

Roller Chain Products

USA Precision Roller Chain

Made in U.S.A.





USA Roller Chain

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USA Made ANSI Roller Chain

QUALITY
Performance
Service

*Solutions that
Drive Success*



Fulton, Illinois USA

Product specifications subject to change without notice.
Some products shown proprietary.



Wide Waist

The wide waist design of 60H and larger chains reduces the bending stress in the link plate which increases the fatigue strength of the chain.

Solid Rollers

Drives utilizes solid rollers on all precision roller chains. The solid roller allows for smooth rotation on the bushing, minimizing the impact load as the chain engages the sprocket tooth.



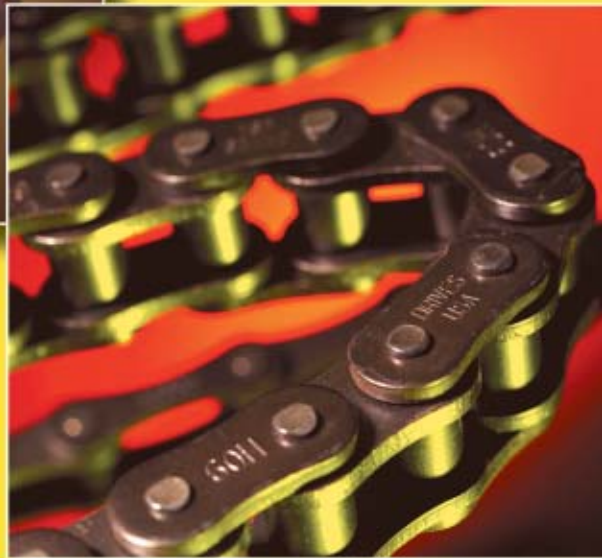
Factory Preloading

Drives precision roller chains are preloaded during assembly.

Preloading the chain seats the chain components, which minimizes the initial elongation of the chain.



USA



Roller

Shot Peened Parts

All precision chain rollers and link plates are shot peened for greater fatigue strength.



Heat Treatment

Rigorous process controls and state of the art heat treating furnaces assure consistent quality in all chain components. This results in optimum toughness and resistance to wear.



Prelubrication

After final assembly, the roller chains are hot dipped in a special lubricant. This process assures that all the load bearing surfaces are protected from metal to metal contact, improving the wear life of the chain.



Automated Assembly

Roller chain assembly methods assure consistent processes and proper assembly of chain components.



r Chain

Connecting Links

Standard connecting links are used when roller chains are operated under normal conditions. For severe applications, press fit connecting links are suggested. Spring clip style connecting links are used for sizes 60H and smaller. Sizes 80 – 180H use a special hardened hook cotter. Coated T-pin is used on 200, 264 and 240.



Offset Links

Offset links are used when the chain length is an odd number of pitches; however their fatigue strength is lower than standard chain links. *Use of offsets should be avoided when possible.*



Section 1

Precision Roller Chain Products



Made in U.S.A.

Drives Engineering Information

Horsepower Rating

The horsepower rating in Table IV on page 10 is based on the following conditions:

1. Chains are operated under ordinary conditions. The ambient temperature range must be between 15°F and 140°F. They should not be used in an atmosphere in which abrasive dust or corrosive gas is present or where the humidity is high.
2. Two transmission shafts are in a horizontal position, and the chains are properly installed.
3. Suggested lubrication system and oil are used.
4. Load does not change significantly during transmission. The "Service Factors" given in Table I should be taken into account when the chains are used under various operating conditions. The load conditions will affect the life of the chain.
5. In order to estimate the service life of a multiple strand chain, the "Multiple Strand Factor" given in Table II must be used. When the chain length is 100 pitches and the above conditions are met, a service life of approximately 15,000 hours can be expected.

Procedures for Selecting Roller Chain

1. The following factors must be considered when selecting roller chain:
 - a. Source of input power
 - b. Drive machine type of driven equipment
 - c. Horsepower to be transmitted
 - d. RPM of driving and driven shafts
 - e. Diameter of driving and driven shafts
 - f. Center distance of the shafts
2. Use Table I to obtain the "Service Factor".
3. Multiply the horsepower value by the service factor to obtain the design horsepower value.
4. Use Table IV on page 10 and the horsepower ratings table to obtain the appropriate chain number of teeth for small sprockets. Refer to the number of revolutions of the high speed shaft (the driving shaft when the speed is reduced; the driven shaft when the speed is increased) and the design horsepower value. For smoother chain drive, a small pitch chain is suggested. If a single strand chain does not satisfy the transmission requirements, use a multiple strand chain. If there are space limitations, a multiple strand roller chain with a smaller pitch may be used.

5. After determining the number of teeth necessary for the small sprocket, be sure the sprocket diameter satisfies the space limitations.
6. The number of teeth for the large sprocket is determined by multiplying the number of teeth for the small sprocket by the speed ratio. More than 15 teeth on the small sprocket is suggested. The number of teeth for the large sprocket should be less than 120. By reducing the number of teeth for the small sprocket, the number of teeth for the large sprocket can be reduced.

Basic Formula for Chain Drive

1. Chain speed: S

$$S = \frac{P_c \times N \times n}{12} \text{ (Ft./Min.)}$$

P_c : Chain pitch (inch)

N : Number of teeth of sprocket

n : Revolution per minute (RPM)

2. Chain tension: P

$$P = \frac{33000 \times \text{HP}}{S} \text{ (Lbs.)}$$

S: Chain speed (Ft./Min.)

HP: Horsepower to be transmitted (HP)

3. Number of pitches of chain: L

$$*L = \frac{N_1 + N_2}{2} + 2C + \frac{\left(\frac{N_2 - N_1}{6.28}\right)^2}{C}$$

N_1 : Number of teeth (small sprocket)

N_2 : Number of teeth (large sprocket)

C : Center distance in pitches

*Any fraction of L is counted as one pitch.

Drives Engineering Information

Table I -
Service Factors
for Roller
Chain Drives

Type of Driven Load	Load Classification	Type of Input Power		
		Internal Combustion Engine with Hydraulic Drive	Electric Drive Motor	Internal Combustion Engine with Mechanical Drive
Smooth Load	AGITATORS - Pure liquid			
	CONVEYORS - Uniformly loaded or fed (apron, assembly, belt, flight, oven, screw)	1.0	1.0	1.2
	FANS - Centrifugal and light, small diameter			
	MACHINES - All types with uniform non-reversing loads			
Moderate Shock	CLAY WORKING MACHINERY - Pug mills			
	CONVEYORS - Heavy duty and NOT uniformly loaded (apron, assembly, belt, flight, oven, screw)			
	FOOD INDUSTRY - Beet slicers, dough mixers, meat grinders	1.2	1.3	1.4
	GRINDERS MACHINE - All types with moderate shock and non-reversing loads			
Heavy Shock	TEXTILE INDUSTRY - Calendars, dyeing machinery, mangles, nappers, soapers, spinners, tenter frames			
	CLAY WORKING MACHINERY - Brick press, briquetting machinery			
	CONVEYORS - Reciprocating and shaker			
	HAMMER MILLS	1.4	1.5	1.7
	MACHINE TOOLS - Punch press, shears, plate planers			
	MILLS (Rotary type) - Ball, cement kilns, rod mills, tumbling mills			
	TEXTILE INDUSTRY - Carding machinery			

Table II - Multiple
Strand Factor

Number of Roller Chain Strands	Multiple Strand Factor
2	1.7
3	2.5
4	3.3
5	3.9
6	4.6

Drive Selection Procedure

Selection Example (1)

Q1. A centrifugal compressor with 3HP is driven by an 1800rpm electric motor. How to select chain and sprockets.

A1. Seek the service factor, 1.3, from Table I

$$\text{Power to be transmitted} \times \text{Service factor} = \text{Design Horsepower}$$

$$3\text{HP} \times 1.3 = 3.9\text{HP}$$

2. Refer to Table IV. Horsepower Rating Table for 1800rpm 3.9HP and 35 chain with sprocket 16T to 20T is obtained.

3. Check horsepower ratings for chain 35, and as you see, the horsepower ratings of 35 17T with speed of 1800rpm is 3.93HP, which is satisfactory.

4. The following are selected:

Chain No 35 Small sprocket 35 17T.

Selection Example (2)

Q1. The number of revolutions for drive is 500rpm and the power to be transmitted is 10HP. The rpm is reduced to 125 (1/4). The center distance should be 11.00" with a space limitation of 19.00", and a uniform load. How to select chain and sprocket for this application.

A1. Design horsepower is computed as follows:

$$\text{Design horsepower: } 10\text{HP} \times 1.0 = 10\text{HP}$$

2. Select chain and the number of teeth for sprocket by referring to Table IV, Horsepower Rating Table.

60 18T has been selected.

3. Speed reduction ratio is $0.25 = \frac{125\text{rpm}}{500\text{rpm}}$

Therefore, the number of teeth in the large sprocket is

$$72T = \frac{18T}{0.25}$$

4. The outside diameter of the 18T is 4.685" and the 72T is 17.60".

The space required for this arrangement is

$$\frac{4.685'' + 17.60''}{2} + 11'' = 22.14''$$

which can not be contained in the 19".

5. Multiple strand chain is selected. 50-2 16T to 20T is selected using Table II.

$$\frac{10\text{HP} \times 1.0}{1.7} = 5.88\text{HP}$$

(1.7 is multiple strand factor)

Refer to horsepower ratings. 50-2, 18T is obtained. It's outside diameter is 3.90". The large sprocket is

$$72T = \frac{18T}{0.25} \text{ outside diameter } 14.69''.$$

However, this selection cannot be contained in the space.

6. Triple strand chain is selected in the same manner as above. 50 - 3, 13T and 52T are obtained. The outside diameter of sprockets is 2.87", and 10.67" respectively.

$$\frac{2.87'' + 10.67''}{2} + 11'' = 17.77'' \text{ can be contained in the space required.}$$

The chain and sprockets selected are 50-3, 13T and 52T.

Drives Engineering Information

Slow Speed Calculation

When the chain speed (S) is less than 160 Ft./Min., select a roller chain size smaller than the chain chosen from the horsepower rating method mentioned above. (Consult Drives for maximum allowable load when slow speed calculation is required.)

1. Tentatively select the chain and sprocket from Table IV and proceed by using a one size smaller chain and it's sprocket with the number of teeth close to the sprocket selected above. Be sure to confirm that the sprocket meets the application requirements such as bore diameter and space limitation, etc.
2. Calculate the chain speed from the number of teeth on the driving sprocket using Formula (1). Also check that the speed is less than 160 ft./min.
3. Calculate the chain tension for the above drive from Formula (2).
4. Select the service factor and the chain speed coefficient from Table I and III.
5. Verify that the chain has maximum allowable load which satisfies Formula (3). Please consult Drives Engineering for working loads.

$$S = \frac{P_c \times N \times n}{12} \text{ (Ft./Min.)} \dots \dots \dots (1)$$

$$P = \frac{33000 \times \text{HP}}{S} \text{ (Lbs.)} \dots \dots \dots (2)$$

$$P \times \text{Service Factor} \times \text{Chain Speed Coefficient} \leq \text{Maximum Allowable Load} \dots \dots \dots (3)$$

S: chain speed (Ft./Min.)

P_c : chain pitch (inch)

N: number of sprocket teeth

P: chain tension (Lbs.)

HP: horsepower to be transmitted (HP)

There are two different ways to do the next step: to increase the number of teeth, or to use the same procedure for HZ series of the same size (refer to HZ chains on page 28-29).

Table III - Chain Speed Coefficient

Chain Speed	Speed Coefficient
Less than 50 Ft./Min.	1.0
50 to 100 Ft./Min.	1.2
100 to 160 Ft./Min.	1.4

Selection of High Temperatures

Drive chains are made of heat treated carbon steel. When exposed to high temperatures, the mechanical properties of the heat treated chain components are impaired.

1. The hardness and, therefore, the wear resistance of pins and bushings is reduced.
2. At temperatures above 390°F, the rollers and plates lose their hardness and strength.

Standard roller chains can be used up to 500°F with the following adjustments:

Temperature	Percentage of Catalog Capacity Rating
Up to 340°F	100%
390°F	75%
500°F	50%

Horsepower Rating Table

Selection of Chain and Small Sprocket

Chain Pitch

The smallest applicable pitch is desirable for quiet operation and for high speed.

Number of Sprocket Teeth

For a given chain pitch and shaft to transmit a given horsepower, the effect of increasing the number of teeth in the sprocket is to increase the chain linear speed and decrease the chain pull proportionally,

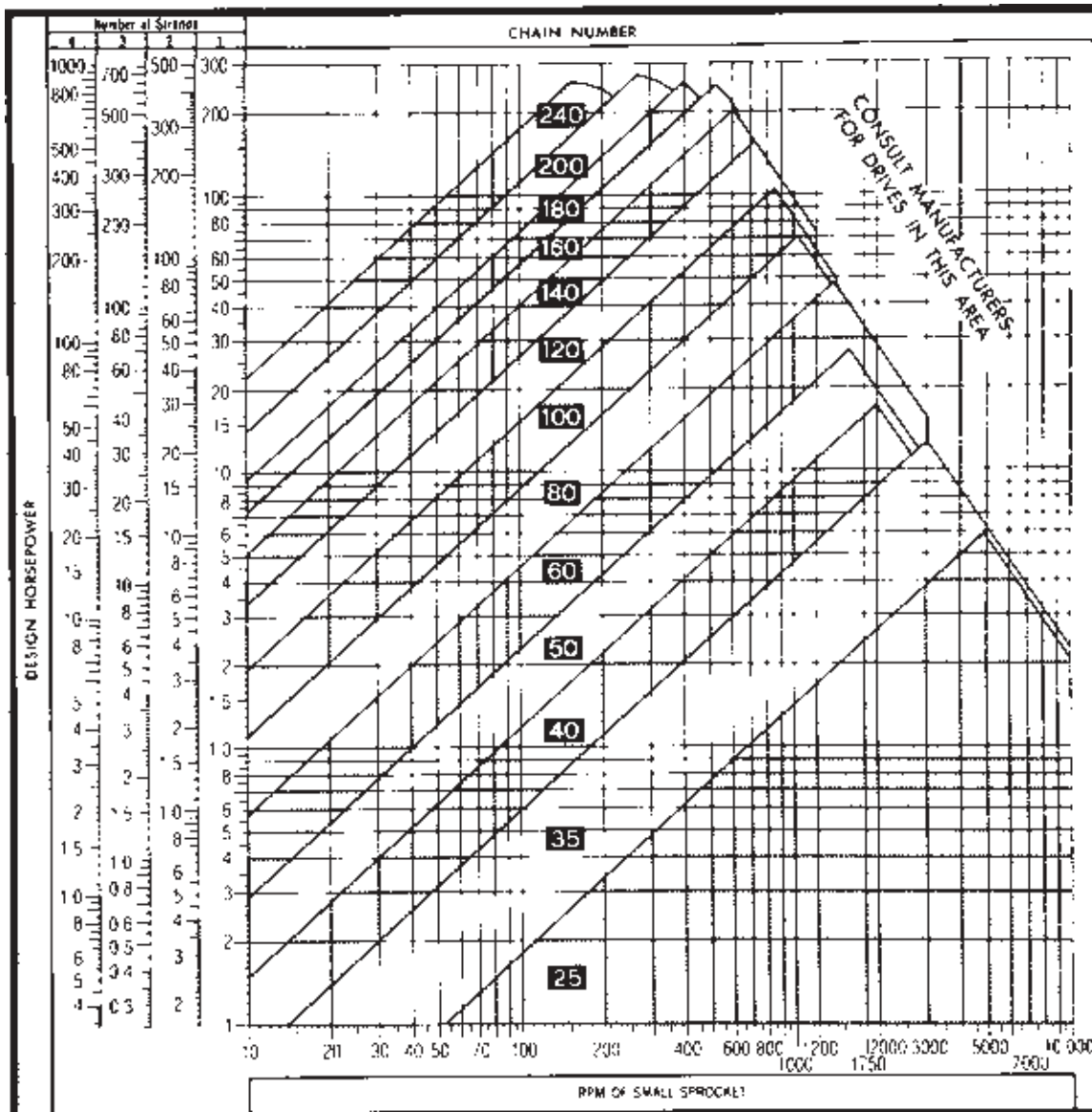
resulting in a decrease of the chordal action, which results in a quiet drive with less impact.

Usually, large sprockets should not exceed 120 teeth although many successful drives use sprockets with 150 teeth and more.

Selection of Large Sprocket

After the small sprocket has been selected, the number of teeth in the large sprocket is determined by the specified ratio of the shaft speeds.

**Table IV -
Roller Chain Pitch Selection**



Note: The Maximum Horsepower Rating specified in each of the strand columns is not limiting for Chain Drives. Consult Drives on those applications which are above the horsepower range of the chart.

Engineering Conversions

BUSHELs – BU

$$\times 1.2445 = \text{Cubic feet (ft}^3\text{)}$$

CENTIMETRES – cm

$$\times 0.3937 = \text{inches (in)}$$

CENTIMETRES PER SECOND – cm/s

$$\begin{aligned} \times 1.9685 &= \text{Feet per minute (ft/min)} \\ \times 0.03291 &= \text{Feet per second (ft/s)} \\ \times 0.03600 &= \text{Kilometres per hour (km/h)} \\ \times 0.6000 &= \text{Metres per minute (m/min)} \\ \times 0.02237 &= \text{Miles per hour (mph)} \end{aligned}$$

CUBIC CENTIMETRES – cm³

$$\begin{aligned} \times 3.5315 \times 10^{-5} &= \text{Cubic feet (ft}^3\text{)} \\ \times 6.1024 \times 10^{-2} &= \text{Cubic inches (in}^3\text{)} \\ \times 1.308 \times 10^{-6} &= \text{Cubic yards (yd}^3\text{)} \\ \times 2.642 \times 10^{-4} &= \text{U.S. gallons (U.S. gal)} \\ \times 1.000 \times 10^{-3} &= \text{Litres (l)} \end{aligned}$$

CUBIC FEET – ft³

$$\begin{aligned} \times 0.02832 &= \text{Cubic metres (m}^3\text{)} \\ \times 2.832 \times 10^4 &= \text{Cubic centimetres (cm}^3\text{)} \\ \times 1728 &= \text{Cubic inches (in}^3\text{)} \\ \times 0.03704 &= \text{Cubic yards (yd}^3\text{)} \\ \times 7.481 &= \text{U.S. gallons (U.S. gal)} \\ \times 6.229 &= \text{Imperial gallons (imp gal)} \\ \times 28.32 &= \text{Litres (l)} \end{aligned}$$

CUBIC INCHES – in³

$$\begin{aligned} \times 1.6387 \times 10^{-5} &= \text{Cubic metres (m}^3\text{)} \\ \times 16.387 &= \text{Cubic centimetres (cm}^3\text{)} \\ \times 0.016387 &= \text{Litres (l)} \\ \times 5.787 \times 10^{-4} &= \text{Cubic feet (ft}^3\text{)} \\ \times 2.143 \times 10^{-5} &= \text{Cubic yards (yd}^3\text{)} \\ \times 4.329 \times 10^{-3} &= \text{U.S. gallons (U.S. gal)} \\ \times 3.605 \times 10^{-3} &= \text{Imperial gallons (imp gal)} \end{aligned}$$

CUBIC METRES – m³

$$\begin{aligned} \times 1000 &= \text{Litres (l)} \\ \times 35.315 &= \text{Cubic feet (ft}^3\text{)} \\ \times 61.024 \times 10^3 &= \text{Cubic inches (in}^3\text{)} \\ \times 1.3080 &= \text{Cubic yards (yd}^3\text{)} \\ \times 264.2 &= \text{U.S. gallons (U.S. gal)} \end{aligned}$$

CUBIC YARDS – yd³

$$\begin{aligned} \times 0.7646 &= \text{Cubic metres (m}^3\text{)} \\ \times 764.6 &= \text{Litres (l)} \\ \times 7.646 \times 10^5 &= \text{Cubic centimetres (cm}^3\text{)} \\ \times 27 &= \text{Cubic feet (ft}^3\text{)} \\ \times 46.656 &= \text{Cubic inches (in}^3\text{)} \\ \times 201.97 &= \text{U.S. gallons (U.S. gal)} \end{aligned}$$

DEGREES, ANGULAR (°)

$$\begin{aligned} \times 0.017453 &= \text{Radians (rad)} \\ \times 60 &= \text{Minutes (')} \\ \times 3600 &= \text{Seconds (")} \\ \times 1.111 &= \text{Grade (gon)} \end{aligned}$$

DEGREES PER SECOND, ANGULAR (°/s)

$$\begin{aligned} \times 0.017453 &= \text{Radians per second (rad/s)} \\ \times 0.16667 &= \text{Revolutions per minute (r/min)} \\ \times 2.7778 \times 10^{-3} &= \text{Revolutions per second (r/s)} \end{aligned}$$

FEET – ft

$$\begin{aligned} \times 0.3048 &= \text{Metres (m)} \\ \times 30.480 &= \text{Centimetres (cm)} \\ \times 12 &= \text{Inches (in)} \\ \times 0.3333 &= \text{Yards (yd)} \end{aligned}$$

FEET PER MINUTE – ft/min

$$\begin{aligned} \times 0.5080 &= \text{Centimetres per second (cm/s)} \\ \times 0.01829 &= \text{Kilometres per hour (km/h)} \\ \times 0.3048 &= \text{Metres per minute (m/min)} \\ \times 0.016667 &= \text{Feet per second (ft/s)} \\ \times 0.01136 &= \text{Miles per hour (mph)} \end{aligned}$$

FOOT-POUNDS-FORCE – ft · lbf

$$\begin{aligned} \times 1.356 &= \text{Joules (J)} \\ \times 1.285 \times 10^{-3} &= \text{British thermal units (Btu)} \\ &\quad \text{(see note)} \\ \times 3.239 \times 10^{-4} &= \text{Kilocalories (kcal)} \\ \times 0.13825 &= \text{Kilogram-force-metres (kgf·m)} \\ \times 5.050 \times 10^{-7} &= \text{Horsepower-hours (hp·h)} \\ \times 3.766 \times 10^{-7} &= \text{Kilowatt-hours (kW·h)} \end{aligned}$$

GALLONS, U.S. – U.S. gal

$$\begin{aligned} \times 3.7854 &= \text{Cubic centimetres (cm}^3\text{)} \\ \times 3.7854 &= \text{Litres (l)} \\ \times 3.7854 \times 10^{-3} &= \text{Cubic metres (m}^3\text{)} \\ \times 231 &= \text{Cubic inches (in}^3\text{)} \\ \times 0.13368 &= \text{Cubic feet (ft}^3\text{)} \\ \times 4.951 \times 10^{-3} &= \text{Cubic yards (yd}^3\text{)} \end{aligned}$$

GRAMS – g

$$\begin{aligned} \times 15.432 &= \text{Grains (gr)} \\ \times 0.035274 &= \text{Ounces (oz) av.} \\ \times 0.032151 &= \text{Ounces (oz) troy} \\ \times 2.2046 \times 10^{-3} &= \text{Pounds (lb)} \end{aligned}$$

GRAMS-FORCE – gf

$$\times 9.807 \times 10^{-3} = \text{Newtons (N)}$$

HORSEPOWER – hp

$$\begin{aligned} \times 745.7 &= \text{Watts (W)} \\ \times 0.7457 &= \text{Kilowatts (kW)} \\ \times 1.0139 &= \text{Horsepower (metric)} \end{aligned}$$

INCHES – in

$$\begin{aligned} \times 2.540 &= \text{Centimetres (cm)} \\ \times 25.4 &= \text{Millimetres (mm)} \end{aligned}$$

KILOGRAMS – kg

$$\begin{aligned} \times 2.2046 &= \text{Pounds (lb)} \\ \times 1.102 \times 10^{-3} &= \text{Tons (ton) short} \end{aligned}$$

KILOGRAMS-FORCE – kgf

$$\begin{aligned} \times 9.807 &= \text{Newtons (N)} \\ \times 2.205 &= \text{Pounds-force (lbf)} \end{aligned}$$

KILOWATTS – kW

$$\times 1.3410 = \text{Horsepower (hp)}$$

LITRES – l

$$\begin{aligned} \times 1000 &= \text{Cubic centimetres (cm}^3\text{)} \\ \times 0.035315 &= \text{Cubic feet (ft}^3\text{)} \\ \times 61.024 &= \text{Cubic inches (in}^3\text{)} \\ \times 1.308 \times 10^{-3} &= \text{Cubic yards (yd}^3\text{)} \\ \times 0.2642 &= \text{U.S. gallons (U.S. gal)} \end{aligned}$$

METRES – m

$$\begin{aligned} \times 3.281 &= \text{Feet (ft)} \\ \times 39.37 &= \text{Inches (in)} \\ \times 1.0936 &= \text{Yards (yd)} \end{aligned}$$

METRES PER MINUTE – m/min

$$\begin{aligned} \times 1.6667 &= \text{Centimetres per second (cm/s)} \\ \times 3.281 &= \text{Feet per minute (ft/min)} \\ \times 0.05468 &= \text{Feet per second (ft/s)} \\ \times 0.03728 &= \text{Miles per hour (mph)} \end{aligned}$$

MICROMETRES – formerly m/cron

$$\times 10^{-6} = \text{Metres (m)}$$

MILES – mi

$$\begin{aligned} \times 1.6093 \times 10^3 &= \text{Metres (m)} \\ \times 1.6093 &= \text{Kilometres (km)} \\ \times 5280 &= \text{Feet (ft)} \\ \times 1760 &= \text{Yards (yd)} \end{aligned}$$

MILES PER HOUR – mph

$$\begin{aligned} \times 44.70 &= \text{Centimetres per second (cm/s)} \\ \times 1.6093 &= \text{Kilometres per hour (km/h)} \\ \times 26.82 &= \text{Metres per minute (m/min)} \\ \times 88 &= \text{Feet per minute (ft/min)} \\ \times 1.4667 &= \text{Feet per second (ft/s)} \end{aligned}$$

MILES PER MINUTE – mi/min

$$\begin{aligned} \times 1.6093 &= \text{Kilometres per minute (km/min)} \\ \times 2682 &= \text{Centimetres per second (cm/s)} \\ \times 88 &= \text{Feet per second (ft/s)} \\ \times 60 &= \text{Miles per hour (mph)} \end{aligned}$$

MINUTES, ANGULAR – (')

$$\times 2.909 \times 10^{-4} = \text{Radians (rad)}$$

NEWTONS – N

$$\begin{aligned} \times 0.10197 &= \text{Kilograms-force (kgf)} \\ \times 0.2248 &= \text{Pounds-force (lbf)} \end{aligned}$$

POUNDS-FORCE – lbf av.

$$\begin{aligned} \times 4.448 &= \text{Newton (N)} \\ \times 0.4536 &= \text{Kilograms-force (kgf)} \end{aligned}$$

POUNDS – lb av.

$$\times 453.6 = \text{Grams (g)}$$

RADIANS – rad

$$\times 57.30 = \text{Degrees (°) angular}$$

TONS-MASS – tonm long

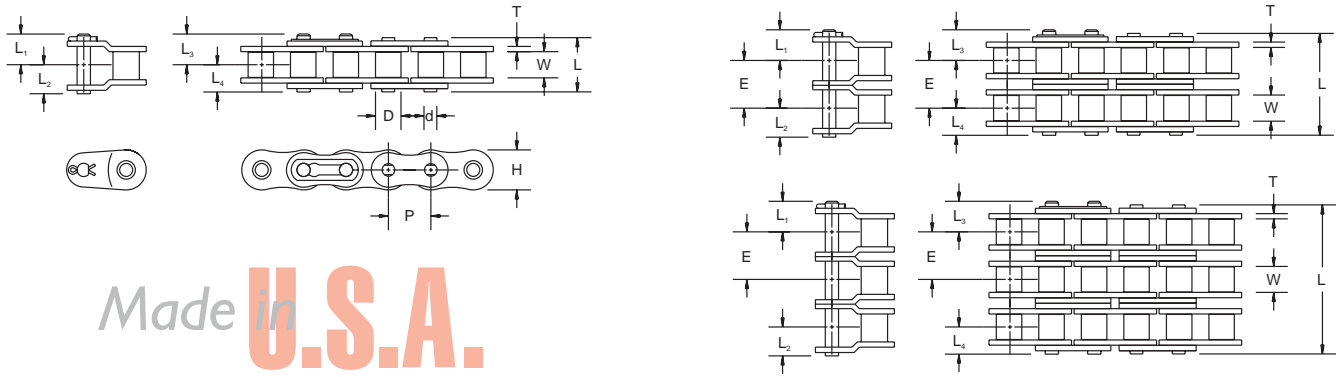
$$\begin{aligned} \times 1016 &= \text{Kilograms (kg)} \\ \times 2240 &= \text{Pounds (lb) av.} \\ \times 1.1200 &= \text{Tons (ton) short} \end{aligned}$$

TONS- ton short

$$\begin{aligned} \times 907.2 &= \text{Kilograms (kg)} \\ \times 0.9072 &= \text{Tonnes (t)} \\ \times 2000 &= \text{Pounds (lb) av.} \\ \times 0.8929 &= \text{Tons (ton) long} \end{aligned}$$

Drives Precision Roller Chain Products

ANSI Standard Chain Sizes Available



Made in U.S.A.

