Chain • Stainless Steel Chain • Hollow Pin Chain 	Overview
12-19	20-23	Page #s

Carbon Steel Chain



S60 Carbon Steel Chain

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

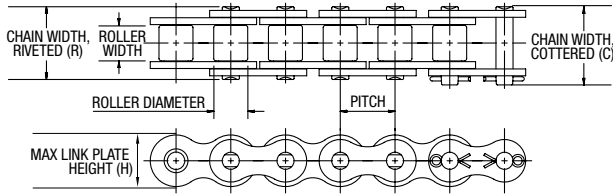
This section will address the following ASME/ANSI Carbon Steel chain types:

Standard Series	Standard roller chain that exceeds ASME/ANSI requirements.
Heavy Series	Heavy Series chain takes the Standard Series and adds thicker linkplates for increased fatigue resistance in applications involving heavy shocks, multiple start/stops, or reversing.
Double Pitch Transmission	Used 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, Double Pitch Conveyor Series chain is easily identified by its use of oval contour linkplates. Available with standard or oversized rollers.
Non-Standard Chain	Chain produced for select applications that do not fall under ASME/ANSI design standards.

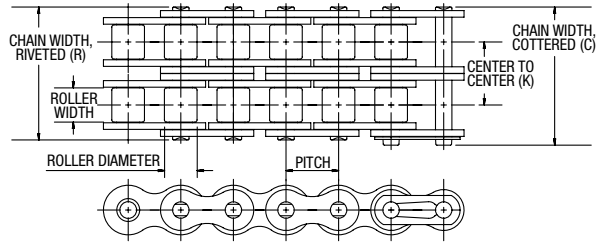
ASME/ANSI Standard Series Chain 25-200 Pitch: Single and Multiple Strand

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

Single Strand



Multiple Strand (-X suffix)



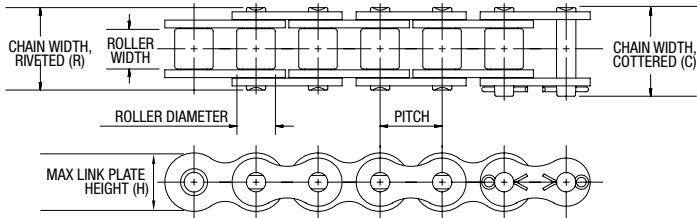
Sapphire Part Number	ASME/ANSI Size	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	H	Avg. Weight	Min. Tensile Strength	Horsepower Table
		in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
S25	25	0.250 6.35	0.125 3.18	*.130 3.30	0.090 2.29	0.030 0.76	0.370 9.40	0.340 8.64	-	0.228 5.80	0.0840 1.25	780 3.47	25
S35	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	-	0.346 8.80	0.210 0.31	1,760 7.83	26
S35-2	35-2	0.375 9.53	0.188 4.76	*.200 5.08	0.141 3.58	0.050 1.27	0.990 25.15	0.900 22.86	0.399 10.13	0.346 8.80	0.450 0.67	3,520 15.66	26
S40	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	-	0.472 12.00	0.410 0.61	3,125 13.90	27
S40-2	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	0.472 12.00	0.800 1.19	6,250 27.80	27
S40-3	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	0.472 12.00	1.200 1.79	9,375 41.70	27
S41	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	-	0.386 9.80	0.260 0.39	1,500 6.67	28
S50	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	-	0.591 15.00	0.680 1.01	4,880 21.71	29
S50-2	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	0.591 15.00	1.320 1.96	9,760 43.41	29
S50-3	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	0.591 15.00	1.980 2.95	14,640 65.12	29
S60	60	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.090 2.38	1.110 28.19	1.040 26.42	-	0.709 18.00	0.990 1.47	7,030 31.27	30
S60-2	60-2	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.090 2.38	2.010 51.05	1.940 49.28	0.897 22.78	0.709 18.00	1.950 2.90	14,060 62.54	30
S60-3	60-3	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.090 2.38	2.910 73.91	2.840 72.14	0.897 22.78	0.709 18.00	2.880 4.29	21,090 93.81	30
S80	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	-	0.949 24.10	1.730 2.57	12,500 55.60	31
S80-2	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	0.949 24.10	3.370 5.02	25,000 111.21	31
S100	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	-	1.185 30.10	2.510 3.74	19,530 86.87	32
S100-2	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	1.185 30.10	4.910 7.31	39,060 173.75	32
S120	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	-	1.425 36.20	3.690 5.49	28,125 125.11	33
S120-2	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	1.425 36.20	7.200 10.71	56,250 250.21	33
S140	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	-	1.661 42.20	5.000 7.44	38,280 170.28	34
S140-2	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	0.192 4.89	1.661 42.20	9.650 14.36	76,560 340.56	34
S160	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	-	1.898 48.20	6.530 9.72	50,000 222.41	35
S160-2	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	1.898 48.20	12.830 19.09	100,000 444.82	35
S200	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	-	2.374 60.30	10.650 15.85	78,125 347.52	36

*Chain is rollerless. Dimension shown is bushing diameter.

ASME/ANSI Heavy Series Chain 50-200H Pitch: Single Strand

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

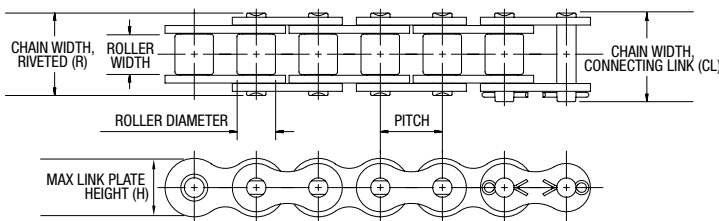
Heavy Series chains utilize linkplates with the thickness of the next larger size chain. The thicker linkplate material provides an increase in fatigue resistance for drives subject to heavy shock loads, multiple stops/starts, or reversing.



Sapphire Part Number	ASME/ANSI Size	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H	Avg. Weight	Min. 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
S50H	50H	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.094 2.39	0.930 23.62	0.860 21.84	0.591 15.00	0.850 1.26	5,886 26.18	n/a
S60H	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	0.709 18.00	1.180 1.76	7,030 31.27	37
S80H	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	0.949 24.10	2.020 3.01	12,500 55.60	38
S100H	100H	1.250 31.75	0.750 19.05	.750 19.05	0.375 9.53	0.187 4.75	1.860 47.24	1.740 44.20	1.185 30.10	2.820 4.20	19,530 86.87	39
S120H	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	1.425 36.20	4.080 6.07	28,125 125.11	40
S140H	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	1.661 42.20	5.400 8.04	38,280 170.28	41
S160H	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	1.898 48.20	7.030 10.46	50,000 222.41	42
S200H	200H	2.250 57.15	1.500 38.10	1.562 39.67	0.781 19.84	0.375 9.53	3.840 97.54	3.430 87.12	2.374 60.30	13.380 19.91	78,125 347.52	43

Non-Standard Chain

Sapphire Non-Standard chain does not fall under ASME/ANSI design standards and is intended for select applications only.



Sapphire Part Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	CL	R	Avg. Weight	Min. Tensile Strength
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
65 x 1/8	0.500 12.70	0.125 3.18	*0.306 7.77	0.141 3.58	0.040 1.02	0.460 11.68	0.420 10.67	0.180 0.27	2,050 9.12

*Chain is rollerless. Dimension shown is bushing diameter.

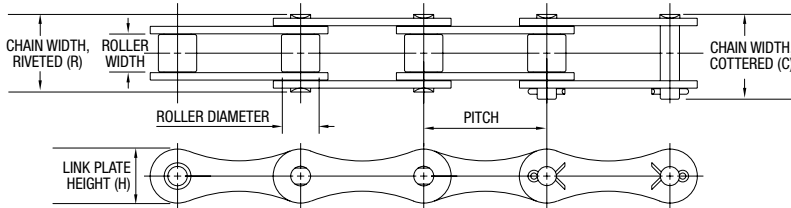
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ASME/ANSI Double Pitch Chain

Sapphire double pitch chains are built to ASME/ANSI B29.1 standards.

Power Transmission Roller Chain

Double Pitch Power Transmission roller chain utilizes figure eight style linkplates with a pitch twice that of Standard Series chains. Typical uses for these chains include light load drives commonly found in agricultural applications.

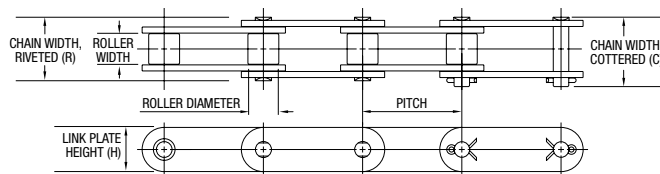


Sapphire Part Number	ASME/ANSI Size	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H	Avg. Weight	Min. Tensile Strength	Horsepower Table
		in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	page
S2040	2040	1.000	0.313	0.312	0.156	0.060	0.760	0.680	0.472	0.280	3,125	44
		25.40	7.94	7.92	3.96	1.52	19.30	17.27	12.00	0.42	13.90	
S2050	2050	1.250	0.375	0.400	0.200	0.080	0.920	0.840	0.591	0.520	4,880	45
		31.75	9.53	10.16	5.08	2.03	23.37	21.34	15.00	0.77	21.71	
S2060	2060	1.500	0.500	0.469	0.234	0.094	1.110	1.050	0.709	0.720	7,030	46
		38.10	12.70	11.91	5.94	2.39	28.19	26.67	18.00	1.07	31.27	

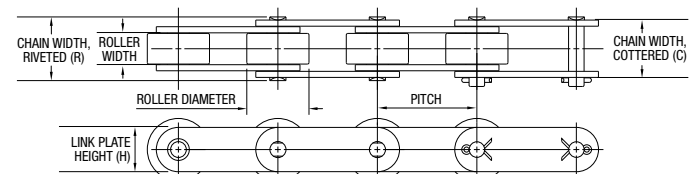
Conveyor Roller Chain

Double Pitch Conveyor roller chain utilize 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. Optional oversized rollers extend above and below the linkplates to produce a rolling rather than sliding action, thus minimizing friction and power requirements.