Carbon Steel

Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Transverse Pitch	Pin					Average Weight	Riveted	Cottered
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb./Ft.			
35	0.375	0.189	0.200	0.355	0.049	0.141	--	0.461	0.264	0.252	0.264	0.240	0.210	STD	--	
41	0.500	0.252	0.306	0.382	0.049	0.141	--	0.524	0.315	0.268	0.315	0.268	0.273	STD	--	
40	0.500	0.313	0.313	0.472	0.060	0.156	--	0.630	0.404	0.317	0.377	0.315	0.420	STD	--	
50	0.625	0.376	0.400	0.590	0.080	0.200	--	0.795	0.489	0.399	0.489	0.398	0.713	STD	--	
60	0.750	0.500	0.469	0.705	0.094	0.234	--	0.996	0.600	0.498	0.648	0.498	1.067	STD	STD	
80	1.000	0.627	0.625	0.943	0.125	0.313	--	1.283	0.768	0.638	0.857	0.642	1.868	STD	STD	
100	1.250	0.755	0.750	1.180	0.156	0.375	--	1.595	0.908	0.785	0.912	0.785	2.801	STD	STD	
120	1.500	1.000	0.875	1.425	0.187	0.437	--	1.955	1.119	1.071	1.119	0.989	4.135	STD	STD	
140	1.750	1.000	1.000	1.663	0.220	0.500	--	2.136	1.253	1.150	1.253	1.068	5.136	STD	STD	
160	2.000	1.250	1.125	1.899	0.250	0.562	--	2.538	1.454	1.370	1.454	1.269	6.603	STD	STD	
180	2.250	1.400	1.406	2.132	0.281	0.687	--	2.780	1.561	1.390	1.561	1.390	9.100	STD	STD	
200	2.500	1.490	1.562	2.312	0.312	0.781	--	3.088	1.889	1.544	1.889	1.544	10.900	STD	STD	
240	3.000	1.864	1.875	2.812	0.375	0.937	--	3.708	2.212	1.854	2.212	1.854	16.400	STD	STD	

Chain size 80 and larger supplied with cottered connecting links.

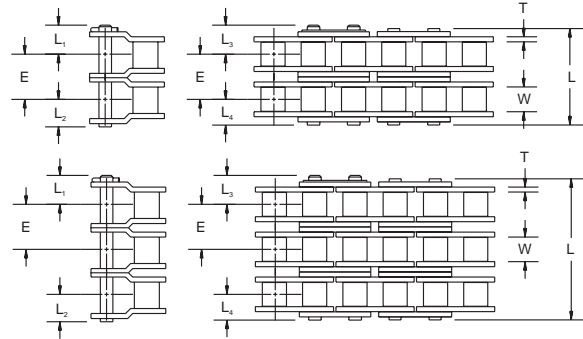
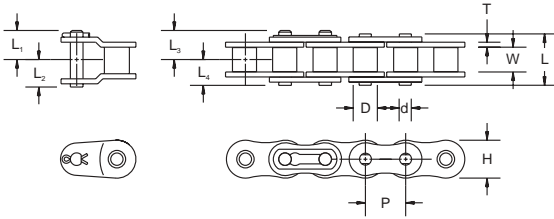
Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Transverse Pitch	Pin					Average Weight
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb./Ft.	
A2040	1.000	0.312	0.312	0.472	0.060	0.156	--	0.638	--	--	0.382	0.319	0.270	
A2050	1.250	0.376	0.400	0.590	0.080	0.200	--	0.795	--	--	0.489	0.398	0.450	
A2060	1.500	0.500	0.469	0.705	0.094	0.234	--	0.996	--	--	0.648	0.498	0.630	
C2040	1.000	0.312	0.312	0.472	0.060	0.156	--	0.638	--	--	0.382	0.319	0.340	
C2050	1.250	0.376	0.400	0.591	0.079	0.200	--	0.795	--	--	0.477	0.409	0.580	
C2060H	1.500	0.500	0.469	0.687	0.125	0.234	--	1.180	--	--	0.660	0.590	0.903	
C2080H	2.000	0.625	0.625	0.950	0.156	0.312	--	1.490	--	--	0.845	0.745	1.204	

NOTE:

- See pages 27-29, 42 & 43 for available U.S.A. made heavy series and extended pitch roller chain sizes.
- See pages 13-25 for multi-strand dimensions.

Drives Precision Roller Chain Products

35 0.375" Pitch



Cut-to-length chain available.

Available in riveted style.

Drives	Pitch	Width Between L.P.	Bushing Dia.	Link Plate		Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Weight
				H	T			L	L ₁	L ₂	L ₃	L ₄		
35-1	0.375	0.189	0.200	0.355	0.049	0.141	--	0.461	0.264	0.252	0.264	0.240	2,100	0.210
35-2	0.375	0.189	0.200	0.355	0.049	0.141	0.398	0.863	0.264	0.252	0.264	0.240	4,200	0.410
35-3	0.375	0.189	0.200	0.355	0.049	0.141	0.398	1.261	0.264	0.252	0.264	0.240	6,300	0.620

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																									
	50	100	200	240	500	700	900	1200	1500	1800	2100	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	10000
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	0.62	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	0.70	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	0.79	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	0.88	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	0.98	0.90	0.00
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	1.08	0.44	0.00
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	1.02	0.00	
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	0.00		
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	0.00		
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	0.00			
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	0.00				
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	0.00				
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	0.00					
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	0.00					
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	0.00					
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	0.00						
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	0.00							
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	0.00							
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	0.00								
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	0.00								
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	0.00									
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	0.00										

Type I Manual or Dip Lubrication Type II Bath or Disc Lubrication Type III Oil Stream Lubrication

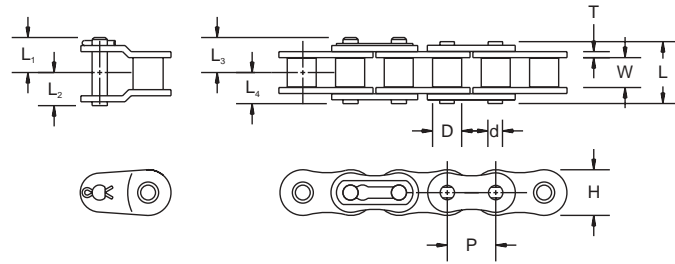
The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Made in U.S.A.

PERFORMANCE

Drives Precision Roller Chain Products

4 | 0.500" Pitch



Cut-to-length chain available.

Available in riveted style.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate				Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Weight
				H	T	d	E			L	L ₁	L ₂	L ₃	L ₄		
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.		
41-1	0.500	0.252	0.306	0.382	0.049	0.141	--	0.524	0.315	0.268	0.315	0.268	2,400	0.273		

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																											
	10	25	50	100	180	200	300	400	500	700	900	1000	1200	1400	1600	1800	2100	2400	2700	3000	3500	4000	5000	6000	7000	8000		
11	0.03	0.07	0.15	0.28	0.50	0.55	0.81	1.07	1.33	1.84	2.34	2.25	1.71	1.36	1.11	0.93	0.74	0.61	0.51	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	1.17	1.45	2.00	2.55	2.57	1.95	1.55	1.27	1.06	0.84	0.69	0.58	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	1.27	1.57	2.17	2.76	2.89	2.20	1.75	1.43	1.20	0.95	0.78	0.65	0.56	0.44	0.36	0.26	0.20	0.16	0.00		
14	0.04	0.10	0.19	0.36	0.63	0.70	1.04	1.37	1.69	2.34	2.97	3.23	2.46	1.95	1.60	1.34	1.06	0.87	0.73	0.62	0.49	0.40	0.29	0.22	0.17	0.00		
15	0.04	0.10	0.20	0.39	0.68	0.75	1.11	1.46	1.81	2.50	3.19	3.53	2.73	2.17	1.77	1.49	1.18	0.96	0.81	0.69	0.55	0.45	0.32	0.24	0.19	0.00		
16	0.05	0.11	0.21	0.41	0.73	0.80	1.18	1.56	1.93	2.67	3.40	3.76	3.01	2.39	1.95	1.64	1.30	1.06	0.89	0.76	0.60	0.49	0.35	0.27	0.00	0.00		
17	0.05	0.12	0.23	0.44	0.77	0.85	1.26	1.66	2.05	2.84	3.61	4.00	3.29	2.61	2.14	1.79	1.42	1.16	0.98	0.83	0.66	0.54	0.39	0.29	0.00	0.00		
18	0.05	0.12	0.24	0.46	0.82	0.90	1.33	1.76	2.18	3.00	3.82	4.23	3.59	2.85	2.33	1.95	1.55	1.27	1.06	0.91	0.72	0.59	0.42	0.32	0.00	0.00		
19	0.05	0.13	0.25	0.49	0.86	0.95	1.41	1.85	2.30	3.17	4.04	4.47	3.89	3.09	2.53	2.12	1.68	1.38	1.15	0.98	0.78	0.64	0.46	0.09	0.00	0.00		
20	0.06	0.14	0.27	0.52	0.91	1.00	1.48	1.95	2.42	3.34	4.25	4.70	4.20	3.33	2.73	2.29	1.81	1.49	1.24	1.06	0.84	0.69	0.49	0.00	0.00	0.00		
21	0.06	0.14	0.28	0.54	0.95	1.05	1.55	2.05	2.54	3.51	4.46	4.94	4.52	3.59	2.94	2.46	1.95	1.60	1.34	1.14	0.91	0.74	0.53	0.00	0.00	0.00		
22	0.06	0.15	0.29	0.57	1.00	1.10	1.63	2.15	2.66	3.67	4.67	5.17	4.85	3.85	3.15	2.64	2.09	1.71	1.44	1.23	0.97	0.80	0.57	0.00	0.00	0.00		
23	0.07	0.16	0.30	0.59	1.04	1.15	1.70	2.24	2.78	3.84	4.89	5.41	5.18	4.11	3.37	2.82	2.24	1.83	1.54	1.31	1.04	0.85	0.61	0.00	0.00	0.00		
24	0.07	0.16	0.32	0.62	1.09	1.20	1.78	2.34	2.90	4.01	5.10	5.64	5.52	4.38	3.59	3.01	2.39	1.95	1.64	1.40	1.11	0.91	0.65	0.00	0.00	0.00		
25	0.07	0.17	0.33	0.64	1.13	1.25	1.85	2.44	3.02	4.17	5.31	5.88	5.87	4.66	3.81	3.20	2.54	2.08	1.74	1.49	1.18	0.96	0.00	0.00	0.00	0.00		
26	0.07	0.18	0.34	0.67	1.18	1.30	1.92	2.54	3.14	4.34	5.52	6.11	6.23	4.94	4.05	3.39	2.69	2.20	1.85	1.58	1.25	1.02	0.00	0.00	0.00	0.00		
28	0.08	0.19	0.37	0.72	1.27	1.40	2.07	2.73	3.38	4.67	5.95	6.58	6.96	5.52	4.52	3.79	3.01	2.46	2.06	1.76	1.40	1.14	0.00	0.00	0.00	0.00		
30	0.08	0.20	0.40	0.77	1.36	1.50	2.22	2.93	3.63	5.01	6.37	7.05	7.72	6.13	5.01	4.20	3.33	2.73	2.29	1.95	1.55	1.27	0.00	0.00	0.00	0.00		
32	0.09	0.22	0.42	0.82	1.45	1.60	2.37	3.12	3.87	5.34	6.80	7.52	8.50	6.75	5.52	4.63	3.67	3.01	2.52	2.15	1.71	1.40	0.00	0.00	0.00	0.00		
35	0.10	0.24	0.46	0.90	1.59	1.76	2.59	3.41	4.23	5.84	7.44	8.23	9.80	7.72	6.32	5.29	4.20	3.44	2.88	2.46	1.95	0.00	0.00	0.00	0.00	0.00		
40	0.11	0.27	0.53	1.03	1.81	2.01	2.96	3.90	4.83	6.68	8.50	9.40	11.20	9.43	7.72	6.47	5.13	4.20	3.52	3.01	0.00	0.00	0.00	0.00	0.00	0.00		
45	0.13	0.31	0.60	1.16	2.04	2.26	3.33	4.39	5.44	7.51	9.56	10.58	12.60	11.25	9.21	7.72	6.13	5.01	4.20	3.59	0.00	0.00	0.00	0.00	0.00	0.00		

Type I
Manual or Drip Lubrication

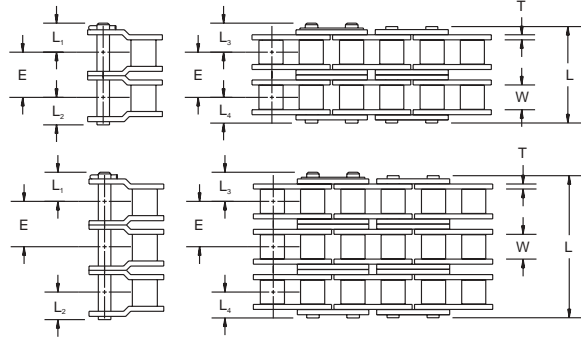
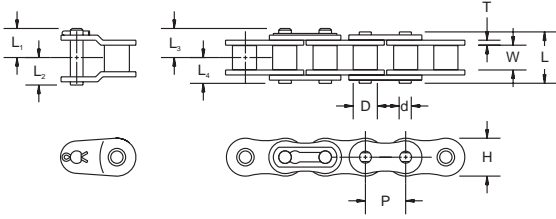
Type II
Bath or Disc Lubrication

Type III
Oil Stream Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table 8 for Multiple Strand Factors.

Drives Precision Roller Chain Products

40 0.500" Pitch



Cut-to-length chain available.

Available in riveted style.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate		Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Weight
				H	T			L	L ₁	L ₂	L ₃	L ₄		
40-1	0.500	0.313	0.313	0.472	0.060	0.156	--	0.630	0.404	0.317	0.377	0.315	3,700	0.420
40-2	0.500	0.313	0.313	0.472	0.060	0.156	0.567	1.195	0.404	0.317	0.377	0.315	7,400	0.810
40-3	0.500	0.313	0.313	0.472	0.060	0.156	0.567	1.773	0.404	0.317	0.377	0.315	11,100	1.210
40-4	0.500	0.313	0.313	0.472	0.060	0.156	0.567	2.331	0.404	0.317	0.377	0.315	14,800	1.610

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																										
	10	25	50	100	180	200	300	400	500	700	900	1000	1200	1400	1600	1800	2100	2400	2700	3000	3500	4000	5000	6000	7000	8000	8500
11	0.06	0.14	0.27	0.52	0.91	1.00	1.48	1.95	2.42	3.34	4.25	4.70	5.60	6.49	5.57	4.66	3.70	3.03	2.54	2.17	1.72	1.41	1.01	0.77	0.61	0.50	0.45
12	0.06	0.15	0.29	0.56	0.99	1.09	1.61	2.13	2.64	3.64	4.64	5.13	6.11	7.09	6.34	5.31	4.22	3.45	2.89	2.47	1.96	1.60	1.15	0.87	0.69	0.57	0.00
13	0.07	0.16	0.31	0.61	1.07	1.19	1.75	2.31	2.86	3.95	5.02	5.56	6.62	7.68	7.15	5.99	4.76	3.89	3.26	2.79	2.21	1.81	1.29	0.98	0.78	0.00	
14	0.07	0.17	0.34	0.66	1.15	1.28	1.88	2.48	3.08	4.25	5.41	5.98	7.13	8.27	7.99	6.70	5.31	4.35	3.65	3.11	2.47	2.02	1.45	1.10	0.87	0.00	
15	0.08	0.19	0.36	0.70	1.24	1.37	2.02	2.66	3.30	4.55	5.80	6.41	7.64	8.86	8.86	7.43	5.89	4.82	4.04	3.45	2.74	2.24	1.60	1.22	0.97	0.00	
16	0.08	0.20	0.39	0.75	1.32	1.46	2.15	2.84	3.52	4.86	6.18	6.84	8.15	9.45	9.76	8.18	6.49	5.31	4.45	3.80	3.02	2.47	1.77	1.34	0.00		
17	0.09	0.21	0.41	0.80	1.40	1.55	2.29	3.02	3.74	5.16	6.57	7.27	8.66	10.04	10.69	8.96	7.11	5.82	4.88	4.17	3.31	2.71	1.94	1.47	0.00		
18	0.09	0.22	0.43	0.84	1.48	1.64	2.42	3.19	3.96	5.46	6.95	7.69	9.17	10.63	11.65	9.76	7.75	6.34	5.31	4.54	3.60	2.95	2.11	1.60	0.00		
19	0.10	0.24	0.46	0.89	1.57	1.73	2.56	3.37	4.18	5.77	7.34	8.12	9.68	11.22	12.64	10.59	8.40	6.88	5.76	4.92	3.91	3.20	2.29	0.09	0.00		
20	0.10	0.25	0.48	0.94	1.65	1.82	2.69	3.55	4.39	6.07	7.73	8.55	10.18	11.81	13.42	11.44	9.07	7.43	6.22	5.31	4.22	3.45	2.47	0.00			
21	0.11	0.26	0.51	0.98	1.73	1.91	2.83	3.72	4.61	6.37	8.11	8.98	10.69	12.40	14.10	12.30	9.76	7.99	6.70	5.72	4.54	3.71	2.66	0.00			
22	0.11	0.27	0.53	1.03	1.81	2.01	2.96	3.90	4.83	6.68	8.50	9.40	11.20	12.99	14.77	13.19	10.47	8.57	7.18	6.13	4.87	3.98	2.85	0.00			
23	0.12	0.28	0.55	1.08	1.90	2.10	3.10	4.08	5.05	6.98	8.89	9.83	11.71	13.58	15.44	14.10	11.19	9.16	7.68	6.55	5.20	4.26	3.05	0.00			
24	0.12	0.30	0.58	1.12	1.98	2.19	3.23	4.26	5.27	7.28	9.27	10.26	12.22	14.17	16.11	15.03	11.93	9.76	8.18	6.99	5.54	4.54	0.87	0.00			
25	0.13	0.31	0.60	1.17	2.06	2.28	3.36	4.43	5.49	7.59	9.66	10.69	12.73	14.76	16.78	15.98	12.68	10.38	8.70	7.43	5.89	4.82	0.00				
26	0.13	0.32	0.63	1.22	2.14	2.37	3.50	4.61	5.71	7.89	10.04	11.11	13.24	15.35	17.45	16.95	13.45	11.01	9.23	7.88	6.25	5.12	0.00				
28	0.14	0.35	0.67	1.31	2.31	2.55	3.77	4.97	6.15	8.50	10.82	11.97	14.26	16.53	18.79	18.94	15.03	12.30	10.31	8.80	6.99	5.72	0.00				
30	0.15	0.37	0.72	1.41	2.47	2.74	4.04	5.32	6.59	9.11	11.59	12.82	15.28	17.71	20.14	21.01	16.67	13.65	11.44	9.76	7.75	6.34	0.00				
32	0.16	0.40	0.77	1.50	2.64	2.92	4.31	5.68	7.03	9.71	12.36	13.68	16.30	18.89	21.48	23.14	18.37	15.03	12.60	10.76	8.54	1.41					
35	0.18	0.43	0.84	1.64	2.88	3.19	4.71	6.21	7.69	10.62	13.52	14.96	17.82	20.67	23.49	26.30	21.01	17.20	14.41	12.30	9.76	0.00					
40	0.21	0.50	0.96	1.87	3.30	3.65	5.38	7.09	8.79	12.14	15.45	17.10	20.37	23.62	26.85	30.06	25.67	21.01	17.61	15.03	0.00						
45	0.23	0.56	1.08	2.11	3.71	4.10	6.06	7.98	9.89	13.66	17.39	19.24	22.92	26.57	30.20	33.82	30.63	25.07	21.01	5.53	0.00						

Type I
Manual or Drip Lubrication

Type II
Bath or Disc Lubrication

Type III
Oil Stream Lubrication

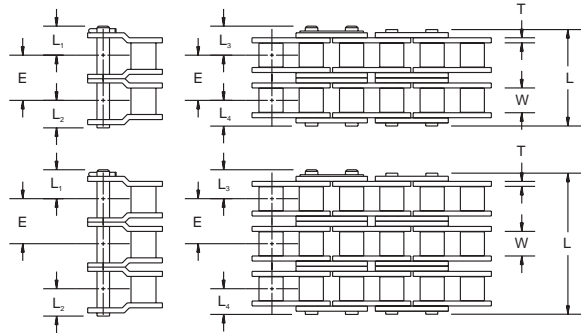
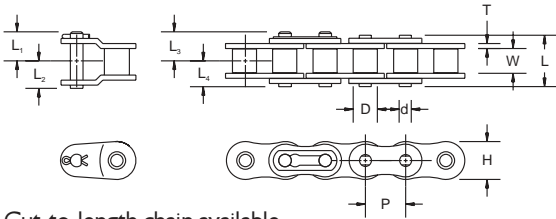
The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Made in U.S.A.

QUALITY

Drives Precision Roller Chain Products

50 0.625" Pitch



Cut-to-length chain available.

Available in riveted style.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate		Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Weight
				H	T			L	L ₁	L ₂	L ₃	L ₄		
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.
50-1	0.625	0.376	0.400	0.590	0.080	0.200	--	0.795	0.489	0.399	0.489	0.398	6,100	0.713
50-2	0.625	0.376	0.400	0.590	0.080	0.200	0.713	1.511	0.489	0.399	0.489	0.398	12,200	1.406
50-3	0.625	0.376	0.400	0.590	0.080	0.200	0.713	2.230	0.489	0.399	0.489	0.398	18,300	2.099
50-4	0.625	0.376	0.400	0.590	0.080	0.200	0.713	2.943	0.489	0.399	0.489	0.398	24,400	2.790
50-5	0.625	0.376	0.400	0.590	0.080	0.200	0.713	3.656	0.489	0.399	0.489	0.398	30,500	3.830

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

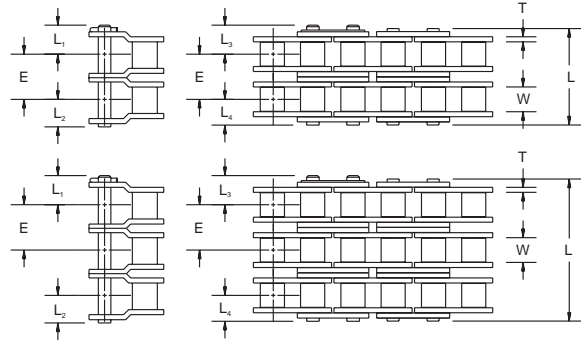
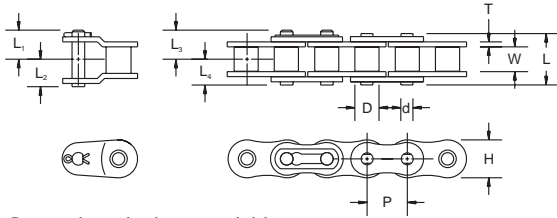
No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																								
	10	25	50	100	140	200	300	500	700	900	1200	1500	1800	2100	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500
11	0.11	0.27	0.52	1.00	1.39	1.95	2.88	4.70	6.50	8.27	10.24	13.33	16.58	20.00	23.60	27.30	31.10	35.00	39.00	43.10	47.30	51.60	56.00	60.50	65.10
12	0.12	0.29	0.56	1.09	1.51	2.13	3.14	5.13	7.09	9.02	11.67	15.00	19.00	23.70	28.60	33.70	39.00	44.50	50.20	56.00	62.00	68.10	74.40	80.80	87.40
13	0.13	0.31	0.61	1.19	1.64	2.31	3.40	5.56	7.68	9.77	12.88	16.80	21.50	26.40	31.50	36.80	42.30	48.00	53.80	59.80	65.90	72.20	78.70	85.40	92.20
14	0.14	0.34	0.66	1.28	1.76	2.48	3.67	5.99	8.27	10.53	13.87	18.00	22.90	28.00	33.30	38.80	44.50	50.40	56.40	62.60	68.90	75.40	82.10	89.00	96.00
15	0.15	0.36	0.70	1.37	1.89	2.66	3.93	6.41	8.86	11.28	14.86	19.50	24.50	29.80	35.30	41.00	46.80	52.80	58.90	65.20	71.70	78.40	85.30	92.40	99.60
16	0.16	0.39	0.75	1.46	2.02	2.84	4.19	6.84	9.45	12.03	15.85	20.70	25.80	31.20	36.80	42.60	48.60	54.70	61.00	67.40	74.00	80.80	87.80	95.00	102.40
17	0.17	0.41	0.80	1.55	2.14	3.02	4.45	7.27	10.04	12.78	16.85	21.80	27.10	32.70	38.50	44.40	50.50	56.70	63.10	69.60	76.30	83.20	90.30	97.60	105.10
18	0.18	0.43	0.84	1.64	2.27	3.19	4.71	7.70	10.63	13.53	17.84	23.00	28.50	34.20	40.10	46.10	52.20	58.40	64.70	71.20	77.90	84.80	91.90	99.20	106.70
19	0.19	0.46	0.89	1.73	2.39	3.37	4.98	8.12	11.22	14.28	18.83	24.20	29.90	35.80	41.80	47.90	54.10	60.40	66.80	73.40	80.10	87.00	94.10	101.40	108.90
20	0.20	0.48	0.94	1.82	2.52	3.55	5.24	8.55	11.81	15.04	19.82	25.20	31.10	37.20	43.40	49.70	56.10	62.60	69.20	75.90	82.80	89.80	97.00	104.40	112.00
21	0.21	0.51	0.98	1.92	2.65	3.73	5.50	8.98	12.40	15.79	20.81	26.30	32.40	38.70	45.10	51.60	58.20	64.90	71.70	78.60	85.60	92.70	100.00	107.50	115.20
22	0.22	0.53	1.03	2.01	2.77	3.90	5.76	9.41	12.99	16.54	21.80	27.50	33.80	40.30	46.80	53.40	60.10	66.90	73.80	80.80	87.90	95.10	102.50	110.10	117.80
23	0.23	0.55	1.08	2.10	2.90	4.08	6.02	9.83	13.58	17.29	22.79	28.60	35.10	41.70	48.40	55.20	62.10	69.10	76.20	83.40	90.70	98.10	105.70	113.40	121.20
24	0.24	0.58	1.13	2.19	3.02	4.26	6.28	10.26	14.18	18.04	23.78	29.62	36.30	43.10	49.90	56.80	63.80	70.90	78.10	85.40	92.80	100.30	108.00	115.80	123.70
25	0.25	0.60	1.17	2.28	3.15	4.44	6.55	10.69	14.77	18.79	24.77	30.51	37.40	44.30	51.20	58.20	65.30	72.50	79.70	87.10	94.60	102.20	110.00	117.90	125.90
26	0.26	0.63	1.22	2.37	3.28	4.61	6.81	11.12	15.36	19.55	25.76	31.64	38.60	45.60	52.60	59.70	66.90	74.20	81.60	89.10	96.70	104.40	112.30	120.30	128.40
28	0.28	0.67	1.31	2.55	3.53	4.97	7.33	11.97	16.54	21.05	27.75	34.00	41.20	48.40	55.70	63.10	70.60	78.10	85.70	93.40	101.20	109.10	117.10	125.20	133.40
30	0.30	0.72	1.41	2.74	3.78	5.32	7.86	12.83	17.72	22.55	29.73	36.01	43.30	50.60	58.00	65.50	73.00	80.60	88.30	96.10	104.00	112.00	120.10	128.30	136.60
32	0.32	0.77	1.50	2.92	4.03	5.68	8.38	13.68	18.90	24.06	31.71	38.80	46.20	53.60	61.10	68.70	76.30	84.00	91.80	99.70	107.70	115.80	124.00	132.30	140.70
35	0.35	0.84	1.64	3.19	4.41	6.21	9.16	14.97	20.67	26.31	34.68	41.80	49.20	56.60	64.10	71.70	79.30	87.00	94.80	102.70	110.70	118.80	127.00	135.30	143.70
40	0.40	0.96	1.88	3.65	5.04	7.10	10.47	17.10	23.63	30.07	39.64	47.00	54.50	62.00	69.50	77.00	84.50	92.00	99.50	107.00	114.50	122.00	130.00	138.00	146.00
45	0.45	1.08	2.11	4.10	5.67	7.98	11.78	19.24	26.58	33.83	44.59	52.00	59.50	67.00	74.50	82.00	89.50	97.00	104.50	112.00	119.50	127.00	134.50	142.00	150.00

Type I Manual or Drip Lubrication Type II Bath or Disc Lubrication Type III Oil Stream Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Drives Precision Roller Chain Products

60 0.750" Pitch



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Weight	Riveted	Cottered
				H	T	d			L	L ₁	L ₂	L ₃	L ₄				
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.			
60-1	0.750	0.500	0.469	0.705	0.094	0.234	--	0.996	0.600	0.498	0.648	0.498	8,500	1.067	STD	MTO	
60-2	0.750	0.500	0.469	0.705	0.094	0.234	0.898	1.896	0.600	0.498	0.648	0.498	17,000	2.068	STD	MTO	
60-3	0.750	0.500	0.469	0.705	0.094	0.234	0.898	2.794	0.600	0.498	0.648	0.498	25,500	3.069	STD	MTO	
60-4	0.750	0.500	0.469	0.705	0.094	0.234	0.898	3.690	0.600	0.498	0.648	0.498	34,000	4.070	MTO	MTO	
60-5	0.750	0.500	0.469	0.705	0.094	0.234	0.898	4.588	0.600	0.498	0.648	0.498	42,500	5.071	MTO	MTO	
60-6	0.750	0.500	0.469	0.705	0.094	0.234	0.898	5.486	0.600	0.498	0.648	0.498	51,000	6.072	MTO	MTO	

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																								
	10	25	50	100	120	200	300	400	500	600	800	1000	1200	1400	1600	1800	2000	2500	3000	3500	4000	4500	5000	5500	6000
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	0.00
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	0.00
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	0.00	
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	0.00	
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	0.00		
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	0.00		
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	0.00			
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	0.00			
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	0.00			
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	0.00				
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	0.00				
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	0.00					
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	0.00					
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	0.00					
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	0.00					
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	0.00					
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	0.00						
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	0.00						
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	0.00						
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	0.00						
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	0.00							
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	0.00							

Type I Manual or Drip Lubrication Type II Bath or Disc Lubrication Type III Oil Stream Lubrication

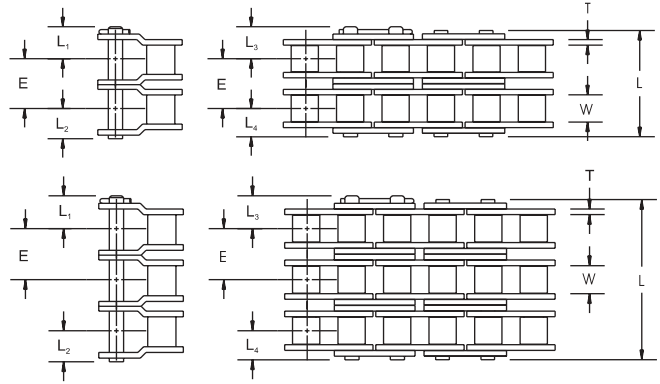
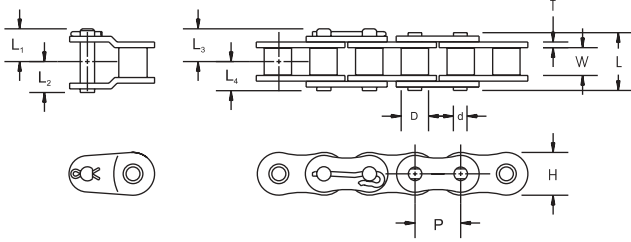
The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Made in U.S.A.

SERVICES

Drives Precision Roller Chain Products

80 1.000" Pitch



Cut-to-length chain available.

Chain No.	Pitch P	Width Between L.P. W	Roller Dia. D	Link Plate H	Link Plate T	Pin Dia. d	Transverse Pitch E	Pin					Average Tensile Strength Case Hardened Pin Lb.	Average Tensile Strength Through Hardened Pin Lb.	Average Weight Lb./Ft.	Riveted	Cottered
								L	L ₁	L ₂	L ₃	L ₄					
80-1	1.000	0.627	0.625	0.943	0.125	0.313	--	1.283	0.768	0.638	0.857	0.642	14,500	21,500	1.868	STD	STD
80-2	1.000	0.627	0.625	0.943	0.125	0.313	1.155	2.434	0.768	0.638	0.857	0.642	29,000	43,000	3.735	STD	STD
80-3	1.000	0.627	0.625	0.943	0.125	0.313	1.155	3.589	0.768	0.638	0.857	0.642	43,500	64,500	5.602	STD	STD
80-4	1.000	0.627	0.625	0.943	0.125	0.313	1.155	4.749	0.768	0.638	0.857	0.642	58,000	86,000	7.436	MTO	STD
80-5	1.000	0.627	0.625	0.943	0.125	0.313	1.155	5.904	0.768	0.638	0.857	0.642	72,500	107,500	9.031	MTO	MTO
80-6	1.000	0.627	0.625	0.943	0.125	0.313	1.155	7.059	0.768	0.638	0.857	0.642	87,000	129,000	10.824	MTO	MTO
80-8	1.000	0.627	0.625	0.943	0.125	0.313	1.155	9.369	0.768	0.638	0.857	0.642	116,000	172,000	14.432	MTO	MTO

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																														
	10	25	50	75	88	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2700	3000	3300	3600	4000	4500	
11	0.44	1.06	2.07	3.05	3.56	4.03	5.94	7.83	11.56	15.23	18.87	22.48	26.07	27.41	22.97	19.61	17.00	14.92	11.84	9.69	8.12	6.93	6.01	5.27	4.42	3.77	3.27	2.87	2.45	0.00	
12	0.48	1.16	2.26	3.33	3.88	4.39	6.48	8.54	12.61	16.62	20.59	24.53	28.44	31.23	26.17	22.35	19.37	17.00	13.49	11.04	9.25	7.90	6.85	6.01	5.04	4.30	3.73	3.27	2.79	0.00	
13	0.52	1.26	2.45	3.61	4.21	4.76	7.02	9.26	13.66	18.00	22.31	26.57	30.81	35.02	29.51	25.20	21.84	19.17	15.21	12.45	10.43	8.91	7.72	6.78	5.68	4.85	4.20	3.69	0.00		
14	0.56	1.35	2.63	3.89	4.53	5.12	7.56	9.97	14.71	19.39	24.02	28.62	33.18	37.72	32.98	28.16	24.41	21.42	17.00	13.91	11.66	9.96	8.63	7.57	6.35	5.42	4.70	4.12			
15	0.60	1.45	2.82	4.16	4.86	5.49	8.10	10.68	15.76	20.77	25.74	30.66	35.55	40.41	36.58	31.23	27.07	23.76	18.85	15.43	12.93	11.04	9.57	8.40	7.04	6.01	5.21	4.57			
16	0.64	1.55	3.01	4.44	5.18	5.86	8.64	11.39	16.81	22.16	27.45	32.70	37.92	43.11	40.30	34.41	29.82	26.17	20.77	17.00	14.25	12.16	10.54	9.25	7.76	6.62	5.74	0.00			
17	0.68	1.64	3.20	4.72	5.50	6.22	9.18	12.10	17.86	23.54	29.17	34.75	40.29	45.80	44.13	37.68	32.66	28.66	22.75	18.62	15.60	13.32	11.55	10.13	8.49	7.25	0.00				
18	0.72	1.74	3.39	5.00	5.83	6.59	9.72	12.81	18.91	24.93	30.88	36.79	42.66	48.49	48.08	41.05	35.59	31.23	24.78	20.29	17.00	14.51	12.58	11.04	9.25	7.90	0.00				
19	0.76	1.84	3.57	5.28	6.15	6.95	10.26	13.53	19.96	26.31	32.60	38.84	45.03	51.19	52.15	44.52	38.59	33.87	26.88	22.00	18.44	15.74	13.64	11.97	10.04	0.36	0.00				
20	0.80	1.93	3.76	5.55	6.47	7.32	10.80	14.24	21.01	27.70	34.32	40.88	47.40	53.88	56.32	48.08	41.68	36.58	29.03	23.76	19.91	17.00	14.74	12.93	10.84	0.00					
21	0.84	2.03	3.95	5.83	6.80	7.69	11.34	14.95	22.07	29.08	36.03	42.92	49.77	56.58	60.59	51.73	44.84	39.36	31.23	25.56	21.42	18.29	15.85	13.91	11.66	0.00					
22	0.88	2.13	4.14	6.11	7.12	8.05	11.88	15.66	23.12	30.47	37.75	44.97	52.14	59.27	64.97	55.47	48.08	42.20	33.49	27.41	22.97	19.61	17.00	14.92	0.00						
23	0.92	2.22	4.33	6.39	7.45	8.42	12.42	16.37	24.17	31.85	39.46	47.01	54.51	61.97	69.38	59.30	51.40	45.11	35.80	29.30	24.55	20.97	18.17	15.95	0.00						
24	0.96	2.32	4.52	6.66	7.77	8.78	12.96	17.09	25.22	33.24	41.18	49.06	56.88	64.66	72.40	63.21	54.79	48.08	38.16	31.23	26.17	22.35	19.37	17.00	0.00						
25	1.00	2.42	4.70	6.94	8.09	9.15	13.50	17.80	26.27	34.62	42.89	51.10	59.25	67.35	75.42	67.20	58.25	51.12	40.57	33.20	27.83	23.76	20.59	18.16	0.00						
26	1.04	2.51	4.89	7.22	8.42	9.52	14.04	18.51	27.32	36.01	44.61	53.14	61.62	70.05	78.43	71.27	61.78	54.22	43.02	35.22	29.51	25.20	21.84	0.00							
28	1.12	2.71	5.27	7.77	9.06	10.25	15.12	19.93	29.42	38.78	48.04	57.23	66.36	75.44	84.47	79.65	69.04	60.59	48.08	39.36	32.98	28.16	9.22	0.00							
30	1.20	2.90	5.64	8.33	9.71	10.98	16.20	21.36	31.52	41.55	51.47	61.32	71.10	80.82	90.50	88.33	76.57	67.20	53.33	43.65	36.58	31.23	0.00								
32	1.28	3.09	6.02	8.89	10.36	11.71	17.28	22.78	33.62	44.32	54.91	65.41	75.84	86.21	96.53	97.31	84.35	74.03	58.75	48.08	40.30	5.65	0.00								
35	1.40	3.38	6.58	9.72	11.33	12.81	18.90	24.92	36.78	48.47	60.05	71.54	82.95	94.29	105.58	111.31	96.49	84.68	67.20	55.00	28.15	0.00									
40	1.61	3.87	7.53	11.11	12.95	14.64	21.61	28.48	42.03	55.40	68.63	81.76	94.80	107.77	120.67	133.51	117.88	103.46	82.10	40.16	0.00										
45	1.81	4.35	8.47	12.49	14.57	16.47	24.31	32.04	47.28	62.32	77.21	91.98	106.65	121.24	135.75	150.20	140.66	123.45	72.28	0.00											

Type I
Manual or Drip Lubrication

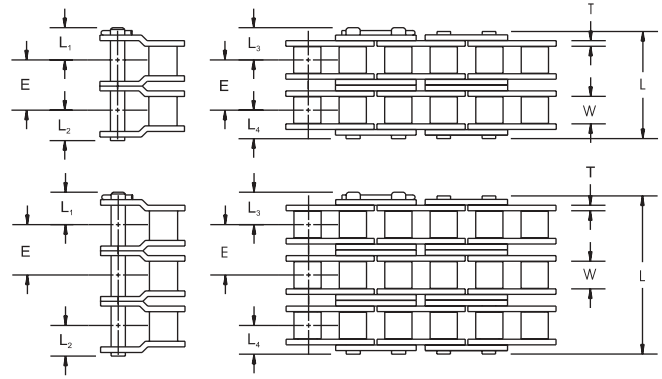
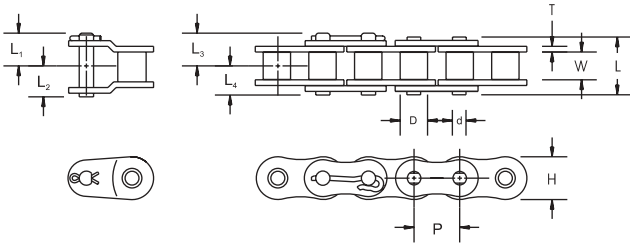
Type II
Bath or Disc Lubrication

Type III
Oil Stream Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Drives Precision Roller Chain Products

100 1.250" Pitch



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Tensile Strength Through Hardened Pin	Average Weight	Riveted	Cottered	
							L	L ₁	L ₂	L ₃	L ₄						Lb.
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb.	Lb./Ft.		
100-1	1.250	0.755	0.750	1.180	0.156	0.375	--	1.595	0.908	0.785	0.912	0.785	24,000	33,000	2.801	STD	STD
100-2	1.250	0.755	0.750	1.180	0.156	0.375	1.411	3.000	0.908	0.785	0.912	0.785	48,000	66,000	5.603	STD	STD
100-3	1.250	0.755	0.750	1.180	0.156	0.375	1.411	4.392	0.908	0.785	0.912	0.785	72,000	99,000	8.470	MTO	STD
100-4	1.250	0.755	0.750	1.180	0.156	0.375	1.411	5.803	0.908	0.785	0.912	0.785	96,000	132,000	11.110	MTO	STD
100-5	1.250	0.755	0.750	1.180	0.156	0.375	1.411	7.214	0.908	0.785	0.912	0.785	120,000	165,000	13.970	MTO	STD
100-6	1.250	0.755	0.750	1.180	0.156	0.375	1.411	8.625	0.908	0.785	0.912	0.785	144,000	198,000	16.720	MTO	STD
100-8	1.250	0.755	0.750	1.180	0.156	0.375	1.411	11.447	0.908	0.785	0.912	0.785	192,000	264,000	22.290	MTO	STD

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																												
	5	10	25	50	71	75	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2700	3000	3300	3600
11	0.43	0.85	2.04	3.96	5.55	5.85	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	7.19	6.31	5.28	4.51	3.91	0.00
12	0.47	0.92	2.22	4.32	6.05	6.38	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	8.19	7.19	6.02	5.14	4.46	0.00
13	0.51	1.00	2.41	4.68	6.56	6.91	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	9.23	8.10	6.79	5.80	0.00	
14	0.55	1.08	2.59	5.04	7.06	7.45	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	10.32	9.05	7.59	1.13	0.00	
15	0.59	1.15	2.78	5.41	7.57	7.98	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	11.44	10.04	8.42	0.00		
16	0.63	1.23	2.96	5.77	8.07	8.51	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	12.60	11.06	4.93	0.00		
17	0.67	1.31	3.15	6.13	8.58	9.04	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	13.80	12.12	0.00			
18	0.71	1.38	3.33	6.49	9.08	9.57	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	15.04	13.20	0.00			
19	0.75	1.46	3.52	6.85	9.59	10.10	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	16.31	0.56	0.00			
20	0.79	1.54	3.70	7.21	10.09	10.64	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	17.62	0.00				
21	0.83	1.61	3.89	7.57	10.60	11.17	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	8.17	0.00				
22	0.87	1.69	4.08	7.93	11.10	11.70	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	0.00					
23	0.91	1.77	4.26	8.29	11.60	12.23	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	0.00					
24	0.95	1.84	4.45	8.65	12.11	12.76	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	0.00					
25	0.99	1.92	4.63	9.01	12.61	13.30	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	0.00						
26	1.03	2.00	4.82	9.37	13.12	13.83	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	0.00						
28	1.11	2.15	5.19	10.09	14.13	14.89	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	0.00							
30	1.19	2.31	5.56	10.81	15.14	15.95	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	0.00							
32	1.26	2.46	5.93	11.53	16.15	17.02	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	0.00							
35	1.38	2.69	6.48	12.61	17.66	18.61	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	0.00								
40	1.58	3.07	7.41	14.41	20.18	21.27	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	0.00									
45	1.78	3.46	8.34	16.22	22.71	23.93	31.54	46.55	61.36	90.56	119.37	147.89	176.17	204.27	232.21	227.21	194.00	168.15	34.58	0.00									

Type I
Manual or Drip Lubrication

Type II
Bath or Disc Lubrication

Type III
Oil Stream Lubrication

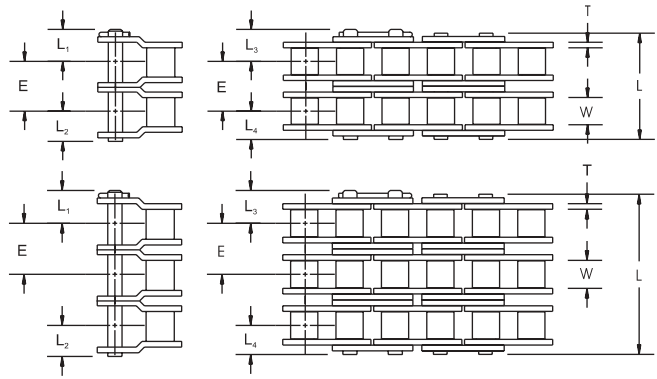
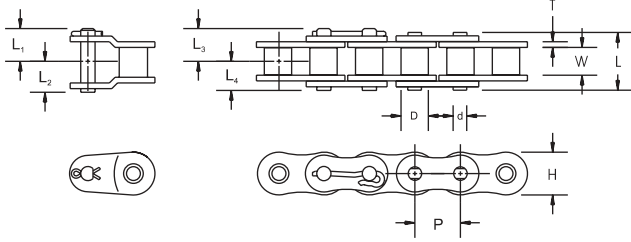
The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Made in U.S.A.