Standard Diameter Roller (SC20X0)



Oversized Diameter Roller (SC20X2)



Sapphire Part Number	ASME/ANSI Size	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H	Avg. Weight	Min. Tensile Strength
		in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
SC2040	C2040	1.000	0.313	0.312	0.156	0.060	0.760	0.680	0.472	0.340	3,125
		25.40	7.94	7.92	3.96	1.52	19.30	17.27	12.00	0.51	13.90
SC2042	C2042	1.000	0.313	0.625	0.156	0.060	0.760	0.680	0.472	0.500	3,125
		25.40	7.94	15.88	3.96	1.52	19.30	17.27	12.00	0.74	13.90
SC2050	C2050	1.250	0.375	0.400	0.200	0.080	0.920	0.840	0.591	0.580	4,880
		31.75	9.53	10.16	5.08	2.03	23.37	21.34	15.00	0.86	21.71
SC2052	C2052	1.250	0.375	0.750	0.500	0.080	0.920	0.840	0.591	0.810	4,880
		31.75	9.53	19.05	12.70	2.03	23.37	21.34	15.00	1.21	21.71
SC2060H	C2060H	1.500	0.500	0.469	0.234	0.125	1.250	1.180	0.709	1.050	7,030
		38.10	12.70	11.91	5.94	3.18	31.75	29.97	18.00	1.56	31.27
SC2062H	C2062H	1.500	0.500	0.875	0.234	0.125	1.250	1.180	0.709	1.420	7,030
		38.10	12.70	22.23	5.94	3.18	31.75	29.97	18.00	2.11	31.27
SC2080H	C2080H	2.000	0.625	0.625	0.312	0.156	1.570	1.450	0.949	1.400	12,500
		50.80	15.88	15.88	7.92	3.96	39.88	36.83	24.10	2.08	55.60

Corrosion and Moisture Resistant Roller Chain

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S60SS Stainless Steel Roller Chain

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

Nickel Plated Chain	Recommended for applications with high humidity or water exposure/washdown. Because water is the only 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. Nickel plating provides good protection against water and humidity. The nickel coating is applied to each part prior to assembly for uniform coverage.
Stainless Steel 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. Sapphire stainless steel roller chains use only 300 series stainless steel components for exceptional corrosion resistance, low magnetic permeability, and applicability in “non sparking” environments.

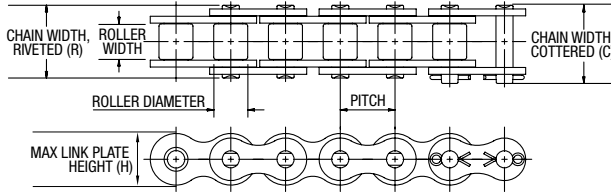
Corrosion/Moisture Resistant Chains

Sapphire Corrosion and Moisture Resistant chains are built to ASME/ANSI B29.1 standards.

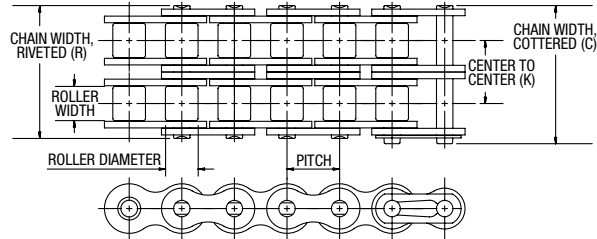
Nickel Plated

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. Offers good protection against water and humidity.

Single Strand



Multiple Strand (-X suffix)



Sapphire Part Number	ASME/ANSI Size	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	H	Avg. Weight lbs/ft kg/m	Min. Tensile Strength lbf kN	Horsepower Table page
		in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm			
S25NP	25	0.250 6.35	0.250 6.35	*.130 3.30	0.090 2.29	0.030 0.76	0.370 9.40	0.340 8.64	-	0.228 5.80	0.084 0.13	780 3.47	27
S35NP	35	0.375 9.53	0.250 6.35	*.200 5.08	0.141 3.58	0.050 1.27	0.560 14.22	0.500 12.70	-	0.346 8.80	0.220 0.33	1,760 7.83	28
S40NP	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	-	0.472 12.00	0.420 0.63	3,125 13.90	29
S40-2NP	40-2	0.500 12.70	0.313 7.94	0.342 8.69	0.156 3.96	0.060 1.52	1.290 32.77	1.250 31.75	0.566 14.38	0.472 12.00	0.800 1.19	6,250 27.80	29
S41NP	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	-	0.386 9.80	0.260 0.39	1,500 6.67	30
S50NP	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	-	0.591 15.00	0.680 1.01	4,880 21.71	31
S50-2NP	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	0.591 15.00	1.320 1.96	9,760 43.41	31
S60NP	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 26.42	-	0.709 18.00	0.990 1.47	7,030 31.27	32
S80NP	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	-	0.949 24.10	1.725 2.57	12,500 55.60	33

*Chain is rollerless. Dimension shown is bushing diameter.

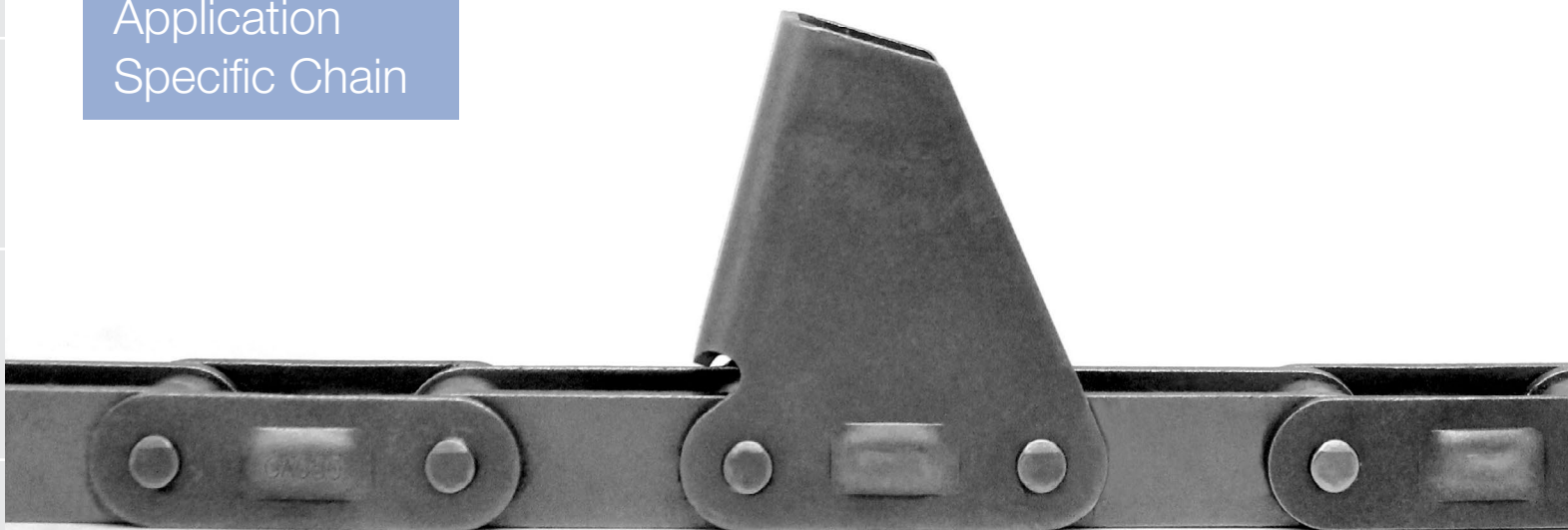
Stainless Steel

Stainless steel, because of its natural corrosion resistance, is the recommended chain material for applications involving exposure to chemicals or acids. However, stainless steel is softer than carbon steel so wear, fatigue, and tensile performance is reduced.

Sapphire Part Number	ASME/ANSI Size	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	K	H	Avg. Weight lbs/ft kg/m	Min. Tensile Strength lbf kN
		in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		
S25SS	25	0.250 6.35	0.250 6.35	*.130 3.30	0.090 2.29	0.030 0.76	0.370 9.40	0.340 8.64	-	0.228 5.80	0.084 0.13	540 2.40
S35SS	35	0.375 9.53	0.250 6.35	*.200 5.08	0.141 3.58	0.050 1.27	0.560 14.22	0.500 12.70	-	0.346 8.80	0.225 0.33	1,256 5.59
S40SS	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	-	0.472 12.00	0.420 0.63	2,203 9.80
S40-2SS	40-2	0.500 12.70	0.313 7.94	.342 8.69	0.156 3.96	0.060 1.52	1.290 32.77	1.240 31.50	0.566 14.38	0.472 12.00	0.826 1.23	4,400 19.57
S50SS	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	-	0.591 15.00	0.680 1.01	3,525 15.68
S50-2SS	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	0.591 15.00	1.400 2.08	7,050 31.36
S60SS	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 26.42	-	0.709 18.00	0.990 1.47	5,070 22.55
S60-2SS	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	0.709 18.00	1.936 2.88	10,100 44.93
S80SS	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	-	0.949 24.10	1.725 2.57	9,035 40.19

*Chain is rollerless. Dimension shown is bushing diameter.

Application
Specific Chain



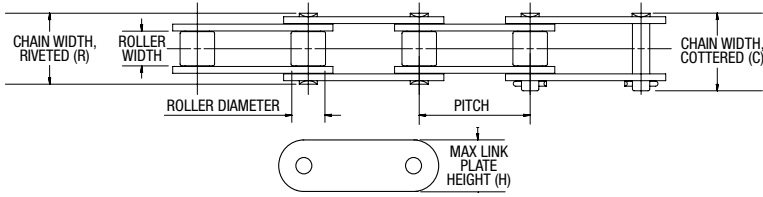
CA550 Agriculture Chain with C17E Corn Header Attachment

Sapphire Series chain is also available in a variety of application-specific configurations. While often including attachments, this section differs from the prior by being highly specialized to a specific application.

Agricultural Chain	Double pitch chain with attachments for specific agriculture applications.
Citrus Chain	Conveyor Series chain with modified extended pins, used for citrus product sortation and conveyance.
Coupling Chain	Roller chain designed to work in concert with drive couplings to efficiently transfer power.
Hollow Pin Chain	Roller chain with special hollow pins for mounting specially designed attachments.
Material Transfer Chain	Chain used in low speed applications (e.g. lumber processing) for material transport.

Agriculture Chains

Agriculture chain is double pitch chain specifically designed for agriculture applications. This page details the base chain, with attachments addressed in the following pages.



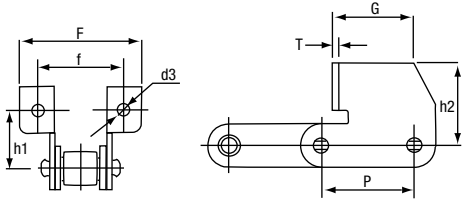
Sapphire Part Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H	Avg. Weight	Min. Tensile Strength	Available Attachments
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN	
Conveyor Series											
CA550	1.630 41.40	0.797 20.24	0.656 16.66	0.283 7.19	0.105 2.67	1.563 39.69	1.375 34.93	0.795 20.20	1.300 1.93	12,125 53.93	✓
CA555	1.630 41.40	0.500 12.70	0.656 16.66	0.283 7.19	0.125 3.18	1.250 31.75	1.188 30.16	0.795 20.20	1.210 1.80	13,228 58.84	✓
CA557	1.630 41.40	0.797 20.24	0.700 17.78	0.315 8.00	0.125 3.18	1.594 40.48	1.469 37.31	0.878 22.30	1.720 2.56	16,535 73.55	-
CA620	1.654 42.01	0.984 25.00	0.696 17.68	0.283 7.19	0.125 3.18	1.844 46.83	1.641 41.67	0.795 20.20	1.570 2.34	13,228 58.84	✓

Stock subject to sale. Minimum order may be required. Contact customer service for availability.

Agriculture Chain Available Attachments

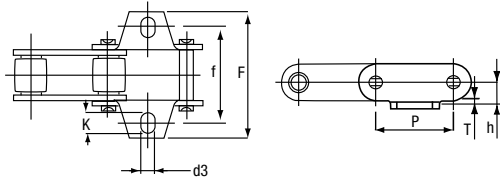
CA550 Attachments

F4 Application: grain elevators, return elevators, flight conveyors, grain handling



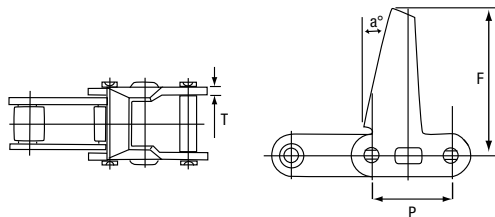
P	f	F	h1	h2	T	d3	G
in	in	in	in	in	in	in	in
1.630	1.874	2.689	1.220	1.689	0.106	0.343	1.453
41.40	47.60	68.30	31.00	42.90	2.70	8.70	36.90

K1 Application: combine feeder house, conveyors, grain elevators, bucket elevators, sugar processing



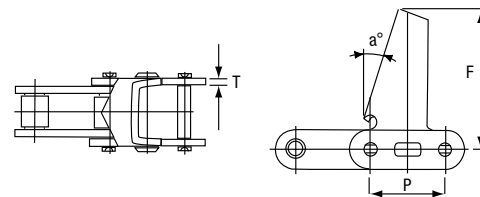
P	f	F	h	d3	K	T
in	in	in	in	in	in	in
1.630	2.126	2.559	0.520	0.327	0.417	0.106
41.40	54.00	65.00	13.20	8.30	10.60	2.70

CPE Application: corn header gathering



P	a°	T	f
in	degrees	in	in
1.630	10°	0.106	2.500
41.40	10°	2.70	63.50

C17E Application: corn header gathering

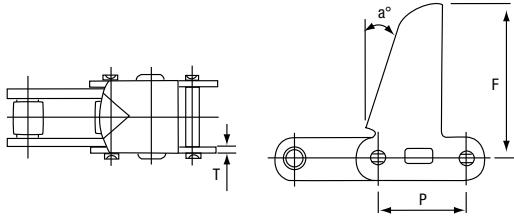


P	a°	T	f
in	degrees	in	in
1.630	19°	0.106	3.000
41.40	19°	2.70	76.20

Agriculture Chain Available Attachments

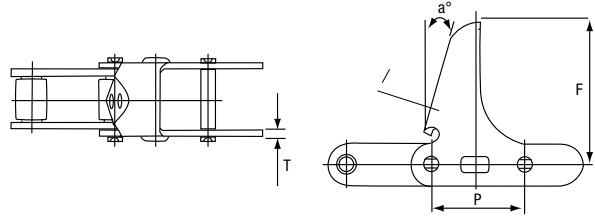
CA550 Attachments (cont.)

C11E Application: corn header gathering



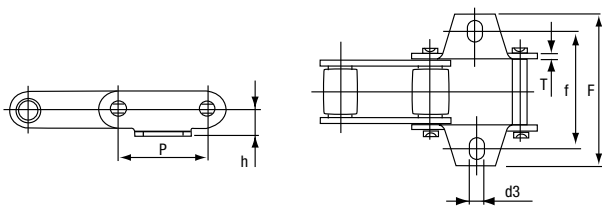
	P	a°	T	f
	in mm	degrees	in mm	in mm
C11E	1.630 41.40	15°	0.106 2.70	2.500 63.50

C6E Application: corn header gathering



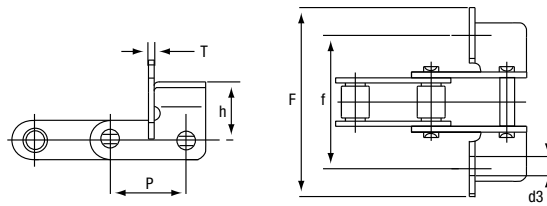
	P	a°	T	f
	in mm	degrees	in mm	in mm
	1.630 41.40	15°	0.106 2.70	2.189 55.60

K19 Application: combine feeder house



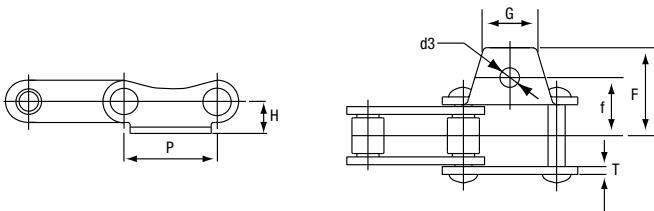
P	f	F	h	d3	T
in mm	in mm	in mm	in mm	in mm	in mm
1.630 41.40	2.000 50.80	2.811 71.40	0.500 12.70	0.266 6.75	0.106 2.70

F1 Application: return elevators,
flight conveyors, grain handling



P	f	F	h	d3	T
in mm	in mm	in mm	in mm	in mm	in mm
1.630 41.40	3.126 79.40	4.126 104.80	1.252 31.80	0.327 8.30	0.106 2.70

A19 Application: corn header gathering, conveyors, elevator feed stations, combine feeder house, forage harvesters, forage baggers, grain handling, manure spreaders

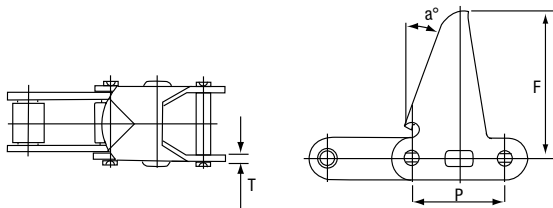


P	f	F	H	d3	K	T
in mm	in mm	in mm	in mm	in mm	in mm	in mm
1.630 41.40	1.000 25.40	1.500 38.10	0.500 12.70	0.874 22.20	0.264 6.70	0.106 2.70