PERFORMANCE

Drives Precision Roller Chain Products

120 I.500" Pitch



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Tensile Strength Through Hardened Pin	Average Weight	Riveted	Cottered	
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb.	Lb./Ft.		
120-1	1.500	1.000	0.875	1.425	0.187	0.437	--	1.955	1.119	1.071	1.119	0.989	34,000	45,100	4.135	STD	STD
120-2	1.500	1.000	0.875	1.425	0.187	0.437	1.789	3.767	1.119	1.071	1.119	0.989	68,000	90,200	8.270	STD	STD
120-3	1.500	1.000	0.875	1.425	0.187	0.437	1.789	5.556	1.119	1.071	1.119	0.989	102,000	135,300	12.100	MTO	STD
120-4	1.500	1.000	0.875	1.425	0.187	0.437	1.789	7.345	1.119	1.071	1.119	0.989	136,000	180,400	16.170	MTO	STD
120-5	1.500	1.000	0.875	1.425	0.187	0.437	1.789	9.134	1.119	1.071	1.119	0.989	170,000	225,500	20.240	MTO	STD
120-6	1.500	1.000	0.875	1.425	0.187	0.437	1.789	10.923	1.119	1.071	1.119	0.989	204,000	270,600	24.200	MTO	STD
120-8	1.500	1.000	0.875	1.425	0.187	0.437	1.789	14.501	1.119	1.071	1.119	0.989	272,000	360,800	32.270	MTO	STD

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																													
	5	10	25	50	60	75	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2700	3000			
11	0.73	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	23.51	20.64	16.38	13.40	11.23	9.59	8.31	7.30	6.11	0.00			
12	0.80	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	26.79	23.51	18.66	15.27	12.80	10.93	9.47	8.31	6.97	0.00			
13	0.87	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	30.21	26.51	21.04	17.22	14.43	12.32	10.68	9.37	0.00				
14	0.93	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	33.76	29.63	23.51	19.25	16.13	13.77	11.94	10.48	0.00				
15	1.00	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	37.44	32.86	26.08	21.34	17.89	15.27	13.24	0.00					
16	1.07	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	41.25	36.20	28.73	23.51	19.71	16.83	14.58	0.00					
17	1.13	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	45.18	39.65	31.46	25.75	21.58	18.43	0.00						
18	1.20	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	49.22	43.20	34.28	28.06	23.51	20.08	0.00						
19	1.27	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	53.38	46.85	37.18	30.43	25.50	0.80	0.00						
20	1.33	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	57.65	50.59	40.15	32.86	27.54	0.00							
21	1.40	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	62.02	54.44	43.20	35.36	27.46	0.00							
22	1.47	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	66.51	58.37	46.32	37.91	0.00								
23	1.53	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	71.09	62.39	49.51	40.53	0.00								
24	1.60	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	75.78	66.51	52.78	43.20	0.00								
25	1.67	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	80.56	70.71	56.11	46.32	0.00								
26	1.73	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	85.45	74.99	59.51	0.00									
28	1.87	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	95.49	83.81	66.51	0.00									
30	2.00	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	105.90	92.95	73.76	0.00									
32	2.14	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	116.67	102.39	0.00										
35	2.34	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	133.46	102.39	0.00										
40	2.67	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	142.93	0.00											
45	3.00	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	176.66	142.93	0.00											

Type I
Manual or Drip Lubrication

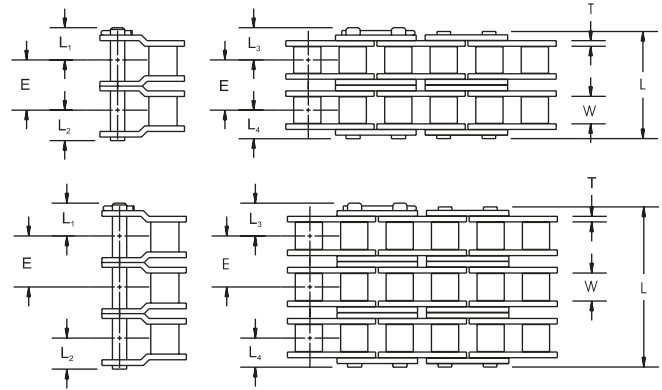
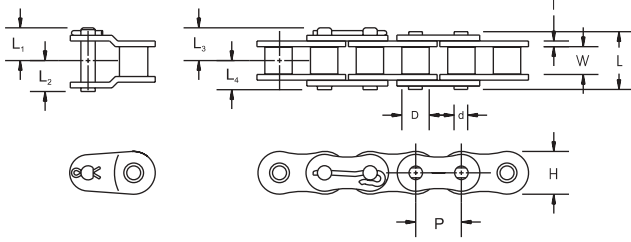
Type II
Bath or Disc Lubrication

Type III
Oil Stream Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Drives Precision Roller Chain Products

I 40 1.750" Pitch



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Tensile Strength Through Hardened Pin	Average Weight	Riveted	Cottered	
							L	L ₁	L ₂	L ₃	L ₄						
140-1	1.750	1.000	1.000	1.663	0.220	0.500	--	2.136	1.253	1.150	1.253	1.068	46,000	57,450	5.136	STD	STD
140-2	1.750	1.000	1.000	1.663	0.220	0.500	1.924	4.062	1.253	1.150	1.253	1.068	92,000	114,900	10.270	STD	STD
140-3	1.750	1.000	1.000	1.663	0.220	0.500	1.924	5.984	1.253	1.150	1.253	1.068	138,000	172,350	15.290	MTO	STD
140-4	1.750	1.000	1.000	1.663	0.220	0.500	1.924	7.908	1.253	1.150	1.253	1.068	184,000	229,800	20.460	MTO	STD
140-5	1.750	1.000	1.000	1.663	0.220	0.500	1.924	9.832	1.253	1.150	1.253	1.068	230,000	287,250	25.520	MTO	STD
140-6	1.750	1.000	1.000	1.663	0.220	0.500	1.924	11.756	1.253	1.150	1.253	1.068	276,000	344,700	30.690	MTO	STD
140-8	1.750	1.000	1.000	1.663	0.220	0.500	1.924	15.604	1.253	1.150	1.253	1.068	368,000	459,600	40.920	MTO	STD

Multiple Strand I40-3 through I40-8 only available with Through Hardened pin in Riveted and Cottered styles. Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

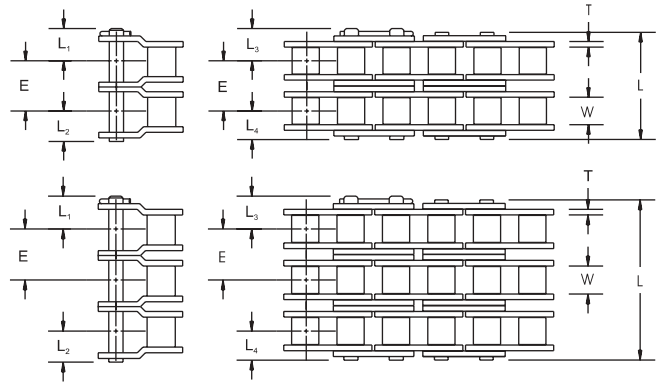
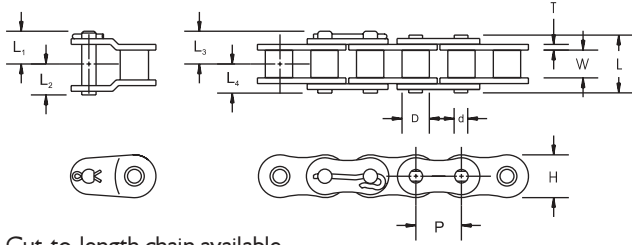
No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																									
	5	10	25	50	53	75	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2700
11	1.14	2.21	5.32	10.36	10.95	15.28	20.15	29.73	39.19	57.84	76.24	86.80	66.03	52.40	42.89	35.94	30.69	26.60	23.35	18.53	15.16	12.71	10.85	9.40	8.25	0.00
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	30.31	26.60	21.11	17.28	14.48	12.36	10.72	0.72	0.00
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	34.17	29.99	23.80	19.48	16.33	13.94	12.08	0.00	
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	38.19	33.52	26.60	21.77	18.25	15.58	0.00		
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	42.36	37.17	29.50	24.15	20.24	17.28	0.00		
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	46.66	40.95	32.50	26.60	22.29	0.00			
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	51.11	44.85	35.59	29.13	24.41	0.00			
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	56.68	48.87	38.78	31.74	0.00				
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	60.38	53.00	42.06	34.42	0.00				
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	65.21	57.23	45.42	35.82	0.00				
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	70.16	61.58	48.87	0.00					
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	75.24	66.03	52.40	0.00					
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	80.42	70.58	56.01	0.00					
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	85.72	75.24	37.90	0.00					
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	91.14	79.99	0.00						
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	96.66	84.83	0.00						
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	108.03	96.62	0.00						
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	119.80	18.64	0.00						
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	135.27	83.92	0.00							
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	0.00								
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	0.00									
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	0.00										

Type I Manual or Drip Lubrication Type II Bath or Disc Lubrication Type III Oil Stream Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Drives Precision Roller Chain Products

160 2.000" Pitch



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pin	Average Tensile Strength Through Hardened Pin	Average Weight	Riveted	Cottered	
							L	L ₁	L ₂	L ₃	L ₄						
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb.	Lb./Ft.		
160-1	2.000	1.250	1.125	1.899	0.250	0.562	--	2.538	1.454	1.370	1.454	1.269	58,000	72,800	6.603	STD	STD
160-2	2.000	1.250	1.125	1.899	0.250	0.562	2.305	4.843	1.454	1.370	1.454	1.269	116,000	145,600	13.210	STD	STD
160-3	2.000	1.250	1.125	1.899	0.250	0.562	2.305	7.148	1.454	1.370	1.454	1.269	174,000	218,400	20.790	MTO	STD
160-4	2.000	1.250	1.125	1.899	0.250	0.562	2.305	9.453	1.454	1.370	1.454	1.269	232,000	291,200	27.830	MTO	STD
160-5	2.000	1.250	1.125	1.899	0.250	0.562	2.305	11.758	1.454	1.370	1.454	1.269	290,000	364,000	34.760	MTO	STD
160-6	2.000	1.250	1.125	1.899	0.250	0.562	2.305	14.063	1.454	1.370	1.454	1.269	348,000	436,800	41.690	MTO	STD
160-8	2.000	1.250	1.125	1.899	0.250	0.562	2.305	20.147	1.454	1.370	1.454	1.269	406,000	464,000	55.495	MTO	STD

Multiple Strand 160-3 through 160-8 only available with Through Hardened pin in Riveted and Cottered styles. Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

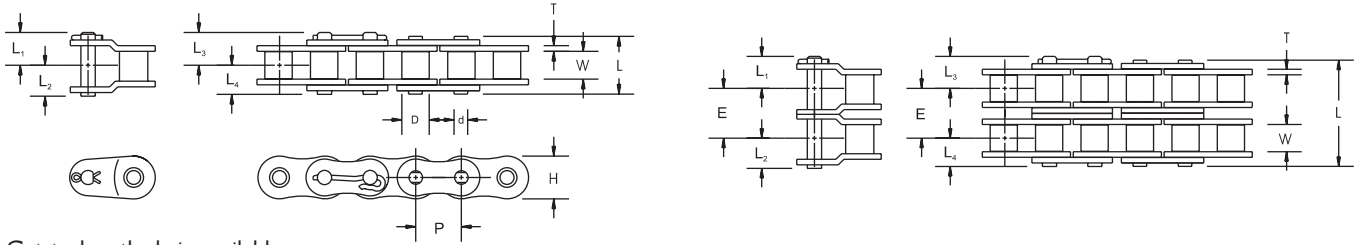
No. of Teeth Small Sprocket	Revolutions Per Minute - Small Sprocket																									
	2	5	10	25	47	50	75	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2200	2400
11	0.68	1.65	3.20	7.72	14.16	15.02	22.17	29.23	43.14	56.86	83.91	110.60	96.58	73.47	58.31	47.72	39.99	34.15	29.60	25.98	20.61	16.87	14.14	12.07	10.46	0.00
12	0.75	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	0.00	
13	0.81	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	0.00		
14	0.87	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	0.00		
15	0.93	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	0.00			
16	0.99	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	0.00			
17	1.06	2.55	4.95	11.94	21.88	23.22	34.27	45.17	66.66	87.87	129.68	170.93	185.56	141.16	112.02	91.69	76.84	65.61	56.87	49.91	39.61	24.21	0.00			
18	1.12	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	0.00				
19	1.18	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	0.00				
20	1.24	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	0.00				
21	1.30	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	0.00					
22	1.37	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	0.00					
23	1.43	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	0.00					
24	1.49	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	0.00					
25	1.55	3.74	7.28	17.55	32.18	34.15	50.40	66.43	98.04	129.22	190.71	251.37	311.42	251.74	199.77	163.51	137.03	117.00	101.41	32.66	0.00					
26	1.62	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	0.00						
28	1.74	4.19	8.16	19.66	36.04	38.24	56.44	74.40	109.80	144.73	213.60	281.54	348.79	298.39	236.79	193.81	162.42	138.68	36.88	0.00						
30	1.86	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	0.00							
32	1.99	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	0.00							
35	2.17	5.24	10.20	24.57	45.05	47.81	70.55	93.00	137.25	180.91	266.99	351.92	435.99	417.01	330.92	270.86	112.60	0.00								
40	2.49	5.99	11.65	28.09	51.48	54.63	80.63	106.28	156.86	206.75	305.14	402.19	498.28	509.49	404.31	160.63	0.00									
45	2.80	6.74	13.11	31.60	57.92	61.46	90.71	119.57	176.47	232.59	343.28	452.47	560.56	607.95	289.10	0.00										

Type I Manual or Dip Lubrication Type II Bath or Disc Lubrication Type III Oil Stream Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Drives Precision Roller Chain Products

180 2.250" Pitch



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Through Hardened Pin	Average Weight	Riveted	Cottered	
							L	L ₁	L ₂	L ₃	L ₄					Lb.
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.		
180-1	2.250	1.400	1.406	2.132	0.281	0.687	--	2.780	1.561	1.390	1.561	1.390	95,000	9.100	STD	STD
180-2	2.250	1.400	1.406	2.132	0.281	0.687	2.592	5.372	1.561	1.390	1.561	1.390	190,000	18.100	STD	STD
180-3	2.250	1.406	1.406	2.132	0.281	0.687	2.592	7.862	1.561	1.390	1.561	1.390	285,000	27.005	MTO	MTO
180-4	2.250	1.406	1.406	2.132	0.281	0.687	2.592	10.454	1.561	1.390	1.561	1.390	380,000	35.910	MTO	MTO

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Speed, min. ⁻¹ , Small Sprocket																							
	2	5	10	25	43	50	75	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000
11	0.94	2.27	4.43	10.66	17.95	20.75	30.62	40.36	59.56	78.51	115.87	148.32	106.13	80.73	64.07	52.44	43.95	37.52	32.52	28.54	22.65	18.54	15.54	0.00
12	1.03	2.48	4.83	11.63	19.58	22.63	33.40	44.03	64.98	85.64	126.40	166.61	120.92	91.99	73.00	59.75	50.07	42.75	37.06	32.52	25.81	21.12	17.70	0.00
13	1.12	2.69	5.23	12.60	21.21	24.52	36.19	47.70	70.39	92.78	136.93	180.49	136.35	103.72	82.31	67.37	56.46	48.21	41.79	36.67	29.10	23.82	0.00	
14	1.20	2.90	5.63	13.57	22.84	26.40	38.97	51.36	75.81	99.92	147.47	194.37	152.38	115.92	91.99	75.29	63.10	53.87	46.70	40.98	32.52	26.62	0.00	
15	1.29	3.10	6.03	14.54	24.48	28.29	41.75	55.03	81.22	107.06	158.00	208.26	169.00	128.56	102.02	83.50	69.98	59.75	51.79	45.45	36.07	0.00		
16	1.37	3.31	6.44	15.51	26.11	30.18	44.54	58.70	86.64	114.19	168.53	222.14	186.17	141.63	112.39	91.99	77.09	65.82	57.05	50.07	39.74	0.00		
17	1.46	3.52	6.84	16.48	27.74	32.06	47.32	62.37	92.05	121.33	179.07	236.02	203.90	155.11	123.09	100.75	84.43	72.09	62.49	54.84	43.52	0.00		
18	1.54	3.72	7.24	17.45	29.37	33.95	50.10	66.04	97.47	128.47	189.60	249.91	222.15	169.00	134.11	109.77	91.99	78.54	68.08	59.75	0.00			
19	1.63	3.93	7.64	18.42	31.00	35.83	52.89	69.71	102.88	135.60	200.13	263.79	240.92	183.27	145.44	119.04	99.76	85.18	73.83	64.80	0.00			
20	1.72	4.14	8.05	19.39	32.64	37.72	55.67	73.38	108.30	142.74	210.67	277.68	260.19	197.93	157.07	128.56	107.74	91.99	79.74	69.98	0.00			
21	1.80	4.34	8.45	20.36	34.27	39.61	58.45	77.05	113.71	149.88	221.20	291.56	279.94	212.96	169.00	138.32	115.92	98.97	85.79	75.29	0.00			
22	1.89	4.55	8.85	21.33	35.90	41.49	61.24	80.71	119.12	157.02	231.73	305.44	300.17	228.35	181.21	148.32	124.30	106.13	91.99	0.00				
23	1.97	4.76	9.25	22.30	37.53	43.38	64.02	84.38	124.54	164.15	242.27	319.33	320.87	244.10	193.70	158.54	132.87	113.45	98.33	0.00				
24	2.06	4.96	9.65	23.27	39.16	45.26	66.80	88.05	129.95	171.29	252.80	333.21	342.02	260.19	206.47	169.00	141.63	120.92	40.34	0.00				
25	2.15	5.17	10.06	24.24	40.79	47.15	69.59	91.72	135.37	178.43	263.33	347.10	363.62	276.62	219.51	179.67	150.57	128.56	0.00					
26	2.23	5.38	10.46	25.21	42.43	49.04	72.37	95.39	140.78	185.56	273.87	360.98	385.66	293.38	232.81	190.55	159.69	122.43	0.00					
28	2.40	5.79	11.26	27.15	45.69	52.81	77.94	102.73	151.61	199.84	294.93	388.75	431.00	327.87	260.19	212.96	178.47	0.00						
30	2.57	6.20	12.07	29.09	48.95	56.58	83.50	110.07	162.44	214.11	316.00	416.51	477.99	363.62	288.56	236.18	128.92	0.00						
32	2.75	6.62	12.87	31.02	52.22	60.35	89.07	117.40	173.27	228.39	337.07	444.28	526.58	400.58	317.89	260.19	0.00							
35	3.00	7.24	14.08	33.93	57.11	66.01	97.42	128.41	189.52	249.80	368.67	485.93	602.34	458.22	363.62	142.51	0.00							
40	3.43	8.27	16.09	38.78	65.27	75.44	111.34	146.75	216.59	285.48	421.34	555.35	688.02	559.83	254.20	0.00								
45	3.86	9.31	18.10	43.63	73.43	84.87	125.26	165.10	243.66	321.17	474.00	624.77	774.03	480.00	0.00									

Type I
Manual or Drip
Lubrication

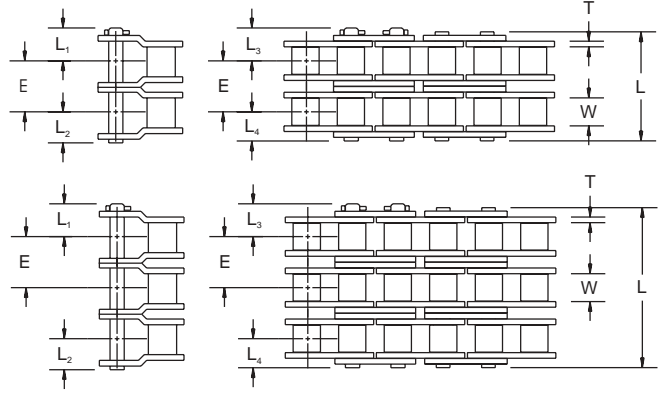
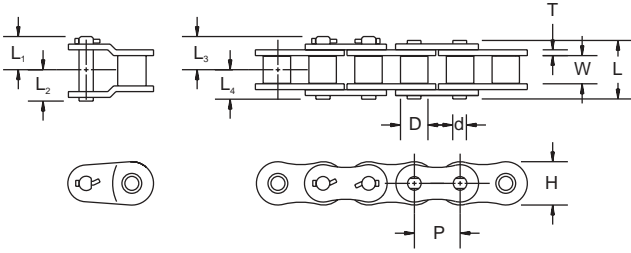
Type II
Bath or Disc Lubrication

Type III
Oil Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Drives Precision Roller Chain Products

200 2.500" Pitch



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Through Hardened Pin	Average Weight	Riveted	Cottered
				H	T	d			L	L ₁	L ₂	L ₃	L ₄				
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.			
200-1	2.500	1.500	1.562	2.312	0.312	0.781	--	3.088	1.889	1.544	1.889	1.544	100,000	10.900	STD	STD	
200-2	2.500	1.500	1.562	2.312	0.312	0.781	2.817	5.905	1.889	1.544	1.889	1.544	200,000	21.000	STD	STD	
200-3	2.500	1.500	1.562	2.312	0.312	0.781	2.817	8.722	1.889	1.544	1.889	1.544	300,000	31.500	MTO	MTO	
200-4	2.500	1.500	1.562	2.312	0.312	0.781	2.817	11.520	1.889	1.544	1.889	1.554	400,000	42.100	MTO	MTO	

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

Horsepower Table

No. of Teeth Small Sprocket	Speed, min ⁻¹ , Small Sprocket																							
	2	5	10	25	40	50	75	100	150	200	250	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800
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	0.00
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	0.00
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	0.00	
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	0.00	
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	0.00	
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	0.00		
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	0.00		
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	0.00			
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	0.00			
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	0.00				
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	0.00				
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	0.00				
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	0.00					
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	0.00					

Type I
Manual or Drip Lubrication

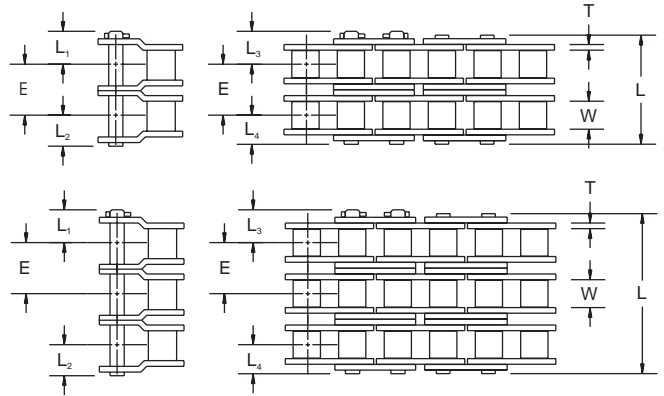
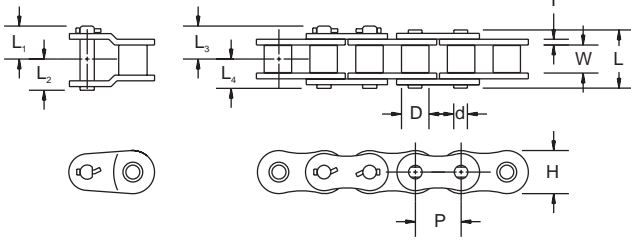
Type II
Bath or Disc Lubrication

Type III
Oil Stream Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Drives Precision Roller Chain Products

240 3.000" Pitch



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Through Hardened Pin	Average Weight	Riveted	Cottered	
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.		
240-1	3.000	1.864	1.875	2.812	0.375	0.937	--	3.708	2.212	1.854	2.212	1.854	152,200	16.400	STD	STD
240-2	3.000	1.864	1.875	2.812	0.375	0.937	3.458	7.166	2.212	1.854	2.212	1.854	304,400	32.200	STD	STD
240-3	3.000	1.864	1.875	2.812	0.375	0.937	3.458	10.624	2.212	1.854	2.212	1.854	456,600	49.400	MTO	MTO
240-4	3.000	1.864	1.875	2.812	0.375	0.937	3.458	14.082	2.212	1.854	2.212	1.854	608,800	65.700	MTO	MTO
240-7	3.000	1.864	1.875	2.812	0.375	0.937	3.458	25.172	2.212	2.212	2.212	2.212	1,064,000	116.200	MTO	MTO*

Please consult Drives Engineering for Maximum Allowable Loads and availability of additional multiple strand widths.

* Available with Cotter on both ends of the pin.

Horsepower Table

No. of Teeth Small Sprocket	Speed, min. ⁻¹ , Small Sprocket																							
	2	5	10	25	36	50	75	100	150	200	250	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
11	2.02	4.86	9.46	22.81	32.36	44.36	65.47	86.30	127.37	167.88	207.99	247.77	186.70	133.59	101.63	80.65	66.01	55.32	47.23	40.94	35.93	31.87	28.51	0.00
12	2.20	5.31	10.32	24.88	35.31	48.40	71.43	94.15	138.95	183.14	226.89	270.30	212.73	152.22	115.80	91.89	75.21	63.03	53.82	46.65	40.94	36.31	2.11	0.00
13	2.39	5.75	11.18	26.95	38.25	52.43	77.38	101.99	150.53	198.41	245.80	292.82	239.87	171.64	130.57	103.61	84.81	71.07	60.68	52.60	46.16	38.13	0.00	0.00
14	2.57	6.19	12.04	29.02	41.19	56.46	83.33	109.84	162.11	213.67	264.71	315.34	268.07	191.82	145.92	115.80	94.78	79.43	67.82	58.78	51.59	0.00	0.00	0.00
15	2.75	6.63	12.90	31.10	44.13	60.50	89.28	117.68	173.68	228.93	283.62	337.87	297.30	212.73	161.83	128.42	105.11	88.09	75.21	65.19	0.00	0.00	0.00	0.00
16	2.94	7.08	13.76	33.17	47.08	64.53	95.24	125.53	185.26	244.19	302.53	360.39	327.52	234.35	178.28	141.47	115.80	97.04	82.86	71.82	0.00	0.00	0.00	0.00
17	3.12	7.52	14.62	35.24	50.02	68.56	101.19	133.37	196.84	259.45	321.43	382.92	358.70	256.66	195.25	154.94	126.82	106.28	90.74	0.00	0.00	0.00	0.00	0.00
18	3.30	7.96	15.48	37.32	52.96	72.59	107.14	141.22	208.42	274.71	340.34	405.44	390.81	279.64	212.73	168.81	138.17	115.80	98.87	0.00	0.00	0.00	0.00	0.00
19	3.49	8.40	16.34	39.39	55.90	76.63	113.09	149.06	220.00	289.98	359.25	427.97	423.82	303.26	230.70	183.08	149.84	125.58	3.20	0.00	0.00	0.00	0.00	0.00
20	3.67	8.84	17.20	41.46	58.84	80.66	119.04	156.91	231.58	305.24	378.16	450.49	457.72	327.52	249.15	197.72	161.83	135.62	0.00	0.00	0.00	0.00	0.00	0.00
21	3.85	9.29	18.07	43.54	61.79	84.69	125.00	164.76	243.16	320.50	397.07	473.02	492.48	352.39	268.07	212.73	174.12	109.86	0.00	0.00	0.00	0.00	0.00	0.00
22	4.04	9.73	18.93	45.61	64.73	88.73	130.95	172.60	254.74	335.76	415.97	495.54	528.07	377.85	287.44	228.10	186.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	4.22	10.17	19.79	47.68	67.67	92.76	136.90	180.45	266.32	351.02	434.88	518.07	564.48	403.91	307.26	243.83	199.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	4.40	10.61	20.65	49.76	70.61	96.79	142.85	188.29	277.89	366.29	453.79	540.59	601.69	430.53	327.52	259.91	188.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	4.59	11.06	21.51	51.83	73.55	100.83	148.81	196.14	289.47	381.55	472.70	563.12	639.68	457.72	348.20	276.32	73.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	4.77	11.50	22.37	53.90	76.50	104.86	154.76	203.98	301.05	396.81	491.61	585.64	678.45	485.46	369.30	293.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Type I
Manual or Drip
Lubrication

Type II
Bath or Disc Lubrication

Type III
Oil Stream Lubrication

The limiting RPM for each lubrication type is shown in the chart's shaded areas directly above the Type I, II, or III reference. For optimum results, it is recommended that the Roller Chain manufacturer be given the opportunity to evaluate the conditions of operation of chains in the shaded (galling range) speed area. The Horsepower Ratings of Multiple Strand Chains are greater than those for Single Strand Chain: see Table II on page 8 for Multiple Strand Factors.