Agriculture Chain Available Attachments

CA555 Attachments

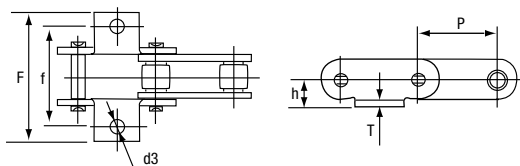
C6E Application: corn header gathering



P	a°	T	F
in mm	degrees	in mm	lbs kg
1.630 41.40	15°	0.126 3.20	2.500 63.50

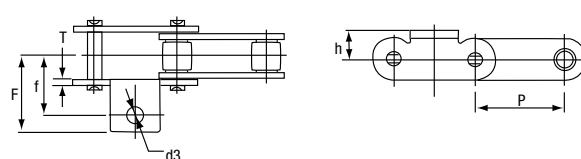
CA620 Attachments

K1 Application: combine feeder house, conveyors, grain elevators, bucket elevators, sugar processing



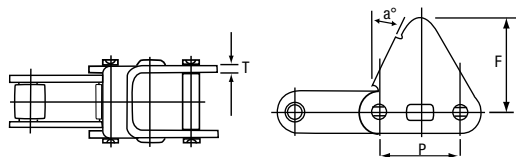
P	f	F	h	d3	T
in mm	in mm	in mm	in mm	in mm	in mm
1.654 42.01	2.469 62.70	3.157 80.20	0.453 11.50	0.266 6.75	0.126 3.20

A1 Application: conveyors, corn header gathering, elevator feed stations, combine feeder house, forage harvesters, forage baggers, grain handling, manure spreaders



P	f	F	h	d3	T
in mm	in mm	in mm	in mm	in mm	in mm
1.654 42.01	1.236 31.40	1.579 40.10	0.453 11.50	0.148 3.75	0.126 3.20

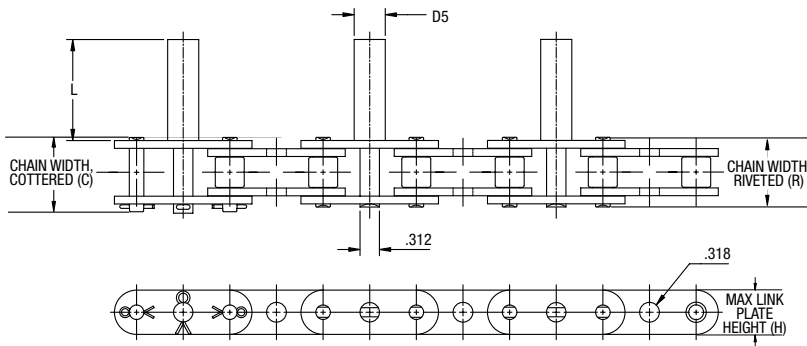
C30E Application: corn header gathering



P	a°	T	f
in mm	degrees	in mm	in mm
1.579 40.10	22.5	0.126 3.20	2.311 58.70

Citrus Chain

Citrus chain is specifically designed for the conveyance of citrus product. Based on the SC2060H conveyor series chain, citrus chain has specially designed extended pins that are used to sort and convey fruit through the production process. Two different pin sizes are available; specify on order as type 1 or type 2.



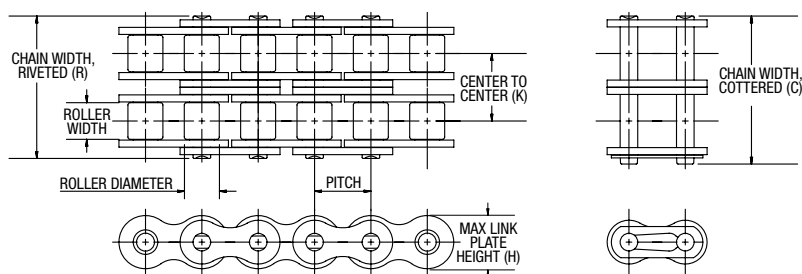
Type	D5	L
	in mm	in mm
1	0.5 12.70	1.625 41.28
2	0.5625 14.29	1.625 41.28

Sapphire Part Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H	Avg. Weight	Min. Tensile Strength
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbs kN
Carbon Steel										
SC2060H C	1.500 38.10	0.495 12.57	0.469 11.91	0.234 5.94	0.125 3.18	1.250 31.75	1.180 29.97	0.709 18.00	1.050 1.56	7,030 31.27
Carbon Steel, Nickel Plated										
SC2060HNP C	1.500 38.10	0.495 12.57	0.469 11.91	0.234 5.94	0.125 3.18	1.250 31.75	1.180 29.97	0.709 18.00	1.050 1.56	7,030 31.27
Stainless Steel										
SC2060HSS C	1.500 38.10	0.495 12.57	0.469 11.91	0.234 5.94	0.125 3.18	1.250 31.75	1.180 29.97	0.709 18.00	1.030 1.53	5,730 25.49

Stock subject to sale. Minimum order may be required. Contact customer service for availability.

Coupling Chain

Coupling chain is specifically designed to work in concert with drive couplings to provide near-seamless power transmission. Note: Sapphire coupling chains use standard connecting links. Only Diamond Series coupling chains use the single-coupling bolt for easier assembly/disassembly.

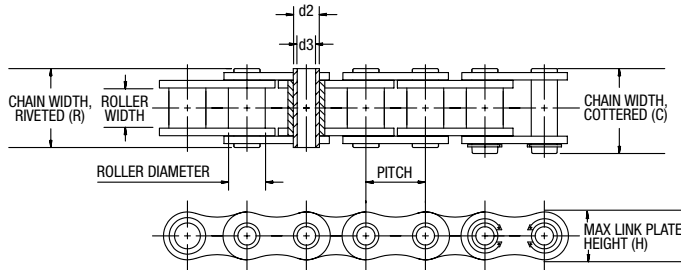


Sapphire Part Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Linkplate Thickness	C	R	H	Avg. Weight	Length Pitches
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	Pitches
S4012	0.500 12.70	0.312 7.92	0.312 7.92	0.156 3.96	0.050 1.27	1.297 32.94	1.240 31.50	0.566 14.38	0.410 0.61	12
S4016	0.500 12.70	0.312 7.92	0.312 7.92	0.156 3.96	0.050 1.27	1.297 32.94	1.240 31.50	0.566 14.38	0.550 0.82	16
S5016	0.625 15.88	0.375 9.53	0.400 10.16	0.200 5.08	0.080 2.03	1.592 40.44	1.550 39.37	0.713 18.11	1.120 1.67	16
S5018	0.625 15.88	0.375 9.53	.400 10.16	0.200 5.08	0.080 2.03	1.592 40.44	1.550 39.37	0.713 18.11	1.260 1.88	18
S6018	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	1.980 50.29	1.940 49.28	0.897 22.78	2.160 3.21	18
S6020	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	1.980 50.29	1.940 49.28	0.897 22.78	2.400 3.57	20
S6022	0.750 19.05	0.500 12.70	0.469 11.91	0.234 5.94	0.094 2.39	1.980 50.29	1.940 49.28	0.897 22.78	2.640 3.93	22
S8018	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	2.567 65.20	2.470 62.74	1.153 29.29	5.000 7.44	18
S8020	1.000 25.40	0.625 15.88	0.625 15.88	0.312 7.92	0.125 3.18	2.567 65.20	2.470 62.74	1.153 29.29	5.560 8.27	20
S10018	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	3.162 80.31	3.020 76.71	1.408 35.76	9.240 13.75	18
S10020	1.250 31.75	0.750 19.05	0.750 19.05	0.375 9.53	0.156 3.96	3.162 80.31	3.020 76.71	1.408 35.76	10.300 15.33	20
S12018	1.500 38.10	0.875 22.23	0.875 22.23	0.437 11.10	0.187 4.75	3.977 101.02	3.970 100.84	1.789 45.44	16.200 24.11	18
S12022	1.500 38.10	0.875 22.23	0.875 22.23	0.437 11.10	0.187 4.75	3.977 101.02	3.970 100.84	1.789 45.44	19.800 29.47	22

Stock subject to sale. Minimum order may be required. Contact customer service for availability.

ASME/ANSI Hollow Pin Chain 40-80 Pitch, C2040-C2082H

Light duty chain used in bakery applications or where the customer is wanting to add their own attachments.

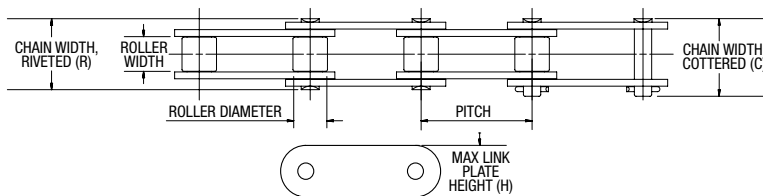


Sapphire Part Number	Pitch	Roller Width	Roller Diameter	Pin Outer Diameter d2	Pin Inner Diameter d3	Linkplate Height H	Linkplate Thickness	C	R	H	Avg. Weight	Min. Tensile Strength
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbs/ft kg/m	lbf kN
40HP	0.500 12.70	0.309 7.85	0.312 7.92	0.222 5.64	0.157 3.99	0.472 11.99	0.059 1.50	0.693 17.60	0.650 16.51	0.472 12.00	0.390 0.58	2,205 9.81
50HP	0.625 15.88	0.370 9.40	0.400 10.16	0.277 7.04	0.202 5.13	0.594 15.09	0.079 2.01	0.862 21.89	0.815 20.70	0.591 15.00	0.637 0.95	4,079 18.14
60HP	0.750 19.05	0.495 12.57	0.469 11.91	0.327 8.31	0.236 5.99	0.709 18.01	0.094 2.39	1.055 26.80	1.016 25.81	0.709 18.00	0.939 1.40	5,732 25.50
80HP	1.000 25.40	0.620 15.75	0.625 15.88	0.449 11.40	0.317 8.05	0.945 24.00	0.126 3.20	1.331 33.81	1.280 32.51	0.945 24.00	1.697 2.53	11,023 49.03
C2040HP	1.000 25.40	0.309 7.85	0.312 7.92	0.222 5.64	0.157 3.99	0.472 11.99	0.059 1.50	0.693 17.60	0.650 16.51	0.472 12.00	0.305 0.45	2,205 9.81
C2050HP	1.250 31.75	0.370 9.40	0.400 10.16	0.284 7.21	0.202 5.13	0.591 15.01	0.079 2.01	0.862 21.89	0.815 20.70	0.591 15.00	0.500 0.74	4,079 18.14
C2060HP	1.500 38.10	0.495 12.57	0.469 11.91	0.327 8.31	0.236 5.99	0.669 16.99	0.094 2.39	1.055 26.80	1.015 25.78	0.669 17.00	0.930 1.38	5,732 25.50
C2062HHP	1.500 38.10	0.495 12.57	0.875 22.23	0.327 8.31	0.236 5.99	0.669 16.99	0.126 3.20	1.055 26.80	1.015 25.78	0.669 17.00	1.300 1.93	5,732 25.50
C2080HP	2.000 50.80	0.620 15.75	0.625 15.88	0.449 11.40	0.317 8.05	0.945 24.00	0.126 3.20	1.331 33.81	1.280 32.51	0.945 24.00	1.210 1.80	11,023 49.03
C2082HHP	2.000 50.80	0.620 15.75	1.125 28.58	0.449 11.40	0.317 8.05	0.945 24.00	0.156 3.96	1.480 37.59	1.425 36.20	0.945 24.00	1.580 2.35	12,125 53.94

Stock subject to sale. Minimum order may be required. Contact customer service for availability.

Material Transfer Chain

Chain used in low speed applications (e.g. lumber processing) for material transport.



Sapphire Part Number	Pitch	Roller Width	Roller Diameter	Pin Diameter	Roller Linkplate Thickness (T)	Pin Linkplate Thickness (t)	C	R	H	Min. Tensile
	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	lbf kN
S81X	2.609 66.27	1.063 27.00	0.906 23.00	0.438 11.12	0.157 4.00	0.157 4.00	2.106 53.50	1.929 49.00	1.122 28.50	24,030 106.89
S81XH	2.609 66.27	1.094 27.78	0.906 23.00	0.438 11.12	0.311 7.90	0.217 5.50	2.563 65.10	2.390 60.70	1.234 31.35	34,171 152.00
S81XHH	2.609 66.27	1.094 27.78	0.906 23.00	0.438 11.12	0.311 7.90	0.311 7.90	2.756 70.00	2.583 65.60	1.234 31.35	42,990 191.23

Stock subject to sale. Minimum order may be required. Contact customer service for availability.

ISO/British Standard Roller Chain



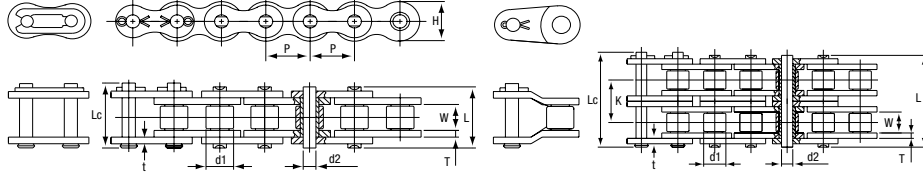
12B British Standard / ISO Roller Chain

Sapphire roller chain offers the following configurations of roller chain that adhere to the International Standards Organization metric dimensions (IS 606, BS228, DIN 8187) for dimensions, interchangeability, and sprocket fit.

Carbon Steel Chain	Carbon Steel ISO/British Standard roller chain offers superior wear and fatigue performance in industrial applications.
Stainless Steel Chain	Stainless Steel ISO/British Standard roller chain is intended for applications involving frequent water washdowns or exposure to chemicals, such as food and beverage, packaging, meat processing, baking, fertilizer, pharmaceutical or medical applications.
Hollow Pin Chain	Roller chain with special hollow pins for mounting specially designed attachments.

ISO/British Standard Chains, Carbon Steel

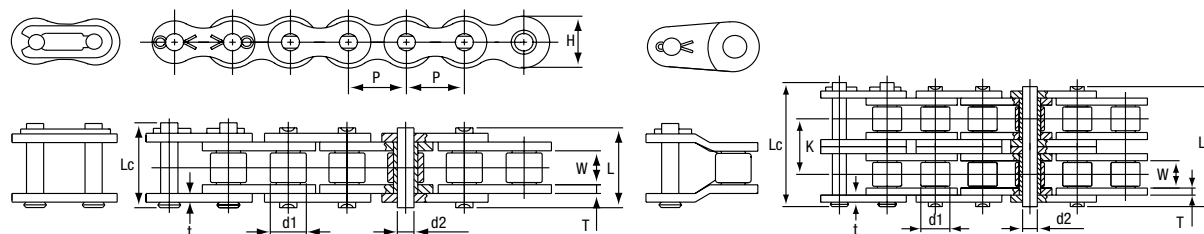
Sapphire ISO/British Standard carbon steel chain is manufactured to the International Standards Organization metric dimensions (IS 606, BS228, DIN 8187) for dimensions, interchangeability, and sprocket fit.