Section 2

Heavy-Series Precision Roller Chain Products



Made in U.S.A.

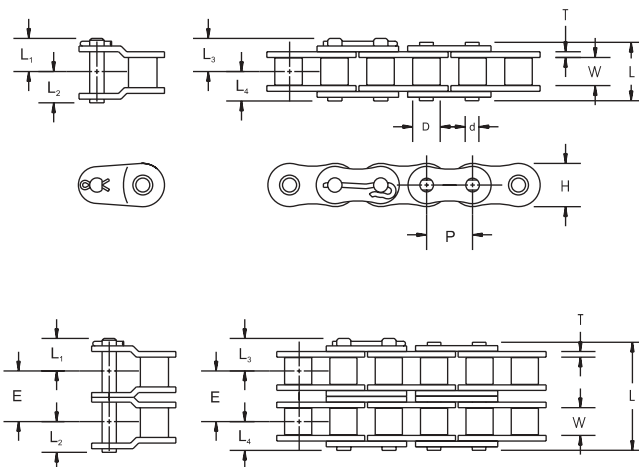
Drives Heavy-Series Roller Chain Products

HR Riveted Series Chain Case Hardened Pins

Heavy-series chains are produced with thicker link plates than standard ANSI chains. HR Riveted style chains contain a carburized pin for increased wear life in high speed and abrasive applications.

All HR series chains are designed with a wide waist contour and a heavy side plate to improve stress distribution, increase fatigue strength, and reduce vibration. All HR Riveted series chains (sizes 80HR-160HR) contain ballized plates to ensure maximum bearing area for optimum press fits, improving fatigue life and increasing working load capacities. This special ballizing process is after heat treatment; key to achieving the maximum residual compressive stress.

Drives USA leads the industry in manufacturing processes, critical to performance in demanding fatigue and wear life applications.



Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Case Hardened Pins	Average Weight	HR Riveted	
							L	L ₁	L ₂	L ₃	L ₄				
60H-1R	0.750	0.500	0.469	0.709	0.125	0.234	--	1.140	0.650	0.570	0.650	0.570	8,500	1.265	STD
60H-2R	0.750	0.500	0.469	0.709	0.125	0.234	1.028	2.160	0.650	0.570	0.650	0.570	17,000	2.637	STD
60H-3R	0.750	0.500	0.469	0.709	0.125	0.234	1.028	3.196	0.650	0.570	0.650	0.570	25,500	4.010	MTO
80H-1R	1.000	0.625	0.625	0.949	0.156	0.312	--	1.413	0.839	0.707	0.839	0.707	14,500	2.462	STD
80H-2R	1.000	0.625	0.625	0.949	0.156	0.312	1.283	2.694	0.839	0.707	0.839	0.707	29,000	4.344	STD
80H-3R	1.000	0.625	0.625	0.949	0.156	0.312	1.283	3.977	0.839	0.707	0.839	0.707	43,500	6.569	MTO
100H-1R	1.250	0.750	0.750	1.186	0.187	0.375	--	1.725	0.993	0.863	0.993	0.863	24,000	3.223	STD
100H-2R	1.250	0.750	0.750	1.186	0.187	0.375	1.539	3.260	0.993	0.863	0.993	0.863	48,000	6.356	STD
100H-3R	1.250	0.750	0.750	1.186	0.187	0.375	1.539	4.799	0.993	0.863	0.993	0.863	72,000	9.579	MTO
120H-1R	1.500	1.000	0.875	1.425	0.219	0.437	--	2.085	1.186	1.043	1.186	1.043	34,000	4.614	STD
120H-2R	1.500	1.000	0.875	1.425	0.219	0.437	1.924	4.010	1.186	1.043	1.186	1.043	68,000	9.161	STD
120H-3R	1.500	1.000	0.875	1.425	0.219	0.437	1.924	5.934	1.186	1.043	1.186	1.043	102,000	13.650	MTO

- Notes:
1. Offset links are available.
 2. 60H slip fit spring clip connector standard. Cotter available upon request.
 3. 80H-120H: slip fit hook style cotter connecting link standard. (Press-fit available upon request.)
 4. Please consult Drives Engineering for Maximum Allowable Loads.
 5. Other multiple wide sizes available.
 6. Cotter style available upon request.

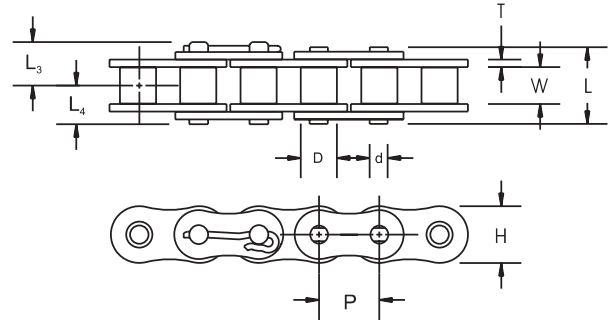
Drives Heavy-Series Roller Chain Products

HZ Riveted Series Chain Through Hardened Pins

Ballized link plate holes - Provides maximum bearing area for optimum press fits, improving fatigue life and working loads.

Through-Hardened Pins - Provides a higher working load capacity and additional resistance to fatigue in high load/pulsating type applications.

HZ series chains have the same dimensions as ANSI standard heavy series chains.



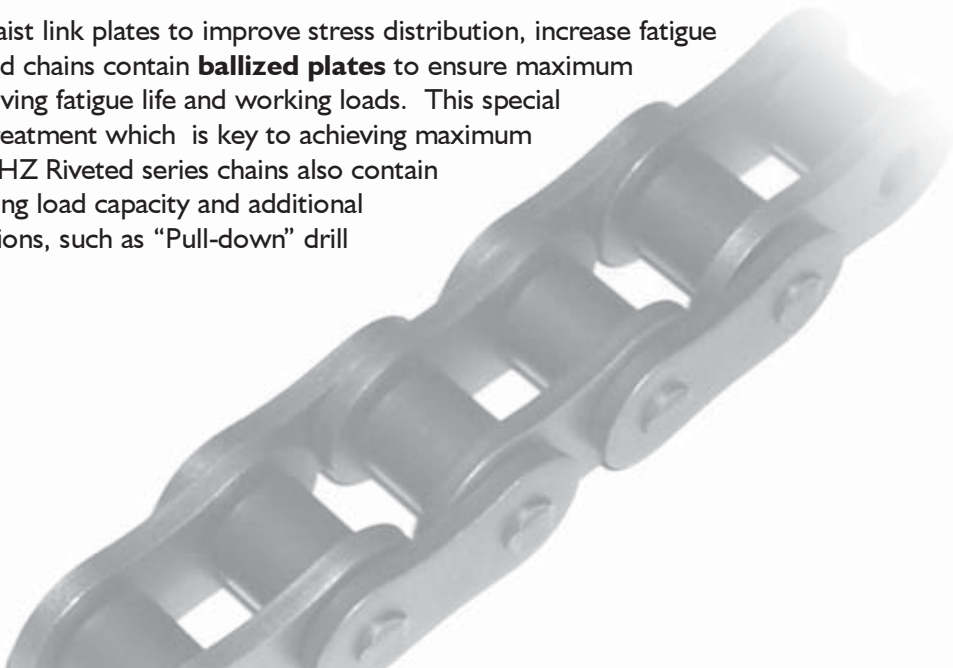
Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Pin	Average Tensile Strength Through Hardened Pins	Average Weight	HZ Riveted			
Chain No.	P	W	D	H	T	d	L	L ₃	L ₄	Lb.	Lb./Ft.	
60HZ-1R	0.750	0.500	0.469	0.709	0.125	0.234	1.140	0.650	0.570	12,500	1.265	STD
80HZ-1R	1.000	0.625	0.625	0.949	0.156	0.312	1.413	0.839	0.707	21,500	2.243	STD
100HZ-1R	1.250	0.750	0.750	1.186	0.187	0.375	1.725	0.993	0.863	33,000	3.277	STD
120HZ-1R	1.500	1.000	0.875	1.425	0.219	0.437	2.085	1.186	1.043	45,100	4.605	STD
140HZ-1R	1.750	1.000	1.000	1.663	0.250	0.500	2.260	1.313	1.130	57,450	5.801	STD
160HZ-1R	2.000	1.250	1.126	1.899	0.283	0.563	2.673	1.520	1.339	72,800	7.548	STD
180HZ-1R	2.250	1.400	1.406	2.132	0.312	0.687	2.968	1.641	1.484	95,000	10.250	STD
264Z-1R	2.500	1.490	1.562	2.375	0.375	0.875	3.344	2.015	1.672	135,000	12.400	STD
240HZ-1R	3.000	1.875	1.875	2.850	0.500	0.937	4.265	2.453	2.157	217,000	19.570	STD
241HZ-1R	3.000	1.250	1.875	2.850	0.500	0.937	3.640	2.140	1.844	217,000	18.090	STD

Consult Drives for review of applications requiring these products

Notes:

1. Multiple strand widths available in all pitch sizes listed above.
2. Riveted endless construction standard/recommended for certain applications.
3. Single strand riveted: Connecting link available in cottered/press-fit or slip fit.
4. Multi-strand cottered: Connecting link cottered/slip-fit type.
5. Please consult Drives Engineering for Maximum Allowable Loads.
6. Size 264 chain is produced with a Heavy Series sideplate (0.375" thick plate material) and a larger diameter pin, which provides greater tensile strength/working load, and replaces number 200H chain.

HZ Riveted series chains contain wide waist link plates to improve stress distribution, increase fatigue strength, and reduce vibration. HZ Riveted chains contain **ballized plates** to ensure maximum bearing area for optimum press fits, improving fatigue life and working loads. This special ballizing process is completed after heat treatment which is key to achieving maximum loading capacity and fatigue strength. The HZ Riveted series chains also contain **through hardened pins** for higher working load capacity and additional resistance to fatigue in heavy load applications, such as "Pull-down" drill rig equipment and skid-steer loaders.



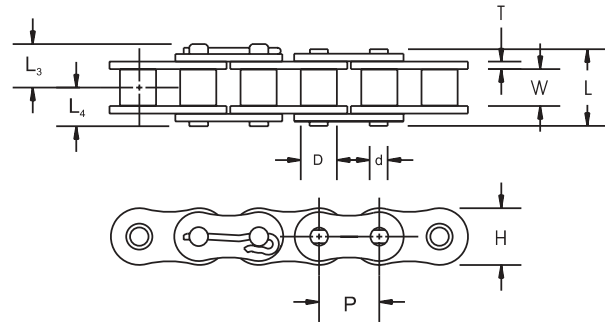
Drives Heavy-Series Roller Chain Products

HZ Cottered Series Chain Through Hardened Pins

Ballized link plate holes - Provides maximum bearing area for optimum press fits, improving fatigue life and working loads.

Through-Hardened Pins - Provides a higher working load capacity and additional resistance to fatigue in high load/pulsating type applications.

HZ series chains have the same dimensions as ANSI standard heavy series chains.



Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Pin	Average Tensile Strength Through Hardened Pins	Average Weight	HZ Riveted			
Chain No.	P	W	D	H	T	d	L	L ₃	L ₄	Lb.	Lb./Ft.	
60HZ-1C	0.750	0.500	0.469	0.709	0.125	0.234	1.140	0.650	0.570	12,500	1.265	STD
80HZ-1C	1.000	0.625	0.625	0.949	0.156	0.312	1.413	0.839	0.707	21,500	2.243	STD
100HZ-1C	1.250	0.750	0.750	1.186	0.187	0.375	1.725	0.993	0.863	33,000	3.277	STD
120HZ-1C	1.500	1.000	0.875	1.425	0.219	0.437	2.085	1.186	1.043	45,100	4.605	STD
140HZ-1C	1.750	1.000	1.000	1.663	0.250	0.500	2.260	1.313	1.130	57,450	5.801	STD
160HZ-1C	2.000	1.250	1.126	1.899	0.283	0.563	2.673	1.520	1.339	72,800	7.548	STD
180HZ-1C	2.250	1.400	1.406	2.132	0.312	0.687	2.968	1.641	1.484	95,000	10.250	STD
264HZ-1C	2.500	1.490	1.562	2.375	0.375	0.875	3.344	2.015	1.672	135,000	12.400	STD
240HZ-1C	3.000	1.875	1.875	2.850	0.500	0.937	4.265	2.453	2.157	217,000	19.570	STD
241HZ-1C	3.000	1.250	1.875	2.850	0.500	0.937	3.640	2.140	1.844	217,000	18.090	STD

Consult Drives for review of applications requiring these products

- Notes:
1. Multiple strand widths available in all pitch sizes listed above.
 2. Connecting link available in cottered/press-fit or slip fit.
 3. Please consult Drives Engineering for Maximum Allowable Loads.
 4. Size 264H chain provides greater tensile strength/working load utilizing larger diameter pin and replaces 200H chain.

HZ Cottered series chains contain wide waist link plates to improve stress distribution, increase fatigue strength, and reduce vibration. HZ Cottered chains contain **ballized plates** to ensure maximum bearing area for optimum press fits, improving fatigue life and working loads. This special ballizing process is completed after heat treatment which is key to achieving maximum loading capacity and fatigue strength. The HZ Cottered series chains also contain **through hardened pins** for higher working load capacity and additional resistance to fatigue in heavy load applications.

USA Oil Field Chain

American Petroleum
Institute (API) 7F

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Since 1959

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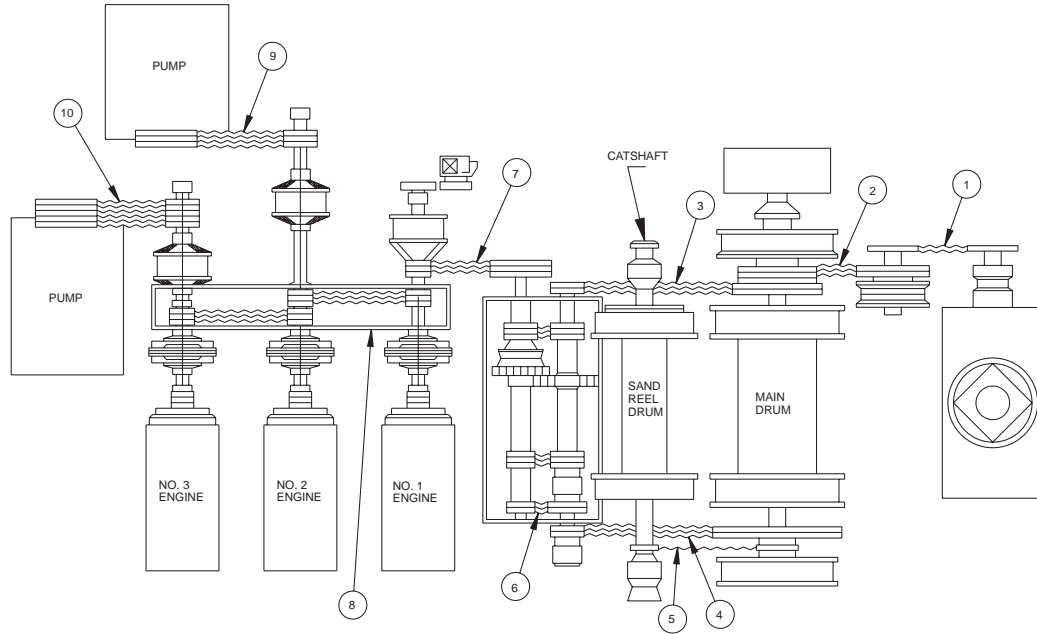
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LICENSED UNDER
SPEC 7F-0022



Drives Oil Field Roller Chain Products

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Roller chains used in the oil and natural gas industries are subjected to some of the greatest loads and harshest operating conditions. We produce our Oil Field Energy chains with the same attention to detail that goes into all of our products, but these chains are also subjected to performance testing in accordance with the latest API (American Petroleum Institute) Specification 7F7.

Users of our chains can be certain they are receiving the highest quality roller chains by examining the label on our box, which carries the API monogram. Only those companies who have established API approved and audited quality systems are authorized to display this symbol of excellence.

Drives	Rig Horsepower						
	4000	3000	2000	1500	1000	750	500
1. Rotary Table	160-2	160-2 264-1	160-2	160-2 140-2	140-2 160-1	140-2 160-1	140-1 120-1
2. Rotary Countershaft	160-2	160-2 264-1	160-2	160-2 140-2	140-2 160-1	140-2 160-1	140-1 120-1
3. High Drum	240-3	264-3	160-4	160-3	140-3 160-2	160-2 140-2	120-3 140-2
4. Low Drum	240-3	264-3	160-4	160-3	140-3 160-2	160-2 140-3	120-3 140-2
5. Catshaft	160-2	160-2 264-1	160-2	160-1 140-2	160-1 140-2	160-1 140-2	140-1 120-1
6. Transmission	140-8	160-4 264-3	160-4 160-3	160-3	160-2 140-3	140-2	120-2 100-3
7. Drawworks Input	140-8	120-8	120-6	120-4	120-3 120-4	100-4	100-3 100-4
8. Compound	140-8	120-8	120-6	120-4	120-3 120-4	100-4	100-3
9. & 10. Mud Pump Drives	140-8	120-8	120-8 120-6	120-6 120-4	120-4 120-3	100-6 100-4	100-4 100-3

NOTE: Size 264 roller chain provides greater tensile strength/working load and replaces 200H chain.

100 years

...of advanced engineering knowledge and experience adds up to the best U.S.A. made roller chain ever produced for the energy industry.

Drives U.S.A. chains are built to B29.100 ANSI specifications to fit your existing sprockets and the oil field industry's new API 7F7 standards to meet your most demanding applications. Whether you're looking to solve an existing roller chain drive problem or just want great value with U.S.A. made chain, our high energy roller chains will be in stock waiting for you to put them to the test.

Primary Oil Field Chain Features Include:

All Ballized Plates

Ballized pin plate, middle bar and bushing plate holes to precision tolerances ensure maximum bearing area for optimum press fits improving fatigue life and working loads.



Wide Waisted Link Plates

Shotpeened wide waisted link plates are manufactured with maximum ball heights from special alloy steels for added strength. The wide link plate profile improves stress distribution leading to improved fatigue resistance and enhanced performance.



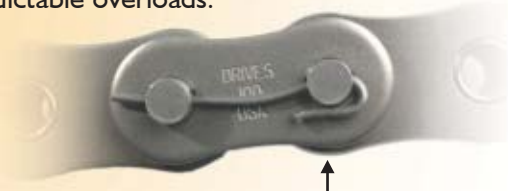
Through Hardened Shotpeened Pins

Through hardened pins are supplied for these demanding applications. All pins are precision hardened and shotpeened to provide maximum performance. These pins are produced to deliver extended wear and protection from unpredictable overloads.



Special Hook Cotter

A full hardened hook cotter provides greater link plate support and twice the shear strength of conventional short split cotters. The easily installed hardened hook cotter will retain position in high vibration applications.



Coated T-Pin

High shear T-pins resist corrosion and retain position in the most extreme applications. Sizes 200, 264, 240.



* Drives Engineering and the American Chain Association (ACA) recommend sprockets and roller chain changed out at the same time.

Plus...

the additional benefits of our standard fatigue/wear resistant chains:

Solid Rollers

Shotpeened solid rollers for ultimate sprocket contact, shock resistance and toughness.

Factory Pre-loaded at 50% MUTS

Drives chains are pre-loaded to 50% of minimum ultimate tensile strength (MUTS) which is especially important for applications involving fixed center-to-center sprockets without take-ups. Applications can withstand shock loads to 50% of the chains tensile without premature elongation.

Hot Dip Lubrication

Industry leading production technology is employed to hot-dip each chain. The working life of the chain is greatly extended compared to cold-dip methods. Drives uses proprietary lubricants designed to fully penetrate and coat the bearing surface between pin & bushing.

Available Options

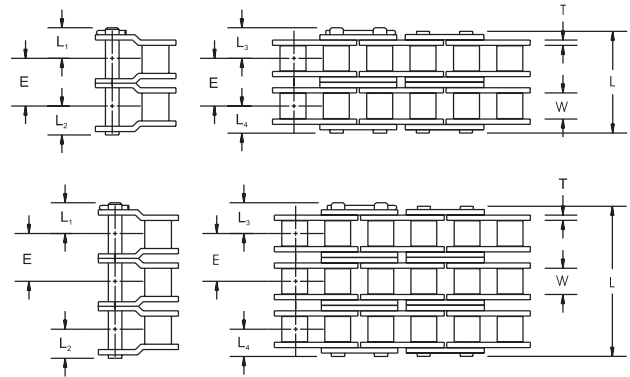
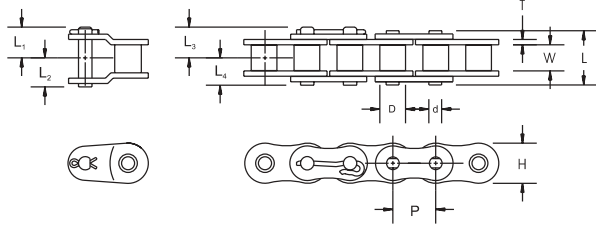
Advanced Corrosion Resistant Plating is available upon request. This plating process combines three metals that are mechanically applied to chain components before assembly. This technology is superior to other plating processes in providing corrosion resistance.

Specialized coatings, also available upon request, are designed to improve wear life, combat corrosion, and simplify your maintenance. Talk to your Drives Sales Representative or call Drives Engineering.



Drives A.P.I. 7F Oil Field Roller Chain Products

Sizes 80-1 through 140-8



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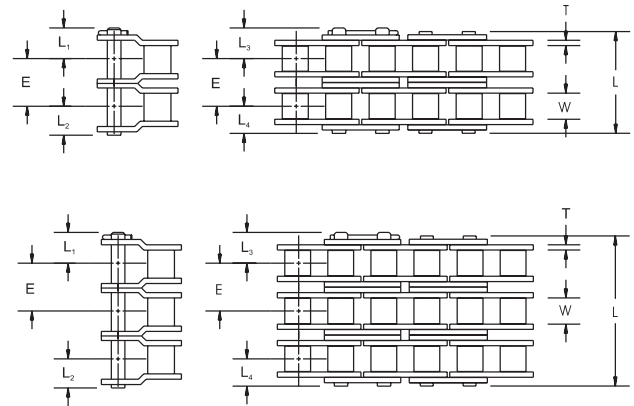
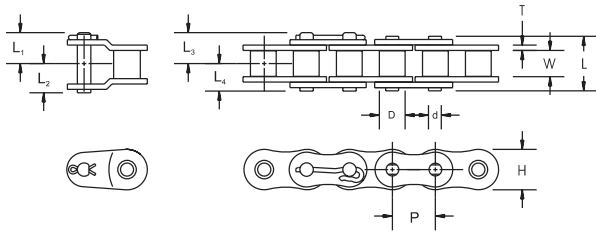
Available in **Cottered Style**

Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate		Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Through Hardened Pin	Average Weight
								L	L ₁	L ₂	L ₃	L ₄		
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.
80-1	1.000	0.627	0.625	0.943	0.125	0.313	--	1.283	0.768	0.638	0.857	0.642	21,500	1.868
80-2	1.000	0.627	0.625	0.943	0.125	0.313	1.155	2.434	0.768	0.638	0.857	0.642	43,000	3.735
80-3	1.000	0.627	0.625	0.943	0.125	0.313	1.155	3.589	0.768	0.638	0.857	0.642	64,500	5.602
80-4	1.000	0.627	0.625	0.943	0.125	0.313	1.155	--	--	--	0.857	0.642	86,000	7.436
80-5	1.000	0.627	0.625	0.943	0.125	0.313	1.155	--	--	--	0.857	0.642	107,500	9.031
80-6	1.000	0.627	0.625	0.943	0.125	0.313	1.155	--	--	--	0.857	0.642	129,000	10.824
80-8	1.000	0.627	0.625	0.943	0.125	0.313	1.155	--	--	--	0.857	0.642	172,000	14.432
100-1	1.250	0.755	0.750	1.180	0.156	0.375	--	1.595	0.908	0.785	0.912	0.785	33,000	2.801
100-2	1.250	0.755	0.750	1.180	0.156	0.375	1.411	3.000	0.908	0.785	0.912	0.785	66,000	5.603
100-3	1.250	0.755	0.750	1.180	0.156	0.375	1.411	--	--	--	0.912	0.785	99,000	8.470
100-4	1.250	0.755	0.750	1.180	0.156	0.375	1.411	--	--	--	0.912	0.785	132,000	11.110
100-5	1.250	0.755	0.750	1.180	0.156	0.375	1.411	--	--	--	0.912	0.785	165,000	13.970
100-6	1.250	0.755	0.750	1.180	0.156	0.375	1.411	--	--	--	0.912	0.785	198,000	16.720
100-8	1.250	0.755	0.750	1.180	0.156	0.375	1.411	--	--	--	0.912	0.785	264,000	22.290
120-1	1.500	1.000	0.875	1.425	0.187	0.437	--	1.955	1.119	1.071	1.119	0.989	45,100	4.135
120-2	1.500	1.000	0.875	1.425	0.187	0.437	1.789	3.767	1.119	1.071	1.119	0.989	90,200	8.270
120-3	1.500	1.000	0.875	1.425	0.187	0.437	1.789	--	--	--	1.119	0.989	135,300	12.100
120-4	1.500	1.000	0.875	1.425	0.187	0.437	1.789	--	--	--	1.119	0.989	180,400	16.170
120-5	1.500	1.000	0.875	1.425	0.187	0.437	1.789	--	--	--	1.119	0.989	225,500	20.240
120-6	1.500	1.000	0.875	1.425	0.187	0.437	1.789	--	--	--	1.119	0.989	270,600	24.200
120-8	1.500	1.000	0.875	1.425	0.187	0.437	1.789	--	--	--	1.119	0.989	360,800	32.270
121-1	1.500	0.750	0.875	1.425	0.187	0.437	--	--	--	--	0.994	0.864	45,100	3.300
121-2	1.500	0.750	0.875	1.425	0.187	0.437	1.546	--	--	--	0.994	0.864	90,200	6.760
121-3	1.500	0.750	0.875	1.425	0.187	0.437	1.546	--	--	--	0.994	0.864	135,300	10.080
140-1	1.750	1.000	1.000	1.663	0.220	0.500	--	2.136	1.253	1.150	1.253	1.068	57,450	5.136
140-2	1.750	1.000	1.000	1.663	0.220	0.500	1.924	4.062	1.253	1.150	1.253	1.068	114,900	10.270
140-3	1.750	1.000	1.000	1.663	0.220	0.500	1.924	--	--	--	1.253	1.068	172,350	15.290
140-4	1.750	1.000	1.000	1.663	0.220	0.500	1.924	--	--	--	1.253	1.068	229,800	20.460
140-5	1.750	1.000	1.000	1.663	0.220	0.500	1.924	--	--	--	1.253	1.068	287,250	25.520
140-6	1.750	1.000	1.000	1.663	0.220	0.500	1.924	--	--	--	1.253	1.068	344,700	30.690
140-8	1.750	1.000	1.000	1.663	0.220	0.500	1.924	--	--	--	1.253	1.068	459,600	40.920