Sapphire/ISO Part Number	Pitch	Roller Width (W)	Roller Diameter (d1)	Pin Diameter (d2)	Roller Linkplate Thickness (T)	Pin Linkplate Thickness (t)	Chain Width Cotted (Lc)	Chain Width Riveted (L)	Center to Center (K)	Max. Linkplate Height (H)	Avg. Weight	Min. Tensile Strength
	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg/m lbs/ft	kN lbf
05B-1	8.00 0.315	3.00 0.118	5.00 0.197	2.31 0.091	0.85 0.033	0.85 0.033	11.70 0.461	8.60 0.339	-	7.10 0.280	0.22 0.150	4.90 1,102
06B-1	9.53 0.375	5.72 0.225	6.35 0.250	3.28 0.129	1.40 0.055	1.10 0.043	16.80 0.661	13.50 0.531	-	8.20 0.323	0.45 0.300	8.92 2,006
06B-2	9.53 0.375	5.72 0.225	6.35 0.250	3.28 0.129	1.40 0.055	1.10 0.043	27.10 1.067	23.80 0.937	10.24 0.403	8.20 0.323	0.80 0.540	16.97 3,814
08B-1	12.70 0.500	7.75 0.305	8.51 0.335	4.45 0.175	1.50 0.059	1.50 0.059	20.70 0.815	17.00 0.669	-	11.80 0.465	0.74 0.500	17.85 4,012
08B-2	12.70 0.500	7.75 0.305	8.51 0.335	4.45 0.175	1.50 0.059	1.50 0.059	34.90 1.374	31.00 1.220	13.92 0.548	11.80 0.465	1.40 0.940	31.19 7,011
08B-3	12.70 0.5	7.75 0.305	8.51 0.335	4.45 0.175	1.50 0.059	1.50 0.059	48.80 1.921	44.90 1.768	13.92 0.548	11.80 0.465	1.99 1.340	44.62 10,031
10B-1	15.88 0.625	9.65 0.380	10.16 0.400	5.08 0.200	1.70 0.067	1.70 0.067	23.70 0.933	19.60 0.772	-	14.70 0.579	0.95 0.640	22.26 5,004
10B-2	15.88 0.625	9.65 0.380	10.16 0.400	5.08 0.200	1.70 0.067	1.70 0.067	40.30 1.587	36.20 1.425	16.59 0.653	14.70 0.579	1.88 1.260	44.62 10,031
10B-3	15.88 0.625	9.65 0.380	10.16 0.400	5.08 0.200	1.70 0.067	1.70 0.067	56.90 2.240	52.80 2.079	16.59 0.653	14.70 0.579	2.80 1.880	67.18 15,102
12B-1	19.05 0.750	11.68 0.460	12.07 0.475	5.72 0.225	1.80 0.071	1.80 0.071	27.30 1.075	22.70 0.894	-	16.10 0.634	1.19 0.800	28.93 6,504
12B-2	19.05 0.750	11.68 0.460	12.07 0.475	5.72 0.225	1.80 0.071	1.80 0.071	46.80 1.843	42.20 1.661	19.46 0.766	16.10 0.634	2.34 1.570	57.86 13,007
12B-3	19.05 0.750	11.68 0.460	12.07 0.475	5.72 0.225	1.80 0.071	1.80 0.071	65.50 2.579	60.90 2.398	19.46 0.766	16.10 0.634	3.79 2.550	86.79 19,511
16B-1	25.40 1.000	17.02 0.670	15.88 0.625	8.28 0.326	4.00 0.157	3.00 0.118	41.50 1.634	36.10 1.421	-	21.00 0.827	2.72 1.830	60.11 13,514
16B-2	25.40 1.000	17.02 0.670	15.88 0.625	8.28 0.326	4.00 0.157	3.00 0.118	73.40 2.890	68.00 2.677	31.88 1.255	21.00 0.827	5.37 3.610	106.11 23,854
16B-3	25.40 1.000	17.02 0.670	15.88 0.625	8.28 0.326	4.00 0.157	3.00 0.118	105.30 4.146	99.90 3.933	31.88 1.255	21.00 0.827	7.98 5.360	161.81 36,376
20B-1	31.75 1.250	19.56 0.770	19.05 0.750	10.19 0.401	4.50 0.177	3.50 0.138	49.30 1.941	43.20 1.701	-	26.40 1.039	3.88 2.610	95.12 21,385
20B-2	31.75 1.250	19.56 0.770	19.05 0.750	10.19 0.401	4.50 0.177	3.50 0.138	85.80 3.378	79.70 3.138	36.45 1.435	26.40 1.039	7.66 5.150	170.15 38,250
20B-3	31.75 1.250	19.56 0.770	19.05 0.750	10.19 0.401	4.50 0.177	3.50 0.138	122.10 4.807	116.00 4.567	36.45 1.435	26.40 1.039	11.46 7.700	250.56 56,328
24B-1	38.10 1.5	25.40 1.000	25.40 1.000	14.63 0.576	6.00 0.236	5.00 0.197	60.0 2.362	53.40 2.102	-	33.40 1.315	7.07 4.750	160.14 36,001
24B-2	38.10 1.500	25.40 1.000	25.40 1.000	14.63 0.576	6.00 0.236	5.00 0.197	107.60 4.236	101.00 3.976	48.36 1.904	33.40 1.315	13.97 9.390	280.27 63,008
24B-3	38.10 1.500	24.40 1.000	25.40 1.000	14.63 0.576	6.00 0.236	5.00 0.197	156.60 6.165	150.00 5.906	48.36 1.904	33.40 1.315	21.76 14.620	431.49 97,003
28B-1	44.45 1.750	27.94 1.100	27.94 1.100	15.90 0.626	7.40 0.291	6.40 0.252	72.50 2.854	65.10 2.563	-	37.00 1.457	9.45 6.350	200.15 44,996
28B-2	44.45 1.750	27.94 1.100	27.94 1.100	15.90 0.626	7.40 0.291	6.40 0.252	131.40 5.173	124.00 4.882	59.56 2.345	37.00 1.457	18.80 12.630	360.30 80,998
28B-3	44.45 1.750	27.94 1.100	27.94 1.100	15.90 0.626	7.40 0.291	6.40 0.252	191.40 7.535	184.00 7.244	59.56 2.345	37.00 1.457	28.20 18.950	530.54 119,270
32B-1	50.80 2.000	30.99 1.220	29.21 1.150	17.81 0.701	7.00 0.276	6.00 0.236	75.30 2.965	67.40 2.654	-	42.20 1.661	10.25 6.890	250.27 56,262
32B-2	50.80 2.000	30.99 1.220	29.21 1.150	17.81 0.701	7.00 0.276	6.00 0.236	133.90 5.272	126.00 4.961	58.55 2.305	42.20 1.661	20.11 13.510	450.32 101,236
32B-3	50.80 2.000	30.99 1.220	29.21 1.150	17.81 0.701	7.00 0.276	6.00 0.236	194.90 7.673	187.00 7.362	58.55 2.305	42.20 1.661	29.91 20.100	670.77 150,796

ISO/British Standard Chains, Stainless Steel

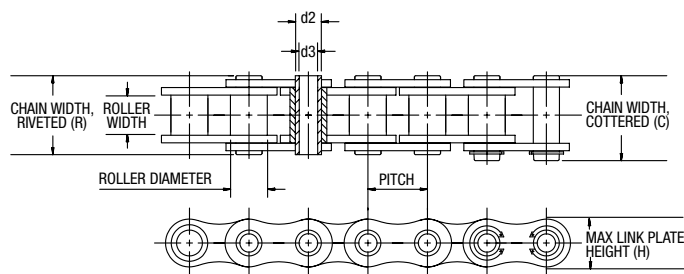
Sapphire ISO/British Standard stainless steel chain is manufactured to the International Standards Organization metric dimensions (IS 606, BS228, DIN 8187) for dimensions, interchangeability, and sprocket fit.



Sapphire/ISO Part Number	Pitch	Roller Width (W)	Roller Diameter (d1)	Pin Diameter (d2)	Roller Linkplate Thickness (T)	Pin Linkplate Thickness (t)	Chain Width Cottered (LC)	Chain Width Riveted (L)	Max. Linkplate Height (H)	Avg. Weight	Min. Tensile Strength
	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg/m lbs/ft	kN lbf
06BSS	9.53 0.375	5.72 0.225	6.35 0.25	3.28 0.129	1.40 0.055	1.10 0.043	16.80 0.661	13.50 0.531	8.20 0.323	0.45 0.3	6.28 1,411
08BSS	12.70 0.5	7.75 0.305	8.51 0.335	4.45 0.175	1.50 0.059	1.50 0.059	20.70 0.815	17.00 0.669	11.80 0.465	0.74 0.5	12.26 2,756
10BSS	15.88 0.625	9.65 0.38	10.16 0.4	5.08 0.2	1.70 0.067	1.70 0.067	23.70 0.933	19.60 0.772	14.70 0.579	0.95 0.64	16.18 3,638
12BSS	19.05 0.75	11.68 0.46	12.07 0.475	5.72 0.225	1.80 0.071	1.80 0.071	27.30 1.075	22.70 0.894	16.10 0.634	1.19 0.8	20.59 4,630
16BSS	25.40 1	17.02 0.67	15.88 0.625	8.28 0.326	4.00 0.157	3.00 0.118	41.50 1.634	36.10 1.421	21.00 0.827	2.72 1.83	42.17 9,480

ISO/British Standard Hollow Pin Chain 08B-12B

Light duty chain used in bakery applications or when the customer is wanting to add their own attachments.



Sapphire Part Number	Pitch	Roller Width	Roller Diameter	Pin Outer Diameter (d2)	Pin Inner Diameter (d3)	Linkplate Height (H)	Linkplate Thickness	C	R	Avg. Weight	Min. Tensile Strength
	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg/m lbs/ft	kN lbf
08BHP	12.70 0.500	7.75 0.305	8.51 0.335	6.60 0.260	4.50 0.177	11.80 0.465	1.50 0.059	19.50 0.768	17.00 0.669	0.52 0.347	9.32 2,094
10BHP	15.88 0.625	9.65 0.380	10.16 0.400	7.02 0.276	5.13 0.202	14.70 0.579	1.70 0.067	20.50 0.807	19.50 0.768	0.83 0.560	10.30 2,315
12BHP	19.05 0.750	12.57 0.495	11.91 0.469	8.31 0.327	5.99 0.236	16.10 0.709	1.80 0.094	23.90 1.055	22.70 1.016	1.03 0.700	14.71 3,307

Stock subject to sale. Minimum order may be required. Contact customer service for availability.

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Horsepower Tables



S60 Carbon Steel Roller Chain

The horsepower rating tables found on the following pages cover the following ASME/ANSI series roller chains: standard series, heavy series, and double pitch.

The horsepower table section is divided as follows:

25-36	Standard Series chain
37-43	Heavy Series chain
44-46	Double pitch 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.

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																											

#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																											

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

#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

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

#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

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

#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	4.08	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

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																								
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																								
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	145.8							
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												

#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											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	43.20					
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	73.76						
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											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	33.70					
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	52.73						
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											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												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												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	32.41			
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	83.72					
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	107.56						
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	212.60								
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	316.63									
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	489.10										
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											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	62.43					
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	87.50						
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	163.97								
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	219.78									
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	361.58										
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											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)									

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)									

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	4.06			
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)											

#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)											

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)											

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)											

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)													

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)													

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)											

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)											

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)

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)

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)											

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)											

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)										

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)										

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	7.79	7.90				
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	5.80	5.90				
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									

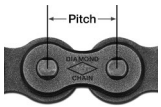
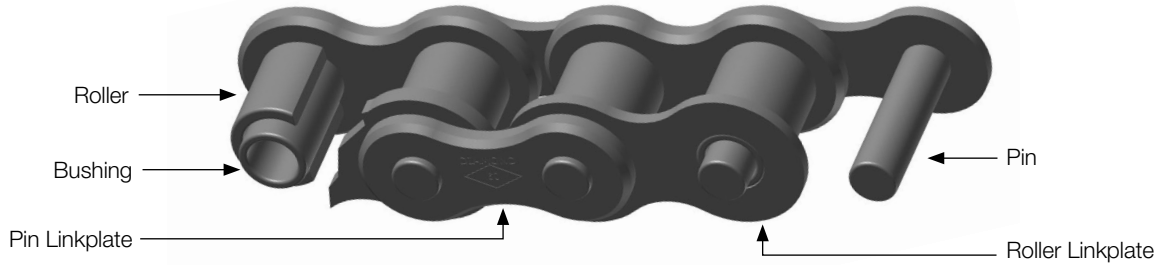
#2060 Double Pitch Roller Chain - Metric Units (Kilowatts)

# 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									

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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 Sapphire Roller Chain logo (RSC) and chain 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.