Drives A.P.I. 7F Oil Field Roller Chain Products

Sizes 160-1 through 240-4



Made in **U.S.A.**

Made in **U.S.A.**

Available in **Cottered Style**

Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Tensile Strength Through Hardened Pin	Average Weight	
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.
160-1	2.000	1.250	1.126	1.899	0.252	0.563	--	2.538	1.454	1.370	1.454	1.269	72,800	6.603
160-2	2.000	1.250	1.126	1.899	0.252	0.563	2.305	4.843	1.454	1.370	1.454	1.269	145,600	13.210
160-3	2.000	1.250	1.126	1.899	0.252	0.563	2.305	--	--	--	1.454	1.269	218,400	20.790
160-4	2.000	1.250	1.126	1.899	0.252	0.563	2.305	--	--	--	1.454	1.269	291,200	27.830
160-5	2.000	1.250	1.126	1.899	0.252	0.563	2.305	--	--	--	1.454	1.269	364,000	34.760
160-6	2.000	1.250	1.126	1.899	0.252	0.563	2.305	--	--	--	1.454	1.269	436,800	41.690
180-1	2.250	1.400	1.406	2.132	0.281	0.687	--	2.780	--	--	1.561	1.390	95,000	9.100
180-2	2.250	1.400	1.406	2.132	0.281	0.687	2.592	--	--	--	1.561	1.390	190,000	18.100
200-1	2.500	1.490	1.562	2.312	0.312	0.781	--	3.088	--	--	1.889	1.544	100,000	10.900
200-2	2.500	1.490	1.562	2.312	0.312	0.781	2.817	--	--	--	1.889	1.544	200,000	21.000
200-3	2.500	1.490	1.562	2.312	0.312	0.781	2.817	--	--	--	1.889	1.544	300,000	31.500
264-1	2.500	1.490	1.562	2.375	0.375	0.875	--	3.344	--	--	2.015	1.672	135,000	12.400
264-2	2.500	1.490	1.562	2.375	0.375	0.875	3.083	--	--	--	2.015	1.672	270,000	24.900
264-3	2.500	1.490	1.562	2.375	0.375	0.875	3.083	--	--	--	2.015	1.672	405,000	37.300
264-4	2.500	1.490	1.562	2.375	0.375	0.875	3.083	--	--	--	2.015	1.672	540,000	49.800
240-1	3.000	1.864	1.875	2.812	0.375	0.937	--	3.708	--	--	2.212	1.854	152,200	16.400
240-2	3.000	1.864	1.875	2.812	0.375	0.937	3.458	--	--	--	2.212	1.854	304,400	32.200
240-3	3.000	1.864	1.875	2.812	0.375	0.937	3.458	--	--	--	2.212	1.854	456,600	49.400
240-4	3.000	1.864	1.875	2.812	0.375	0.937	3.458	--	--	--	2.212	1.854	608,800	65.700
241-1	3.000	1.250	1.875	2.812	0.375	0.937	--	3.094	--	--	1.905	1.547	152,200	16.200

NOTE:

- Corrosion resistant finishes for components available upon request.
- Offsets not recommended/please contact Drives Engineering.
- T-head cotters used on sizes 200, 264, and 240 Oil Field Chain.
- Heavy chain series available/MTO.
- Product specifications subject to change without notice.
- 121 series replaces 472 series.
- Size 264 chain provides greater tensile strength/working load utilizing larger diameter pin and replaces 200H chain.

Drives A.P.I. 7F Oil Field Roller Chain Products

■ Four Pitch Press-fit Offset Link Assembly

When multiple wide chain drive assemblies must be shortened due to wear elongation, Drives can supply a four pitch offset link assembly to replace a five pitch section of chain. When wear elongation occurs, allowing the removal of another chain pitch, the four pitch offset link assembly needs to be replaced with a three pitch section of similar design.

Drives Engineering recommends avoiding an offset in any power transmission chain design, due to the reduced load carrying capability of the offset link.



■ Silver Shield CR® Series Chain

Silver Shield CR® series chains are available for those applications that may be subjected to wet, caustic or acidic environments. Silver Shield CR® chains consist of Drives' precision carbon steel components, specially coated with a Zinc – Aluminum compound. This compound, combined with a polymer based resin, tightly adheres to the components during a high temperature baking process. This combination of precision carbon steel components and environmental resistant coating, provides a superior barrier for preserving the structural integrity of the base chain in wet applications. Contact Drives Engineering for proper application use of the Silver Shield CR® chain coatings.

■ Skate Roller Bearing Chain Standard Series



Drives A.P.I. 7F Oil Field Roller Chain Products

Industry leading performance with more than 100 years of advanced engineering experience. Drives manufacturing facilities in Fulton, Illinois produce industry leading API 7F7 Power Transmission Roller Chains for Oil & Gas Exploration.

Coil Tubing Injector Kits



As chains interact with the injector sprockets, positioned gripper blocks secure the tubing to advance or retract the coil within the well. Special chain pins manufactured from alloy steel are through hardened for tensile strength and fatigue resistance. Drives coil tubing injector chains are available with Corrosion Resistant Silver Shield CR® Series coatings to address stress corrosion cracking caused by moist operating environments.



Skate Roller Bearing Chain Special Series

- Special bushed style middle link plate doubles the bearing area and wear life of the chain.
- Case hardened bushings are pressed into through hardened middle link plates, improving the wear life of the chain, compared to other designs using only free floating link plates.
- Alternating link direction design limits the allowable camber of the bearing assembly which keeps the assembly running smooth and true.

Contact Drives Engineering for proper application use of skate chain products.



“Get maximum life out of your tubing injector chains by utilizing the design advantages of Drives Skate Roller Bearing Chains.”

* Some products shown are proprietary.

Section 3

USA Specialty Chain Products



Drives Specialty Chain Products

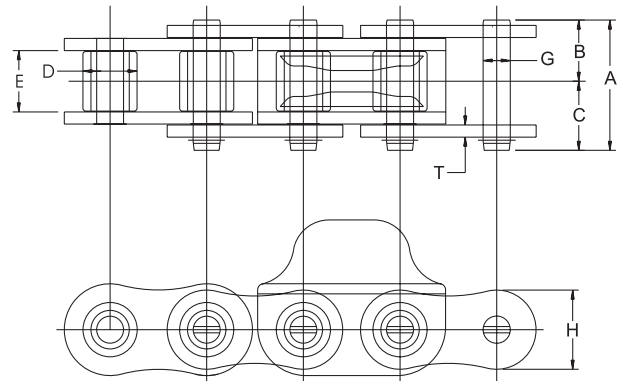
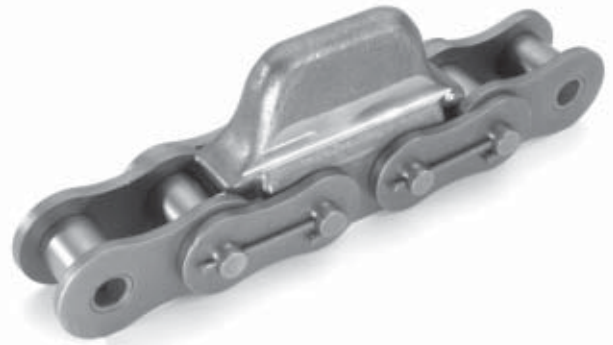
Caterpillar Drive Chain

Caterpillar Drive Chains are essential in driving drop forged chain conveyors. Drives USA Caterpillar Drive Chains provide high fatigue life and are designed to perform flawlessly with forged rivetless chains.

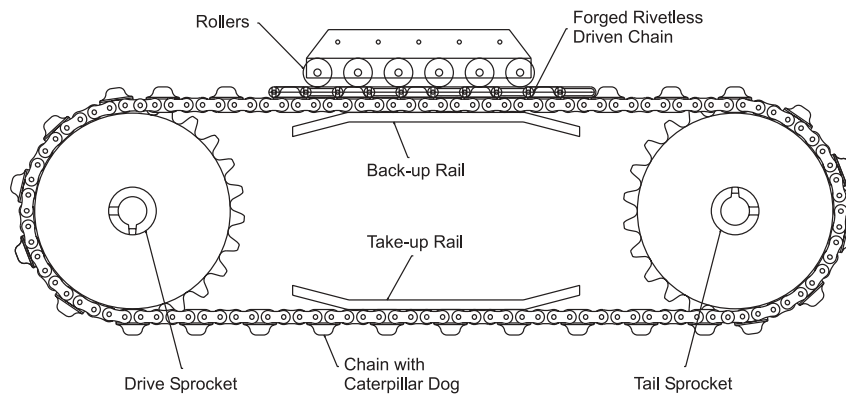
Drives USA Caterpillar Drive Chains feature all ballized plates to ensure maximum bearing area for optimum press fits. This improves fatigue life and working loads. We use wide waist link plates with maximized ball heights to improve stress distribution that also increases fatigue strength and reduces vibration.

The use of through hardened pins that are micro ground and shotpeened provides maximum pin to bushing surface contact for extended wear and protection from any unpredictable overload. Hardened hook cotters* are used to resist shearing and hold their place in the most rigorous of applications.

Our one-piece forged drive dog is induction hardened in the chain contact bearing area for wear resistance. The balance of the drive dog is through hardened for strength and durability.



Caterpillar Drive Chain Detail

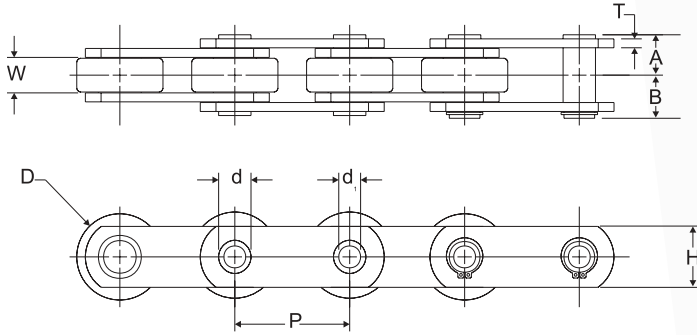


Drives	Pitch	Chain Width				Diameter		Sidebars		Drive Dog Pitch Spacing	Average Ultimate Strength	Approx. Weight
		Overall	Pin Head to CL	Pin End to CL	Inside Width	Roller	Pin	Thickness	Height			
Chain No.	P	A	B	C	E	D	G	T	H		Lbs.	Lb./Ft.
160/348	2.000	2.723	1.269	1.454	1.250	1.126	0.563	0.250	1.899	6	58,000	8.3
160/458	2.000	2.723	1.269	1.454	1.250	1.126	0.563	0.250	1.899	4 or 6	58,000	8.3 or 10.0
160/678	2.000	2.723	1.269	1.454	1.250	1.126	0.563	0.250	1.899	6	58,000	9.8

* Note: Dual cotter keys available upon request.

Drives Specialty Chain Products

Hollow Pin Chain 2.000" Pitch



Drives	Pitch	Width Between Inner L.P.	Bushing Dia.	Roller Dia.	Link Plate		Pin Dia.		Pin		Approx Weight	Average Tensile Strength	Maximum Recommended Working Load
Chain No.	P	W	B	D	H	T	d	d ₁	A	B	Lb./Ft.	Lbs.	Lbs.
HP200	2.000	0.617	--	1.500	1.060	0.156	0.564	0.382	0.703	0.750	2.500	15,000	2,600

Coupling Chain

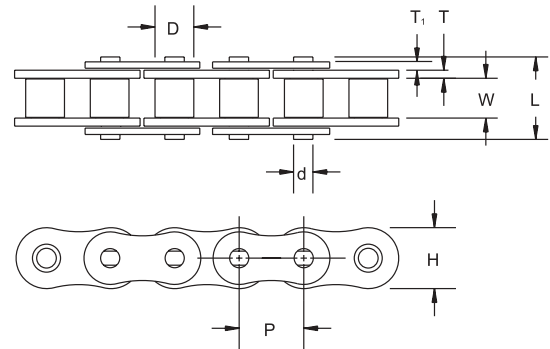
Drives coupling chain is manufactured in accordance with ASME B29.100. These duplex chains utilize a standard duplex connecting link for easy installation.

Drives	Pitch	Length	Approx. Weight	Drives Weight
Chain No.	Inches	Pitches	Lb./Ft.	Lbs.
40	0.500	12	0.410	0.410
40	0.500	16	0.550	0.550
50	0.625	16	1.120	1.170
50	0.625	18	1.260	1.320
60	0.750	18	2.160	2.330
60	0.750	20	2.400	2.590
60	0.750	22	2.640	2.840
80	1.000	18	5.000	5.600
80	1.000	20	5.560	6.230
100	1.250	18	9.240	10.510
100	1.250	20	10.300	11.670
120	1.500	18	16.200	18.610
120	1.500	22	19.800	22.740

Drives Specialty Chain Products

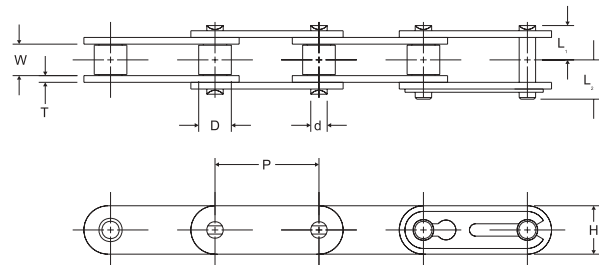
Extra Clearance EXC® Conveyor Chain

EXC conveyor chains are produced with “extra-clearance” to compensate for steel expansion at temperatures up to 500° F and to permit free joint-action at oven temperatures. Extra Clearance chain may be used with ANSI chain sprockets. Consult Drives Engineering for application and available sizes.



Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Transverse Pitch	Pin					Avg. Tensile Strength Through Hardened	Average Weight	Riveted	Cottered
Chain No.	P	W	D	H	T	T ₁	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.		
80 EXC	1.000	0.625	0.625	0.949	0.156	0.120	0.312	--	1.413	0.839	0.707	0.839	0.707	21,500	2.200	STD	MTO

C2040 - 2160H Chain



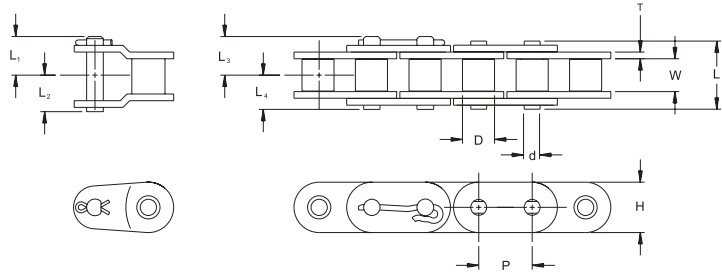
Available in riveted style.
Cut-to-length chain available.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate		Pin Dia.	Pin		Average Tensile Strength	Average Weight
Chain No.	P	W	D	H	T	d	L ₁	L ₂	Lb.	Lb./Ft.
C2040	1.000	0.312	0.312	0.472	0.060	0.156	0.382	0.319	5,700	0.340
C2050	1.250	0.376	0.400	0.591	0.080	0.200	0.477	0.409	6,100	0.580
C2060H	1.500	0.500	0.469	0.687	0.125	0.234	0.660	0.590	8,500	0.903
C2070H	1.750	0.500	0.469	0.687	0.125	0.234	0.660	0.590	8,500	0.948
C2080H	2.000	0.625	0.625	0.950	0.156	0.312	0.845	0.745	14,500	1.204
C2100H	2.500	0.750	0.750	1.186	0.187	0.375	0.863	0.993	31,350	2.500
C2120H	3.000	1.000	0.875	1.425	0.219	0.437	1.043	1.186	42,845	3.600
C2160H	4.000	1.250	1.125	1.899	0.283	0.563	1.339	1.520	69,160	6.200

Note: See pages 55-57 for available attachments on chain sizes C2040-C2080H. Contact Drives Engineering for available attachments on chain sizes C2100H-C2160H. Riveted standard, cottered available upon request.

Drives Specialty Chain Products

E-Series Chain



Cut-to-length chain available.

"E" Series recommended for heavy duty transfer systems.

Available in riveted style.

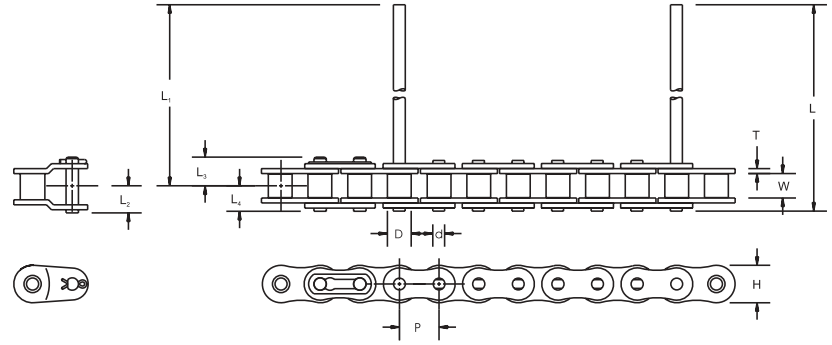
Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate	Pin Dia.	Transverse Pitch	Pin					Average Weight	
Chain No.	P	W	D	H	T	d	E	L	L ₁	L ₂	L ₃	L ₄	Lb./Ft.
C60E	0.750	0.500	0.469	0.705	0.094	0.234	-	0.996	0.600	0.498	0.648	0.498	1.173
C80E	1.000	0.627	0.625	0.943	0.125	0.312	-	1.283	0.768	0.638	0.857	0.642	2.054
C100E	1.250	0.755	0.750	1.180	0.156	0.375	-	1.595	0.908	0.785	0.912	0.785	3.081
C120E	1.500	1.000	0.875	1.425	0.187	0.437	-	1.955	1.119	1.071	1.119	0.989	4.588
C140E	1.750	1.000	1.000	1.663	0.220	0.500	-	2.136	1.253	1.150	1.253	1.068	5.878
C160E	2.000	1.250	1.126	1.899	0.252	0.563	-	2.538	1.454	1.370	1.454	1.269	7.787

Note: Carrier roller available on made-to-order basis.



Drives Specialty Chain Products

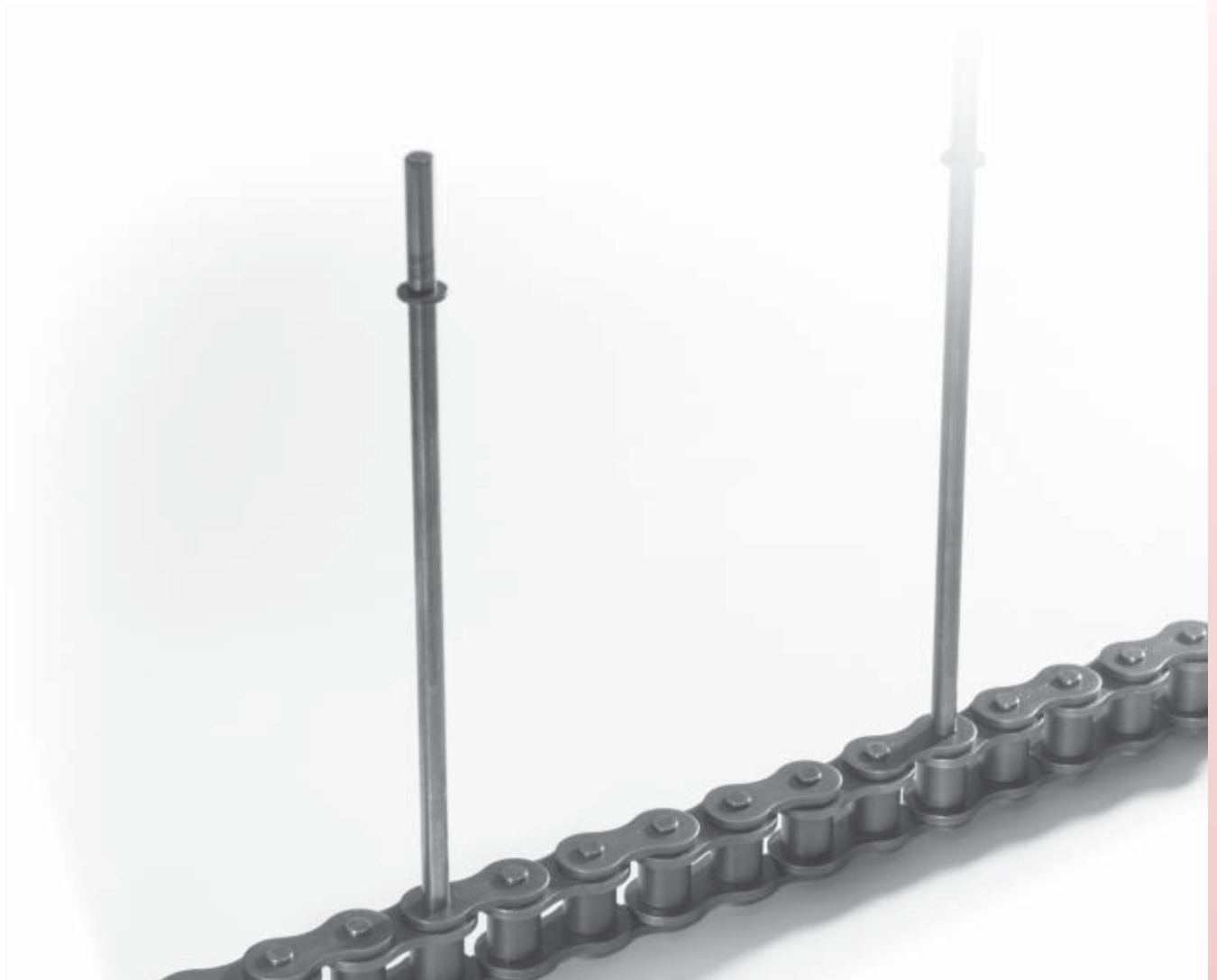
Pin-Oven Chain



Supplied without tips.
Available in riveted style.

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate		Pin Dia.	Pin					Average Tensile Strength	Average Weight	Riveted
Chain No.	P	W	D	H	T	d	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb./Ft.	
60	0.750	0.500	0.469	0.705	0.094	0.234	7.950	7.450	0.500	0.579	0.500	8,500	1.262	Y

Made in U.S.A.



Drives Corrosion and Moisture Resistant Chains

Drives – headquartered, with manufacturing facilities in Fulton, IL USA has for over 45 years produced industry leading chain products for the backbone of our country's manufacturing industries. This foundation gives Drives the history, capability and clear understanding of what is expected by the terms; dependability, reliability and productivity. Drives relentlessly delivers these time tested core values to the marketplace through their power transmission and conveyor chains.

Drives subscribes and fully adheres to the globally recognized quality systems of ISO 9001:2000 as well as American Petroleum Institute (API) Specification Q1 to insure that the processes utilized to manufacture the finest U.S.A. produced chain products are documented and followed.

If your power transmission or conveyor chain application requires resistance to moisture, mild or aggressive corrosive agents, or extreme temperatures, look to Drives for the corrosion resistant chain products that best fit your needs. You can be assured that the chains you'll be receiving will provide the dependability, reliability and productivity that makes Drives a world leader in the production of power transmission and conveyor chains. "We promise the best... nothing less."



www.drivesinc.com

USA/ Fulton, IL



PTPLACE.COM



AMERICAN CHAIN
ASSOCIATION

American
Petroleum
Institute



LICENSED UNDER
SPEC 7F-0022

corrosion and moisture resistant chains for your application

Drives is ready to assist you in providing a full line of moisture and corrosion resistant chains to suit your application.

Stainless Steel Chain

Stainless steel offers the greatest resistance to corrosion and temperature extremes. Drives manufactures 300 series roller chains in the most commonly used sizes. 300 series stainless provides an excellent resistance to corrosion but is less wear resistant than carbon steel. If your application requires an alternative stainless; heat treated components for increased wear or different chemistry for extreme corrosion resistance, contact Drives application engineering.

Silver Shield CR® Series Chains

Silver Shield CR® series chains are available for those applications that may be subjected to mildly caustic or acidic environments. Silver Shield CR® chains consist of Drives' standard carbon steel components, specially coated with a Zinc – Aluminum compound. This compound, combined with a polymer based resin, tightly adheres to the components during a high temperature baking process. This combination, quality carbon steel components and environmental resistant coating, provides the best alternative to stainless in applications where stainless has historically been the only option.

Nickel-Plated Chain

Nickel-Plated chains are designed to resist incidental contact or exposure to water or water based wash-down operations. Drives applies an electroless nickel plating to the component parts prior to assembly to insure complete coverage of all exposed carbon material. Special attention is placed on after-plating processes to virtually remove the possibility of hydrogen embrittlement – a common occurrence in lesser quality chains.

All products are configured to meet the needs of the application

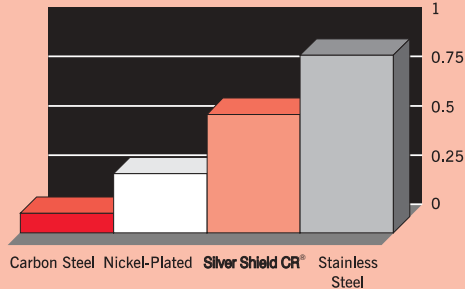
Drives offers Stainless, Silver Shield CR® and Silver Shield CR® materials and coatings in commonly used sizes - in standard packaged lengths or cut-to-length as required. Additionally, attachment link plates and extended pins are readily available for the most commonly requested ANSI power transmission and extended pitch conveyor chains. Contact Drives for the specific availability of the size and configuration your application requires.

Caution: Do not weld or torch-cut nickel plated or Silver Shield CR® coated chains. Consult Drives Engineering for application information.

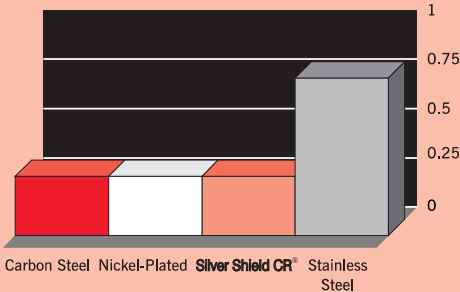


Drives Selection Information

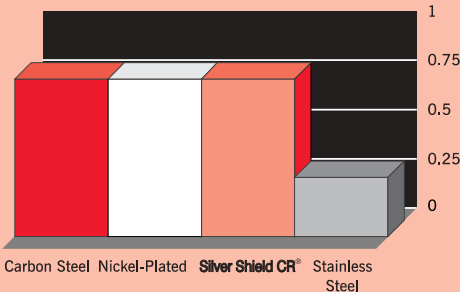
Material Resistance to Chemical Attack



Material Resistance to Temperature



Wear Resistance / Strength



The overall requirements of the application are important when selecting the correct type of roller or conveyor chain. The factors that most often define what chain combination should be used are: resistance to the environment, wear life / strength and total operational cost.

Below are some characteristics to consider when selecting the chain that best suits the application.

Environment Resistance:

The chain selected should be capable of resisting the majority of the chemical and/or temperature requirements. If the environment is ambient in temperature, then only chemical presence need be addressed. Drives Stainless, Nickel-Plated or Silver Shield CR® chains may be considered depending upon the severity of the chemical environment. If the environment is one which is elevated or sub-zero, Stainless Steel chains will most often provide the best overall operation.

Wear Life / Strength:

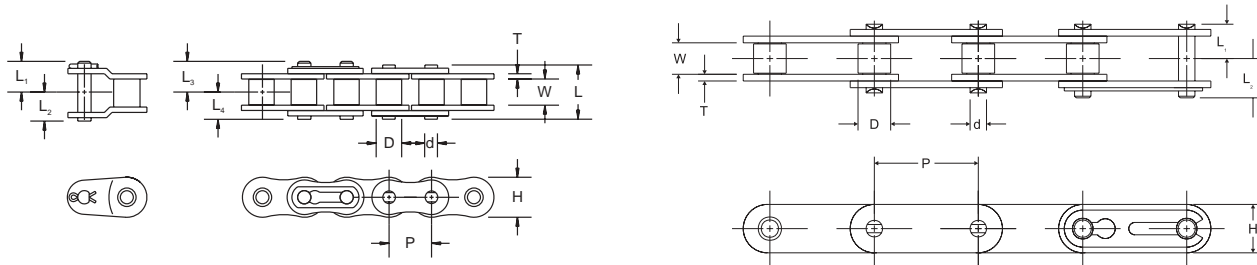
If satisfactory chain life is defined as extended wear, then carbon steel based products are best suited. Drives Nickel-Plated or Silver Shield CR® chains are constructed from carbon steel components having the highest level of wear resistance and strength.

Chain strength is normally defined by its allowable working load. This value is one at which the chain can be expected to operate at or below for an indefinite period of time. Remember, allowable working loads are significantly less than ultimate tensile strength. Chains can have very different allowable working loads but have very similar ultimate tensile strengths.

Cost:

Cost is normally dependent upon the material used to produce the chain. Stainless Steel chains are considerably more costly to produce than carbon based chains. However, if the environment requires a chain with exceptional corrosion resistance, the use of carbon steel based chains may provide the user with a lower priced product, but ultimately incurs a higher cost of operation.

Drives Stainless Steel Roller Chain Products



Stainless Steel Roller Chains

Depending on the specific component, Drives produces 300 series stainless from 301, 302, 303 or 304 material. These materials provide excellent resistance to most corrosive agents as well as temperature extremes beyond the capability of carbon steel chain. 300 series chains normally have very low magnetic permeability – essentially non-magnetic and when used in conjunction with 300 series sprockets, can be considered non-sparking.

- Provides corrosion resistance superior to either nickel plated or coated series chains
- Provides operating temperature ranges above and below where carbon steel base chains can operate
- Available in a variety of grades depending on the specific application's requirements
- 300 series chains are considered to be non-magnetic

Single Pitch Drive Chain

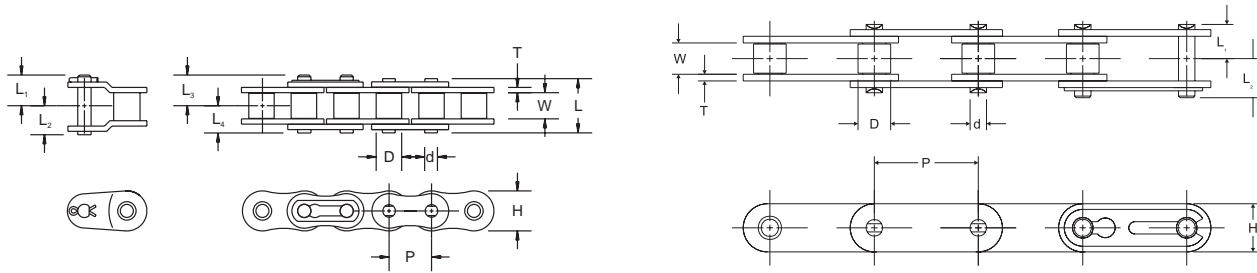
Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Pin					Average Weight	Max. Allowable Load
				H	T	d		L	L ₁	L ₂	L ₃	L ₄		
Chain No.	P	W	D	H	T	d	L	L ₁	L ₂	L ₃	L ₄	Lb./Ft.	Lb.	
40SS	0.500	0.312	0.312	0.472	0.060	0.156	0.630	0.404	0.317	0.377	0.315	0.420	100	
50SS	0.625	0.376	0.400	0.590	0.080	0.200	0.795	0.489	0.399	0.489	0.398	0.713	165	
60SS	0.750	0.500	0.469	0.705	0.094	0.234	0.996	0.600	0.498	0.648	0.498	1.067	231	
80SS	1.000	0.627	0.625	0.943	0.125	0.313	1.283	0.768	0.638	0.857	0.642	1.868	396	

Extended Pitch Conveyor Chain

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Pin		Max. Allowable Load
				H	T	d		L ₁	L ₂	
Chain No.	P	W	D	H	T	d	L ₁	L ₂	Lb.	
C2040SS	1.000	0.312	0.312	0.472	0.060	0.156	0.319	0.382	100	
C2050SS	1.250	0.376	0.400	0.591	0.079	0.200	0.409	0.477	165	
C2060HSS	1.500	0.500	0.469	0.687	0.125	0.234	0.590	0.660	231	
C2080HSS	2.000	0.625	0.625	0.950	0.156	0.312	0.745	0.845	396	

Note: Over-sized carrier rollers available for C-series chains on made-to-order basis. Other sizes available on made-to-order basis.

Drives Silver Shield CR® Roller Chain Products



Silver Shield CR® Roller Chains

Drives recognizes that industry requires an option when the strength of carbon steel and some degree of stainless steel corrosion resistance is required. For these reasons, we have engineered Silver Shield CR® to provide industries this needed option. Silver Shield CR® is constructed using our standard high-quality carbon components that have been specially coated using a Zinc-Aluminum compound. After coating, a protective polymer resin is applied and baked to insure complete resistance to abrasion and flaking. Silver Shield CR® is specifically designed to resist mild acidic or caustic environments. For more information, contact Drives application engineering for specific application criteria.

- Equal in strength to carbon steel chains
- Equal in wear resistance to carbon steel chains
- Protective coating is applied to all parts for uniform and complete protection
- Silver Shield CR® coating developed specifically for corrosion resistance in caustic or acidic environments

Single Pitch Drive Chain

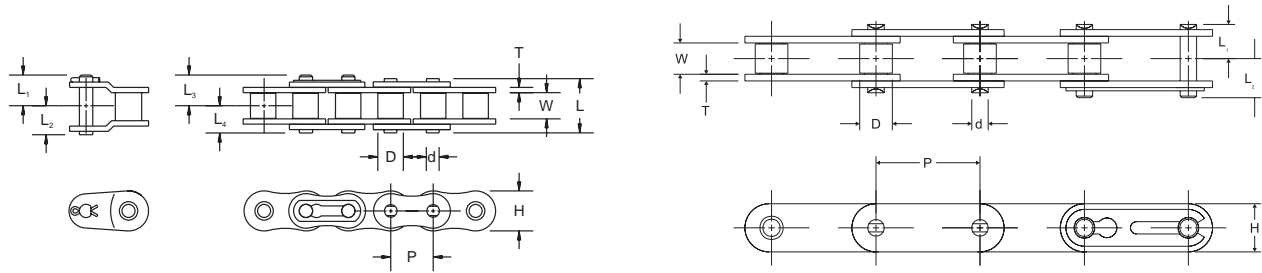
Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Pin					Average Weight	Minimum Tensile Strength
				H	T	d		L	L ₁	L ₂	L ₃	L ₄		
Chain No.	P	W	D	H	T	d	L	L ₁	L ₂	L ₃	L ₄	Lb./Ft.	Lb.	
40CR	0.500	0.312	0.312	0.472	0.060	0.156	0.630	0.404	0.317	0.377	0.315	0.420	3,700	
50CR	0.625	0.376	0.400	0.590	0.080	0.200	0.795	0.489	0.399	0.489	0.398	0.713	6,100	
60CR	0.750	0.500	0.469	0.705	0.094	0.234	0.996	0.600	0.498	0.648	0.498	1.067	8,500	
80CR	1.000	0.627	0.625	0.943	0.125	0.313	1.283	0.768	0.638	0.857	0.642	1.868	14,500	

Extended Pitch Conveyor Chain

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Pin		Minimum Tensile Strength
				H	T	d		L ₁	L ₂	
Chain No.	P	W	D	H	T	d	L ₁	L ₂	Lb.	
C2040CR	1.000	0.312	0.312	0.472	0.060	0.156	0.319	0.382	3,700	
C2050CR	1.250	0.376	0.400	0.591	0.079	0.200	0.409	0.477	6,100	
C2060HCR	1.500	0.500	0.469	0.687	0.125	0.234	0.590	0.660	8,500	
C2070HCR	1.750	0.500	0.469	0.687	0.125	0.234	0.590	0.660	8,500	
C2080HCR	2.000	0.625	0.625	0.950	0.156	0.312	0.745	0.845	14,500	

Note: Over-sized carrier rollers available for C-series chains on made-to-order basis. Other sizes available on made-to-order basis. Riveted standard, cottered available upon request.

Drives Nickel Plated Roller Chain Products



Nickel Plated Roller Chains

Drives produces nickel plated chains to withstand the effects of exposure to moisture, out-door conditions and incidental wash down applications. All components are identical to our carbon steel components with the addition of electroless nickel plating prior to assembly to insure complete coverage of all exposed carbon material.

- Equal in strength to carbon steel chains
- Equal in wear life to carbon steel chains
- Electroless nickel plated parts for uniform and complete protection
- Resists rust from incidental exposure to water or water vapor
- Nickel plating applied prior to assembly

Single Pitch Drive Chain

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Pin					Average Weight	Minimum Tensile Strength
				H	T	d		L	L ₁	L ₂	L ₃	L ₄		
Chain No.	P	W	D	H	T	d	L	L ₁	L ₂	L ₃	L ₄	Lb./Ft.	Lb.	
40NP	0.500	0.312	0.312	0.472	0.060	0.156	0.630	0.404	0.317	0.377	0.315	0.420	3,700	
50NP	0.625	0.376	0.400	0.590	0.080	0.200	0.795	0.489	0.399	0.489	0.398	0.713	6,100	
60NP	0.750	0.500	0.469	0.705	0.094	0.234	0.996	0.600	0.498	0.648	0.498	1.067	8,500	
80NP	1.000	0.627	0.625	0.943	0.125	0.313	1.283	0.768	0.638	0.857	0.642	1.868	14,500	

Extended Pitch Conveyor Chain

Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin Dia.	Pin		Minimum Tensile Strength
				H	T	d		L ₁	L ₂	
Chain No.	P	W	D	H	T	d	L ₁	L ₂	Lb.	
C2040NP	1.000	0.312	0.312	0.472	0.060	0.156	0.319	0.382	3,700	
C2050NP	1.250	0.376	0.400	0.591	0.079	0.200	0.409	0.477	6,100	
C2060HNP	1.500	0.500	0.469	0.687	0.125	0.234	0.590	0.660	8,500	
C2080HNP	2.000	0.625	0.625	0.950	0.156	0.312	0.745	0.845	14,500	

Note: Over-sized carrier rollers available for C-series chains on made-to-order basis. Other sizes available on made-to-order basis.

Drives Corrosion Resistant Chain Products

Stainless Steel Material Selection

304 Stainless Steel Series

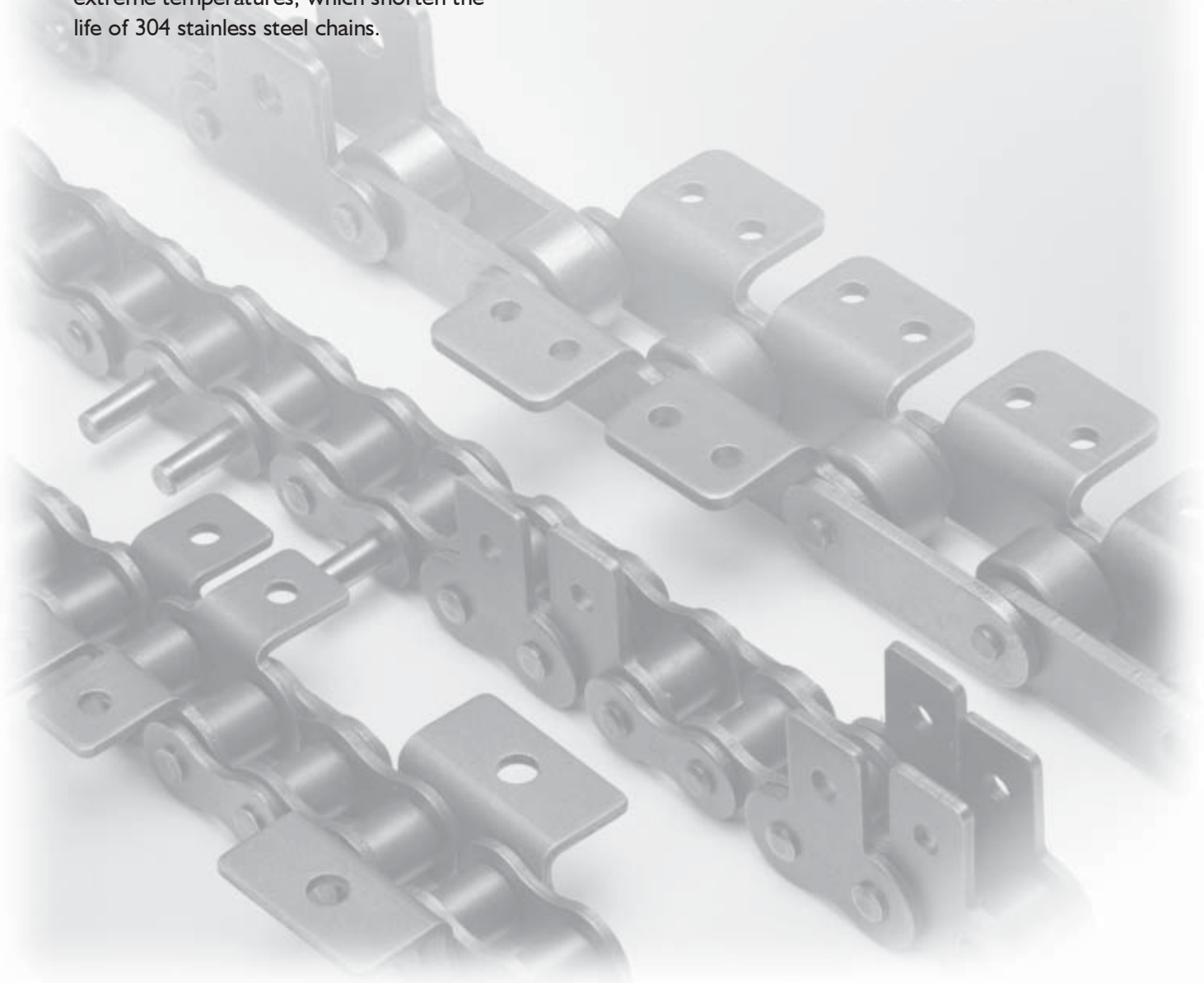
The primary use of 304 stainless steel chain is in corrosive and/or high temperature environments, which shorten life of standard carbon steel roller chains. The 304 stainless steel chains give excellent resistance to corrosion and high temperatures. 304 stainless steel is generally considered non-magnetic.

316 Stainless Steel Series

The primary use of 316 and 317 stainless steel chain is in highly corrosive and/or extreme temperatures, which shorten the life of 304 stainless steel chains.

400 and 600 Stainless Steel Series

The primary use of 400 and 600 stainless steel chain is in corrosive and/or high temperature environments, which shortens the life of standard carbon steel chain. The 400 and 600 stainless steel chains have less corrosion resistance than 304 stainless steel, but the hardened round parts provide for better wear life than 304 stainless steel chains. These chains are designed for drive applications, which normally have a high number of articulations.



Drives Corrosion Resistant Chain Products

Stainless Steel

Materials of Component Parts

	Link Plate	Pin	Bushing	Roller
304 Series	AISI 304	AISI 304	AISI 304	AISI 304
316 Series	AISI 316	AISI 316	AISI 316	AISI 316
400 Series	AISI 304	AISI 431	AISI 403	AISI 403
600 Series	AISI 304	600 APH	600 APH	600 APH

*PH: Precipitation Hardened

Performance of Anti-corrosive Chains

	Corrosion Resistance	Temperature Resistance	Magnetism	Wear Resistance
NP Chain	Acceptable for outdoor and decorative applications.	14°F - 140°F (Never use below -4°F or above 300°F)	Magnetic	Excellent
400 & 600 Series	Good for general acid, alkali and water.	-40°F ~ 750°F (Never use over 930°F)	Magnetic	Very Good
304 Series	Good for general acid, alkali and water.	-40°F ~ 750°F (Never use below -270°F or over 1300°F)	Slightly magnetic due to cold forming of parts	Fair
316 Series	Superior to the other stainless material.	-40°F ~ 750°F (Never use below -270°F or over 1500°F)	Non-magnetic	Fair

Chain Selection

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

	Max. Allowable Bearing Pressure Between Pin & Bushing	Maximum Operating Speed
304 & 316 Series	1,420 psi	230 Ft./Min.
400 & 600 Series	2,130 psi	230 Ft./Min.

Chain selection can be made using the following formula.

$$\boxed{\text{Maximum Chain Tension}} \times \boxed{\text{Service Factor}} \times \boxed{\text{Speed Coefficient}} \times \boxed{\text{Temperature Factor}} \leq \boxed{\text{Maximum Allowable Load}}$$

Maximum allowable load or maximum bearing pressure as shown above can be doubled only when chain is used in group "A" of the "Corrosion Resistance Guide" on pages 52-53 and properly lubricated.

Maximum Allowable Load

The chain's maximum allowable load can be obtained by the formula: (Maximum allowable bearing pressure) X (Bearing area between pin and bushing)

	304 & 316 Series	400 & 600 Series
25	26 Lbs.	36 Lbs.
35	66 Lbs.	90 Lbs.
40	100 Lbs.	155 Lbs.
50	165 Lbs.	230 Lbs.
60	231 Lbs.	350 Lbs.
80	396 Lbs.	600 Lbs.

Service Factor

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

Speed Coefficient

Chain Speed	Speed Coefficient
0-50 Ft./Min.	1.0
50-100 Ft./Min.	1.2
100-160 Ft./Min.	1.4
160-230 Ft./Min.	1.6

Temperature Factor

Temperature	304 Series	316 Series	400 & 600 Series
~ -270°F	X	X	X
-270°F ~ -40°F	1.0	1.0	X
-40°F ~ 750°F	1.0	1.0	1.0
750°F ~ 930°F	1.2	1.0	1.8
930°F ~ 1,100°F	1.5	1.2	X
1,100°F ~ 1,300°F	1.8	1.5	X
1,300°F ~ 1,500°F	X	2.0	X
1,500°F ~	X	X	X

X = Not suggested.

Drives Corrosion Resistant Chain Products

Stainless Steel

Substance	Concentration	Temp. F	600 SS	400 SS	304 SS	316 SS
Acetone		68	A	C	A	A
Oil (Plant, Mineral)		68	A	A	A	A
Linseed Oil	100%	68	B	A	A	A
Sulfur Dioxide		68	C	C	A	A
Alcohol		68	A	A	A	A
Ammonia Water		68	A	A	A	A
Whiskey		68	A	A	A	A
Ethyl Ether		68	A	A	A	A
Zinc Chloride	50%	68	D	D	B	B
Sal Ammoniac	50%	Boiling	C	D	B	A
Potassium Chloride	Saturation	68	B	A	A	A
Calcium Chloride	Saturation	68	D	D	B	A
Ferric Chloride	5%	68	D	D	B	B
Sodium Chloride	5%	68	B	B	A	A
Chlorine Gas		68	D	D	D	B
Chlorinated Water			D	D	D	A
Oleic Acid		68	A	A	A	A
Sea-water		68	C	C	B	A
Sodium Perchlorate	10%	Boiling	D	D	A	A
Hydrogen Peroxide	30%	68	B	B	A	A

Substance	Concentration	Temp. F	600 SS	400 SS	304 SS	316 SS
Gasoline		68	A	A	A	A
Potassium Permanganate	Saturation	68	A	A	A	A
Ferric Acid	50%	68	A	A	A	A
Milk		68	A	A	A	A
Citric Acid	50%	68	A	A	A	A
Glycerol		68	A	A	A	A
Creosote		68	A	A	A	A
Chromic Acid	5%	68	B	B	A	A
Ketchup		68	A	A	A	A
Developing Solution		68	B	B	A	A
Synthetic Detergent			A	A	A	A
Coffee		Boiling	A	A	A	A
Syrup			A	A	A	A
Acetic Acid	10%	68	A	A	A	A
Sugar Solution		68	A	A	A	A
Calcium Hypochlorite	11-14%	68	C	C	A	A
Sodium Hypochlorite	10%	68	D	D	D	A
Sodium Cyanide		68	--	--	A	A
Carbon Tetrachlorite		68	A	A	A	A
Potassium Bichromate	10%	68	A	A	A	A
Oxalic Acid	10%	68	B	B	A	A
Tartaric Acid	6%	68	A	A	A	A

A = Total Resistance

B = Partial Resistance

C = Satisfactory Resistance

D = Not Recommended

Drives Corrosion Resistant Chain Products

Stainless Steel

Substance	Concentration	Temp. F	600 SS	400 SS	304 SS	316 SS
Nitric Acid	Saturation	Boiling	B	B	A	A
Ammonium Nitrate		68	A	A	A	A
Potassium Nitrate	25%	68	A	A	A	A
Potassium Nitrate	25%	Boiling	D	D	A	A
Vinegar		68	C	C	B	A
Potassium Hydroxide	20%	68	A	A	A	A
Calcium Hydroxide	20%	Boiling	A	A	A	A
Sodium Hydroxide	25%	68	A	A	A	A
Formic Acid	100%	Boiling	C	C	C	A
Soft Drink		68	A	A	A	A
Hydroxibenzene		68	A	A	A	A
Petroleum		68	A	A	A	A
Soap & Water Solution		68	A	A	A	A
Phosphate			A	A	A	A
Sodium Hydrocarbonate		68	A	A	A	A
Sodium Carbonate	Saturation	Boiling	A	A	A	A
Sodium Thiosulfate	25%	Boiling	A	A	A	A
Turpentine		95	A	A	A	A
Kerosene		68	A	A	A	A
Varnish			A	A	A	A
Heavy Nitric Acid	85%	68	D	D	A	A
Heavy Nitric Acid	65%	68	D	D	B	B
Lactic Acid	10%	68	B	B	A	A
Honey			A	A	A	A
Paraffin		68	A	A	A	A
Beer		68	A	A	A	A
Picric Acid	Saturation	68	A	A	A	A