Single and Multiple Strand Component Identification

Single 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. Standard with slip fit cover linkplates. Open-ended spring clip standard.



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 plates are standard for single strand chain, press fit cover plates are standard for multiple strand chain.






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.




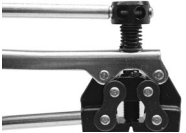


Two-Pitch Offset Link - Similar to a single-pitch offset link except assembled into the chain. Press fit construction increases rigidity, reliability, and durability and is recommended over the single-pitch offset link. For single strand chain only.

Chain Assembly and Disassembly Tools

Connecting Tools

	<p>CT35 Connecting Tool - Small For use with ANSI 35 through 60H or ISO/British Standard 05B through 12B roller chain.</p>
	<p>CT80 Connecting Tool - Large For use with ANSI 80 through 240 or ISO/British Standard 16B through 48B single strand chain and most conveyor and engineered chains with a width of 5/8" (15.9mm) or wider between the inside links. For multi-strand chains, a second connecting tool will aid in the alignment of the chain.</p>
	<p>CT80-Cable Cable Connecting Tool - Large For use with ANSI 80 through 240 or ISO/British Standard 16B through 48B single strand, multi-strand and double-pitch chain, and most conveyor and engineered chains with a width of 5/8" (15.9mm) or wider between the inside links. This tool holds the ends of a chain together during the connection process.</p>

Pin Extractor Tools

	<p>PE113 Pin Extractor - Small For use with ANSI 25 through 60H or ISO/British Standard 05B through 12B roller chain.</p>
	<p>PE135 Pin Extractor - Large For use with ANSI 80 through 100H or ISO/British Standard 16B through 20B roller chain.</p>
	<p>PERE157 Pin Extractor - Extra Large For use with ANSI 120 through 160 or ISO/British Standard 24B through 32B roller chain.</p>
	<p>PE-MAX Pin Extractor - High Speed For use with ANSI 25 through 80 or ISO/British Standard 05B through 16B roller chain. Specify ANSI or ISO/British Standard when ordering.</p>

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

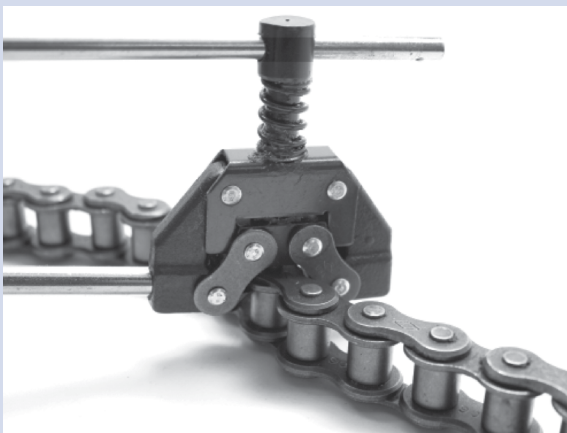
PE113, PE135 & PERE157

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:



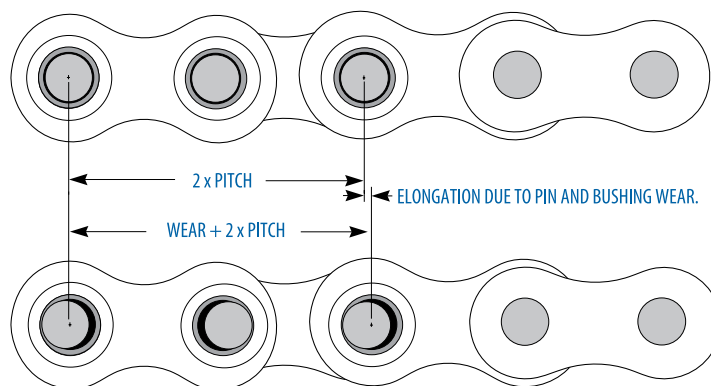
Reference www.timken.com/warnings for a complete list of cautions and warnings.

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 Diamond 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) as the chain will not engage the sprockets properly and damage to the sprockets may occur.

Chain Wear Elongation Limits							
ANSI Chain No.	Chain Pitch		Pitches	Measured Length			
				Nominal		At 3% Wear	
	Inch	mm		Inch	mm	Inch	mm
25	0.250	6.35	48	12	305	12.375	314
35	0.375	9.52	32	12	305	12.375	314
41	0.500	12.70	24	12	305	12.375	314
40	0.500	12.70	24	12	305	12.375	314
50	0.625	15.88	20	12.5	318	12.875	327
60	0.750	19.05	16	12	305	12.375	314
80	1.000	25.40	12	12	305	12.375	314
100	1.250	31.75	20	25	635	25.750	654
120	1.500	38.10	16	24	610	24.719	628
140	1.750	44.45	14	24.5	622	25.250	641
160	2.000	50.80	12	24	610	24.719	628
200	2.500	63.50	10	25	635	27.750	654
ISO/BS Chain No	Chain Pitch		Pitches	Nominal		At 3% Wear	
	Inch	mm		Inch	mm	Inch	mm
06B	0.375	9.52	32	12	305	12.375	314
08B	0.500	12.70	24	12	305	12.375	314
10B	0.625	15.88	20	12.5	318	12.875	327
12B	0.750	19.05	16	12	305	12.375	314
16B	1.000	25.40	12	12	305	12.375	314
20B	1.250	31.75	20	25	635	25.750	654
24B	1.500	38.10	16	24	610	24.719	628
28B	1.750	44.45	14	24.5	622	25.250	641
32B	2.000	50.80	12	24	610	24.719	628

How To Measure Chain Wear

1 - As a safety precaution, shut off power and lock out gears, motors, 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 for a list of 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.

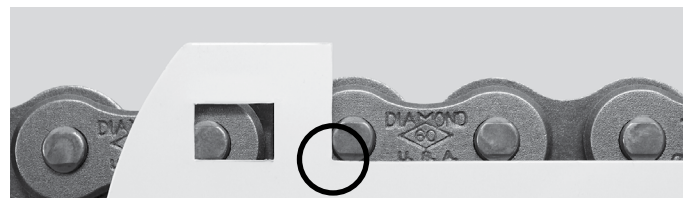
8 - If the center of the indicated pin does not reach the wear line for the corresponding chain size, the chain has not reached the wear limit.

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.

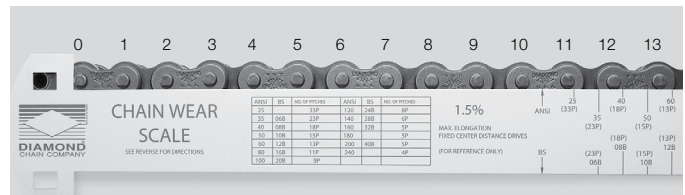
9 - If the center of the indicated pin is at or beyond the indicated line, the chain is worn to the wear limit (1.5% or 3%, depending on the scale used) and should be replaced.

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.

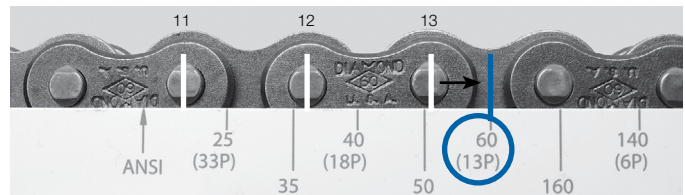
ANSI	BS	No. of Pitches	ANSI	BS	No. of Pitches
25		33P	120	24B	8P
35	06B	23P	140	28B	6P
40	08B	18P	160	32B	5P
50	10B	15P	180		5P
60	12B	13P	200	40B	5P
80	16B	11P	240		4P
100	20B	9P			



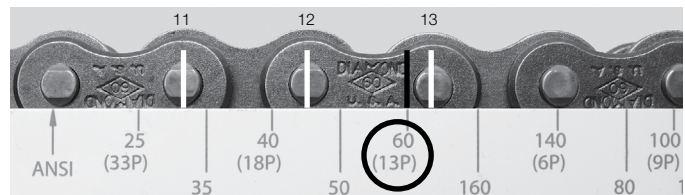
Step 6



Step 7


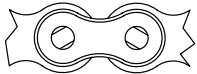
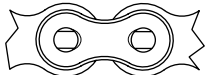
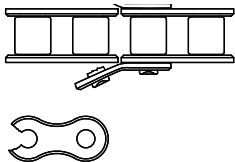

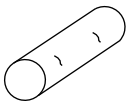


Step 8

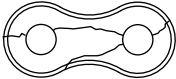

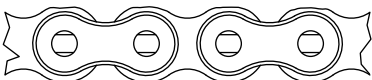
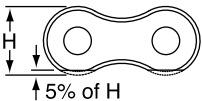


Step 9

Troubleshooting Guide

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

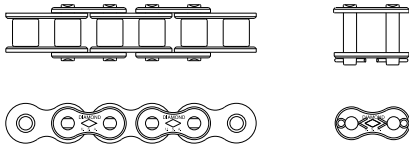
Troubleshooting Guide

CONDITION/SYMPTOM	POSSIBLE CAUSE	WHAT TO DO
Missing or Broken Cotters	Cotters installed improperly. Vibration. Excessively high speed.	Install new cotters per manufacturer's instructions. Replace chain. Reduce vibration. Use larger sprockets. 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. Loose casing or shaft mounts. Excess chain slack. Excessive sprocket wear. Sprocket misalignment. Inadequate lubrication. Chain pitch too large Too few sprocket teeth.	Replace chain. Eliminate interference. Tighten fasteners. Re-tension chain. Replace and re-tension chain. Replace chain and sprockets, if needed. Realign sprockets. Replace chain if needed. Re-establish proper lubrication. Redesign drive for smaller pitch chain. 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. Sprocket misalignment.	Replace sprockets and chain. Replace sprockets and chain if needed. Realign sprockets.

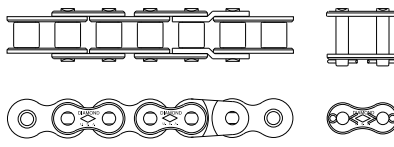
Ordering Information

Ordering Terminology

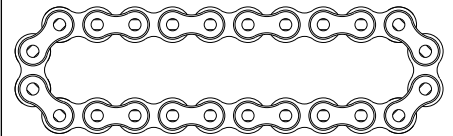
Chain-6 pitches long, including connecting link.



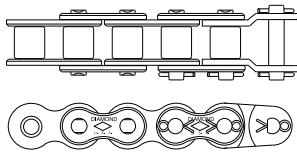
Chain-7 pitches long, including two-pitch offset and connecting link.



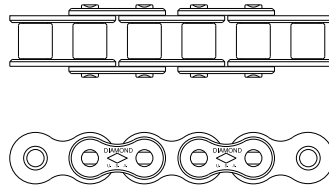
Chain-24 pitches long, riveted endless with no connecting link.



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



Chain-5 pitches long, roller link each end.



Ordering Information

Ordering Details

Sapphire ANSI chains are offered in 10' boxes, 50' reels or 100' reels. See following pages for model specific details.

Sapphire British Standard/ISO chains are offered in 3.05m (10') or 5m (16.4') boxes. Reels available upon request. See following pages for model specific details.

Cut-to-length chain available upon request. Contact customer service at customerservicechain@timken.com for additional details.

Attachment chains available with minimum order requirement. Contact customer service at customerservicechain@timken.com for additional details.

Product Details

All chains furnished with connecting links unassembled.

Spring clip slip fit connecting links standard up to and including ASME/ANSI #60 and British Standard/ISO 12B.

Cottered slip fit connecting links standard for ASME/ANSI #80 and British Standard/ISO 16B and larger.

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

Pitch size does not allow ANSI #140 / ISO 28B chain to be supplied in 10 foot (3.05m) lengths; instead, it is provided in 10.21 foot (3.112m) lengths.

Pitch size does not allow ANSI #180 chain to be supplied in 10 foot (3.05m) lengths; instead, it is provided in 10.13 foot (3.088m) lengths.

Ordering Examples

S60-2 Riv x 10ft (10' box of S60-2 chain).

10B-1 x 3.05m (3.05 meter box of 10B-1 chain).

Pitches to inches calculator

ASME/ANSI	Imperial Units			Metric Units	
	Pitch (inches - fraction)	Pitch (inches - decimal)	Pitches per foot	Pitch (mm)	Pitches per meter
25	1/4	0.250	48.0	6.4	157.5
35	3/8	0.375	32.0	9.5	105.0
40	1/2	0.500	24.0	12.7	78.7
50	5/8	0.625	19.2	15.9	63.0
60	3/4	0.750	16.0	19.1	52.5
80	1	1.000	12.0	25.4	39.4
100	1 1/4	1.250	9.6	31.8	31.5
120	1 1/2	1.500	8.0	38.1	26.2
140	1 3/4	1.750	6.9	44.5	22.5
160	2	2.000	6.0	50.8	19.7
180	2 1/4	2.250	5.3	57.2	17.5
200	2 1/2	2.500	4.8	63.5	15.7
240	3	3.000	4.0	76.2	13.1
ISO/British Standard	Pitch (inches - fraction)	Pitch (inches - decimal)	Pitches per foot	Pitch (mm)	Pitches per meter
05B	5/16	0.313	38.3	7.9	126.0
06B	3/8	0.375	32.0	9.5	105.0
08B	1/2	0.500	24.0	12.7	78.7
10B	5/8	0.625	19.2	15.9	63.0
12B	3/4	0.750	16.0	19.1	52.5
16B	1	1.000	12.0	25.4	39.4
20B	1 1/4	1.250	9.6	31.8	31.5
24B	1 1/2	1.500	8.0	38.1	26.2
28B	1 3/4	1.750	6.9	44.5	22.5
32B	2	2.000	6.0	50.8	19.7

Instructions

Divide # pitches in chain by pitches per foot/meter for length in feet/meters.

Example

Convert 84 pitches of #160 chain to feet.
84 pitches ÷ 6 pitches/foot = 14 feet.

Convert 84 pitches of #160 chain to meters.
84 pitches ÷ 19.7 pitches/meter = 4.26 meters.

Standard Packaged Roller Chain Weights

The tables below contain the weights of standard packaged roller chain. Additional lengths available upon request. Weights are for product and container only, and do not include any accompanying overpack, pallets, etc...

ASME/ANSI or Sapphire Number	10 ft (3.05m) Boxes		50 ft (1,524 cm) Reel		100 ft (3,048 cm) Reel	
	lbs	kg	lbs	kg	lbs	kg
Single Strand Chain (applies to carbon steel, nickel plated, & stainless steel roller chains)						
S25	1.0	0.5	5	2.4	11	5.0
S35	2.2	1.0	13	5.9	23	10.4
S41	3.0	1.4	16	7.3	29	13.2
S40	4	1.8	22	10.0	43	19.5
S50	7	3.2	37	16.8	71	32.2
S60	10	4.5	51	23.1	112	50.8
S80	17	7.7	97	44.0	170	77.0
S100	25	11.3	126	57.2	252	114.1
S120	37	16.8	186	85		
S140*	51	23.1				
S160	66	29.9				
S200	105	47.6				
Double Strand Chain (applies to carbon steel, nickel plated, & stainless steel roller chains)						
S35-2	5	2.0	23	10		
S40-2	8	3.7	41	19	83	37.5
S50-2	14	6.1	67	30	135	61.2
S60-2	20	9.1	100	45		
S80-2	34	15.4	163	74		
S100-2	51	23.1				
S120-2	75	34.0				
S140-2*	100	45.4				
S160-2	132	59.9				
Triple Strand Chain						
S40-3	12	5.4				
S50-3	20	9.1				
S60-3	29	13.2				
Double Pitch Single Strand Chain						
S2040	3	1.4	15	7	30	13.6
SC2040	3	1.5	16	7	32	14.5
SC2042	3	1.5				
S2050	5	2.3	25	11	50	22.7
SC2050	6	2.7	30	14	60	27.2
SC2052	6	2.7				
S2060	8	3.4	38	17	75	34.0
SC2060H	11	5.0	55	25	110	49.9
SC2062H	11	5.0				
SC2080H	15	6.6	73	33		
Non-Standard Chains						
65 x 1/8	2	0.9	10	5	20	9.1

British Standard/ISO	3.05m (10 ft) Boxes		5.0m (16.40 ft) Boxes	
	lbs	kg	lbs	kg
Single Strand Chain (applies to carbon steel, nickel plated, & stainless steel roller chains)				
05B	2.0	0.9	3.3	1.5
06B	3.0	1.4	4.9	2.2
08B	5	2.3	8.2	3.7
10B	7	3.2	11.5	5.2
12B	8	3.6	13.1	5.9
16B	18	8.2	29.5	13.4
20B	26	11.8	42.6	19.3
24B	48	21.8	78.7	35.7
28B	64	29.0	104.9	47.6
32B	69	31.3	113.1	51.3
Double Strand Chain				
06B-2	5	2.4	8.9	4.0
08B-2	9	4.3	15.4	7.0
10B-2	13	5.7	20.7	9.4
12B-2	16	7.1	25.7	11.7
16B-2	36	16.4	59.2	26.8
20B-2	52	23.4	84.4	38.3
24B-2	94	42.6	153.9	69.8
28B-2	126	57.3	207.0	93.9
32B-2	135	61.3	221.5	100.5
Triple Strand Chain				
08B-3	13	6.1	22.0	10.0
10B-3	19	8.5	30.8	14.0
12B-3	26	11.6	41.8	19.0
16B-3	54	24.3	87.9	39.9
20B-3	77	34.9	126.2	57.3
24B-3	146	66.3	239.7	108.7
28B-3	190	86.0	310.7	140.9
32B-3	201	91.2	329.5	149.5



Diamond is the recognized world leader in the design and manufacture of high quality, high performance roller chain. Since 1890, we've produced tens of thousands of types of roller chain for a wide variety of applications from oil field to conveyors to combines.



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