Substance	Concentration	Temp. F	600 SS	400 SS	304 SS	316 SS
Fruit Juice		68	B	B	A	A
Benzene		68	A	A	A	A
Boric Acid	50%	Boiling	A	A	A	A
Formalin	40%	68	A	A	A	A
Mayonnaise		68	B	B	A	A
Water			A	A	A	A
Vegetable Juice		68	A	A	A	A
Lard			A	A	A	A
Butyric Acid		68	A	A	A	A
Hydrogen Sulfide (dry)			A	A	A	A
Hydrogen Sulfide (wet)			D	D	D	D
Sulfuric Acid	5%	68	D	D	D	A
Zinc Sulfate	25%	68	A	A	A	A
Aluminum Sulfate	Saturation	68	D	D	A	A
Ammonium Sulfate	Saturation	Boiling	B	B	A	A
Sodium Sulfate	Saturation	68	A	A	A	A
Malic Acid	50%	Boiling	A	A	A	A
Phosphoric Acid	5%	68	B	B	A	A
Phosphoric Acid	10%	68	B	B	B	B
Wine		68	A	A	A	A

A = Total Resistance

B = Partial Resistance

C = Satisfactory Resistance

D = Not Recommended

Attachment Chain - ANSI Standard

**Push, roll, carry or lift...
Our world class chains
accomplish the task.**

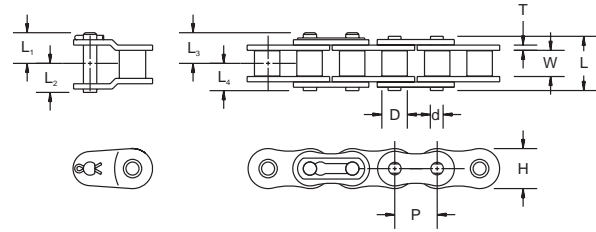
Made-to-order

Ship within 48 hours



Attachment Carbon & Stainless Roller Chain Products

ANSI Standard Chain Sizes Available

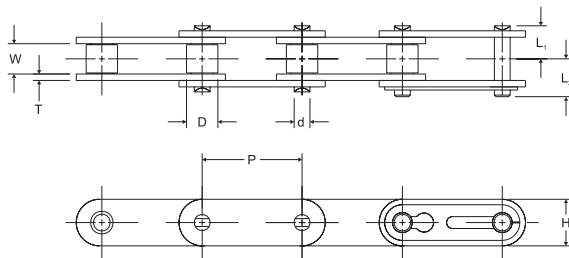


Carbon Steel and Stainless Steel

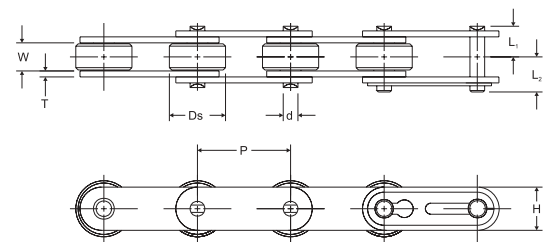
Drives	Pitch	Width Between L.P.	Roller Dia.	Link Plate			Pin					Carbon Max. Allowable Load	304SS Stainless Max. Allowable Load	Average Weight
							Pin Dia.							
Chain No.	P	W	D	H	T	d	L	L ₁	L ₂	L ₃	L ₄	Lb.	Lb.	Lb./Ft.
40	0.500	0.313	0.313	0.472	0.060	0.156	0.630	0.404	0.317	0.377	0.315	860	100	0.420
50	0.625	0.376	0.400	0.590	0.080	0.200	0.795	0.489	0.399	0.489	0.398	1,389	165	0.713
60	0.750	0.500	0.469	0.705	0.094	0.234	0.996	0.600	0.498	0.648	0.498	2,095	231	1.067
80	1.000	0.627	0.625	0.943	0.125	0.313	1.283	0.768	0.638	0.857	0.642	3,300	396	1.868

Extended Pitch Roller Chain

Small Roller



Large Roller



Carbon Steel and Stainless Steel Small Roller

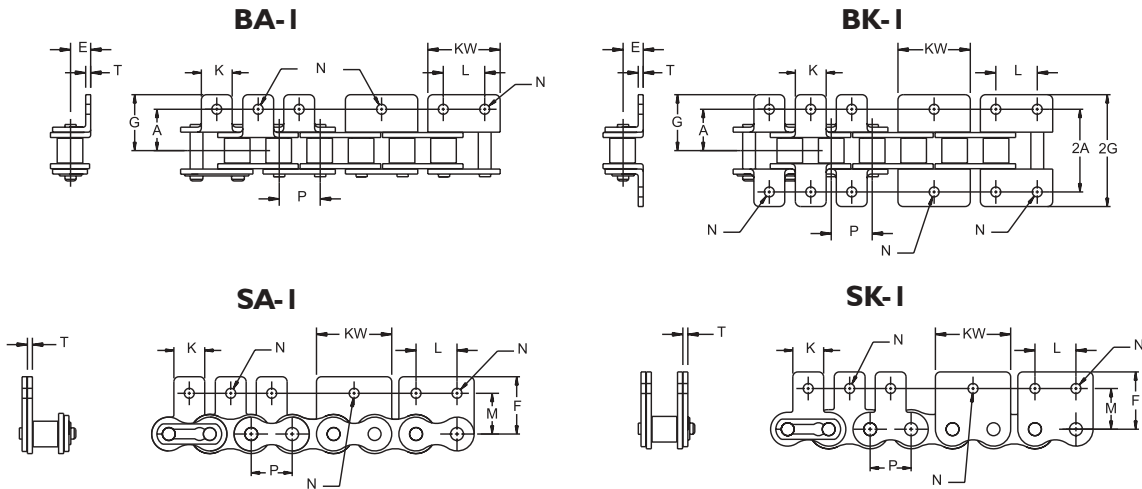
Drives	Pitch	Link Plate							Carbon Max. Allowable Load	304SS Stainless Max. Allowable Load	Average Weight
		W	D	H	T	d	L ₁	L ₂			
Chain No.	P	W	D	H	T	d	L ₁	L ₂	Lb.	Lb.	Lb./Ft.
C2040	1.000	0.312	0.312	0.472	0.060	0.156	0.319	0.382	615	100	0.340
C2050	1.250	0.376	0.400	0.591	0.080	0.200	0.409	0.477	1,010	165	0.580
C2060H	1.500	0.500	0.469	0.687	0.125	0.234	0.590	0.660	1,410	231	1.010
C2080H	2.000	0.626	0.625	0.950	0.156	0.312	0.745	0.845	2,350	396	1.770

Carbon Steel and Stainless Steel Large Roller

Drives	Pitch	Link Plate							Carbon Max. Allowable Load	304SS Stainless Max. Allowable Load	Average Weight
		W	D _s	H	T	d	L ₁	L ₂			
Chain No.	P	W	D _s	H	T	d	L ₁	L ₂	Lb.	Lb.	Lb./Ft.
C2042	1.000	0.312	0.625	0.472	0.060	0.156	0.319	0.382	615	100	0.580
C2052	1.250	0.376	0.750	0.591	0.080	0.200	0.409	0.477	1,010	165	0.900
C2062H	1.500	0.500	0.875	0.687	0.125	0.234	0.590	0.660	1,410	231	1.461
C2082H	2.000	0.626	1.125	0.950	0.156	0.312	0.745	0.845	2,350	396	2.450

Attachment Carbon & Stainless Roller Chain Products

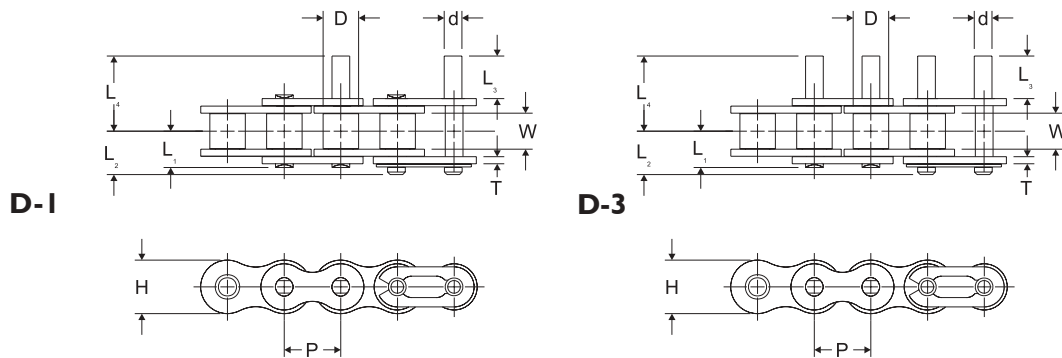
ANSI Roller Chain with Attachment



Carbon Steel and Stainless Steel

Drives	(BA-BK-SA-SK Type) Attachment													Average Weight per Attachment - Lb.	
Chain No.	P	T	K	KW	L	N	A	E	G	(2A)	(2G)	M	F	BA-SA	BK-SK
40	0.500	0.060	0.374	0.970	0.500	0.142	0.500	0.311	0.681	1.000	1.362	0.500	0.685	0.0044	0.0088
50	0.625	0.080	0.500	1.210	0.625	0.205	0.625	0.406	0.917	1.250	1.834	0.625	0.906	0.0066	0.0132
60	0.750	0.094	0.625	1.460	0.750	0.205	0.750	0.469	1.106	1.500	2.212	0.720	1.051	0.0154	0.0308
80	1.000	0.125	0.750	1.940	1.000	0.268	1.000	0.625	1.413	2.000	2.826	0.969	1.358	0.0287	0.0574
100	1.250	0.156	1.000	--	1.250	0.343	1.250	0.780	1.768	2.500	3.536	1.252	1.732	0.0572	0.1144
120	1.500	0.187	1.250	--	1.500	0.386	1.500	0.906	2.197	3.000	4.394	1.437	2.081	0.0968	0.1935
140	1.750	0.221	1.375	--	1.750	0.448	1.750	1.125	2.484	3.500	4.968	1.750	2.500	0.1562	0.3124
160	2.000	0.250	1.500	--	2.000	0.516	2.000	1.252	2.827	4.000	5.654	2.000	2.76	0.2134	0.4268

Extended Pin Roller Chain

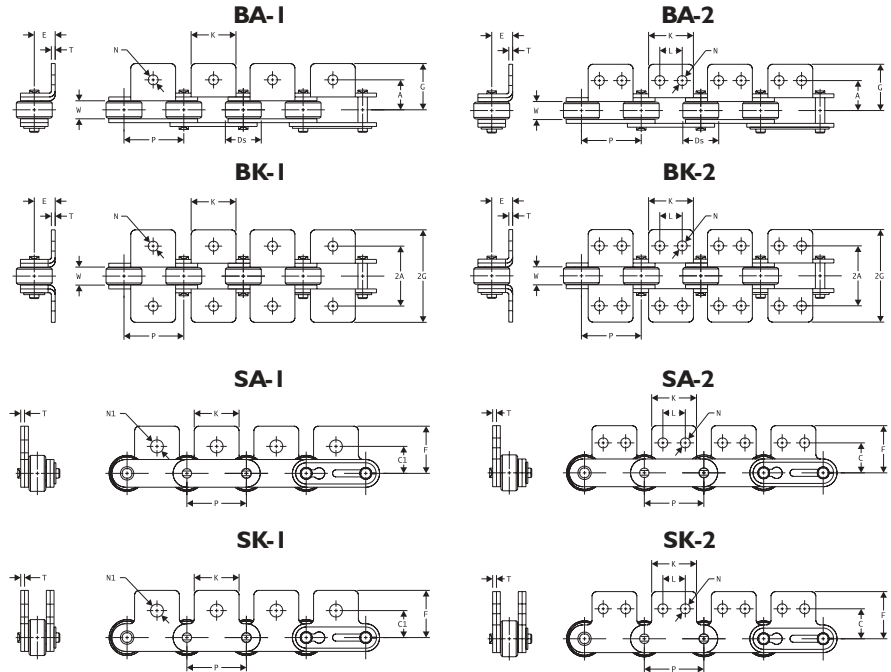


Carbon Steel and Stainless Steel

Drives									Average Weight per Attachment - Lb.	
Chain No.	P	T	d	L ₁	L ₂	L ₃	L ₄	D-1	D-3	
40	0.500	0.059	0.156	0.315	0.377	0.374	0.661	0.002	0.004	
50	0.625	0.079	0.200	0.398	0.489	0.469	0.827	0.004	0.008	
60	0.750	0.094	0.234	0.498	0.648	0.563	1.018	0.006	0.012	
80	1.000	0.125	0.313	0.642	0.857	0.752	1.335	0.020	0.040	

Attachment Carbon & Stainless Roller Chain Products

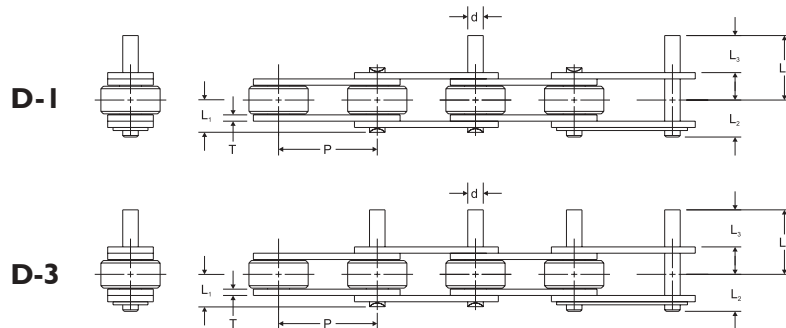
Extended Pitch Roller Chain with Attachment



Carbon Steel & Stainless Steel

Drives	Pitch	Link Plate	(BA-BK-SA-SK Type) Attachment												Additional Weight per Attachment-Lb.	
			Chain No.	P	T	K	N	L	A	E	G	(2A) B	(2G) H	C	F	C1
C2040 - C2042	1.000	0.060	0.750	0.142	0.374	0.500	0.358	0.750	1.000	1.500	0.531	0.780	0.437	0.205	0.006	0.013
C2050 - C2052	1.250	0.080	0.937	0.205	0.469	0.625	0.437	0.953	1.252	1.906	0.625	0.969	0.563	0.268	0.013	0.026
C2060H - C2062H	1.500	0.125	1.126	0.205	0.563	0.844	0.579	1.230	1.688	2.460	0.750	1.205	0.689	0.346	0.037	0.075
C2080H - C2082H	2.000	0.156	1.500	0.268	0.752	1.094	0.750	1.598	2.188	3.196	1.000	1.583	0.874	0.406	0.082	0.163

Extended Pin Roller Chain



Carbon Steel & Stainless Steel

Chain No.	P	T	d	L ₁	L ₂	L ₃	L ₄	Additional Weight per Attachment-Lb.	
C2040 - C2042	1.000	0.059	0.156	0.319	0.382	0.374	0.663	0.002	0.004
C2050 - C2052	1.250	0.079	0.200	0.409	0.477	0.469	0.833	0.004	0.008
C2060H - C2062H	1.500	0.125	0.234	0.590	0.660	0.563	1.083	0.006	0.012
C2080H - C2082H	2.000	0.156	0.313	0.745	0.845	0.752	1.401	0.020	0.040

Extended Life CHP[®] Series Chain Products

Up until now there have been many attempts to produce roller chains capable of operating without lubrication. These attempts have focused on either sealing a fixed volume of lubricant inside the joint during manufacturing or by providing certain chain components produced from porous materials reported to retain and disperse lubricant as the chain requires. These types of solutions are often only offered in limited sizes and attachments may not be available.

Sealed joint chains are just that – sealed. Once the internal reservoir of lubricant is exhausted there is no method of replenishing that supply in service. Additionally, many environments are unsuitable for these type of chains due to speeds, loads, temperatures, chemicals or abrasives that can destroy or dislodge the seals.

Porous component chains are often hindered in similar ways as sealed chains. Typically, their ability to transmit high loads and their temperature ranges are limited. Some are produced with “rollers” by using a porous bushing material with a thicker cross-section and a “thinner” roller causing impact load issues. Dry, dusty or abrasive conditions can reduce the operating life of these types of products.

Chain elongation, due to wear, is the primary mode of failure in most roller chain drives. Wear is the result of abrasion between the pin and bushing. The rate of wear between these two components is often accelerated by the operating environment or the inability to adequately provide lubricant to these parts.

Until now...welcome to Extended Life CHP[®] Chain Series.



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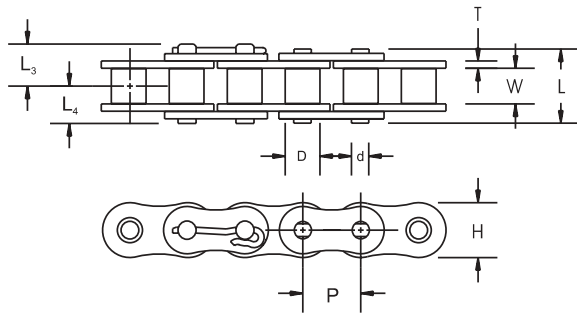
American
Petroleum
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SPEC 7F-0022

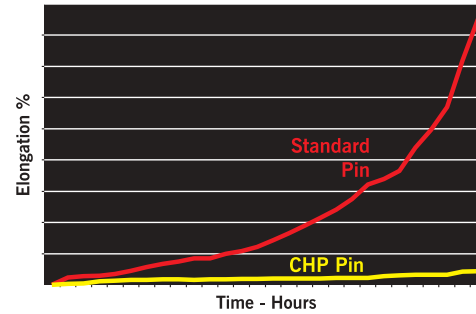


Drives Extended Life CHP® Series Chain Products

Made in
U.S.A.



Elongation vs. Time



Extended Life CHP® chains:

CHP hard chrome plated pins possess standard steel's metallurgical properties for toughness and strength while delivering an extremely hard wear resistant pin surface. CHP chain pins resist wear longer than standard heat treated pins, even in dry and abrasive environments.

- CHP chain is directly interchangeable with standard ANSI chain
- Outstanding wear and shock load performance even at elevated temperatures
- No reduction in working loads or operating speeds
- Exceptional pin wear resistance reduces chain elongation and can increase wear life by 3X over conventional premium chains
- Full range of ANSI standard attachments available

Drives	Pitch	Width Between L.P.	Roller Dia.	Average Weight
Chain No.	P	W	D	Lb./ft.
40	0.500	0.313	0.313	0.420
50	0.625	0.376	0.400	0.713
60	0.750	0.500	0.469	1.067
80	1.000	0.627	0.625	1.868
100	1.250	0.755	0.750	2.801
120	1.500	1.000	0.875	4.135
140	1.750	1.000	1.000	5.136
160	2.000	1.250	1.126	6.603
180	2.250	1.400	1.406	9.100
200	2.500	1.490	1.562	10.900
240	3.000	1.864	1.875	16.400
C2040	1.000	0.312	0.312	0.340
C2050	1.250	0.376	0.400	0.580
C2060H	1.500	0.500	0.470	1.010
C2080H	2.000	0.625	0.625	1.204

NOTE:

- CHP offsets available on a made-to-order basis. Two pitch riveted offsets recommended.
- Cotter type connecting links standard for CHP chains.
 - 40 thru 60 pitch dual cotter key
 - 80 thru 180 pitch hardened hook cotter
 - 200 thru 240 pitch coated T-pin
- Available in single and multiple strand sizes - #40 to #240.
- Riveted or cotttered pins available depending on size.
- Corrosion resistant finishes available upon request for remaining chain components.

* Drives Engineering and the American Chain Association (ACA) recommend sprockets and roller chain changed out at the same time.

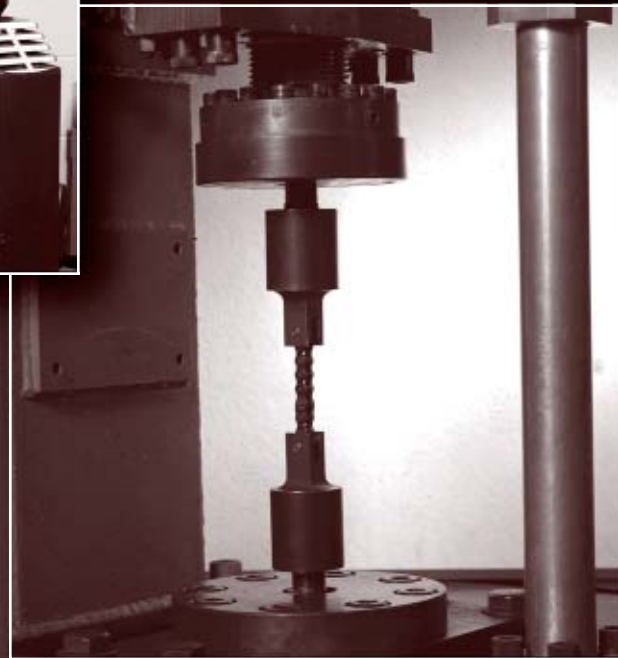
* Drives recommends operating roller chain with periodic lubrication and maintenance review. Various lubricants are available including food grade and no "stain", depending on application.

* Product specifications subject to change without notice.



Section 4

Engineering Information



Installation and Drive Arrangements

Speed Ratio and Chain Wrap

The speed ratio of roller chain can range up to 7:1 under normal operating conditions. However, a speed ratio of 10:1 is possible if the speed is very slow. Chain wrap on the small sprocket must be at least 120 degrees.

Distance Between Shafts

Sprockets can be separated by any distance as long as their teeth do not touch. Optimum distance is 30 to 50 times the pitch of the chain being used except when there is a pulsating load. In such cases, the distance should be up to 20 times the pitch of the chain used.

Position

Roller chains are ideally installed in a horizontal position. If the chain drive must be in a vertical position the wear life of the chain will be reduced because of the effect of gravity.

Slack

Generally, the slack of a roller chain should be on the lower side (see Fig. A). Adequate slack (SS) is 4% of the span for normal drives. In the following cases, the slack should be about 2% of the span:

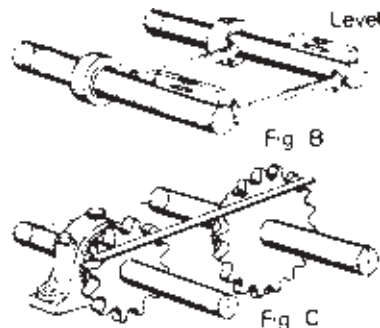
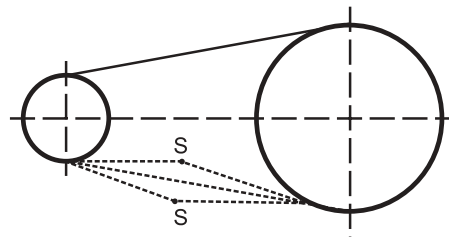
- Vertical drive or close to vertical drive.
- Center distance between two shafts is greater than 3 Ft.
- Chain is operated under heavy load and high frequency of on and off drive.
- Direction of the drive is often changed.

Position of Sprocket

The two shafts should be parallel and preferably in a horizontal position. Sprockets should be firmly installed. (See Figs. B and C)

Use a straight edge to check that the two sprockets are installed along the same horizontal plane.

Fig. A

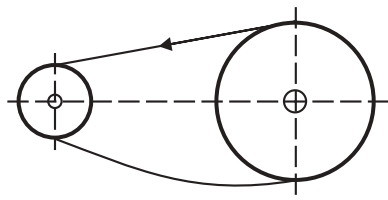


Encourage customers who are replacing worn chain to also replace sprockets. Chain life is reduced when chain and sprockets are not replaced at the same time.

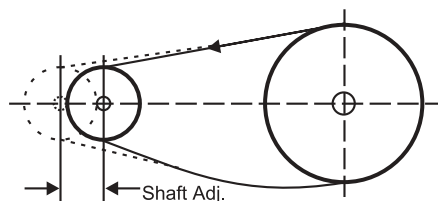
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Drives Engineering Information

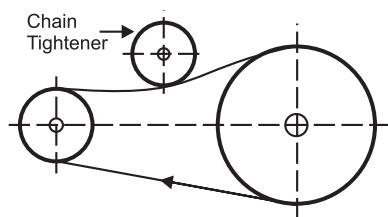
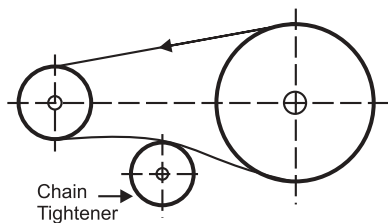
Arrangements



Satisfactory arrangement for drives with short centers.

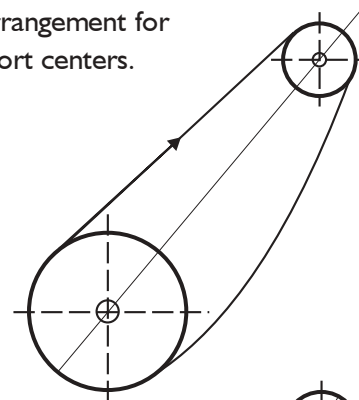


It is best to have one shaft adjustable as shown directly above, or use chain tightener as shown in lower arrangement.

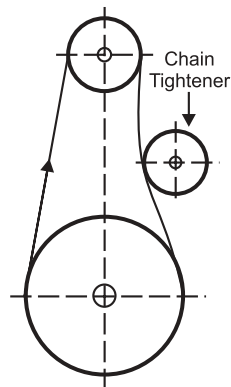
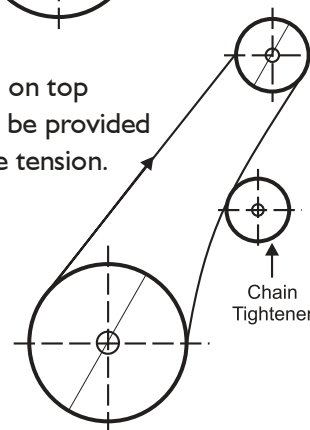


When slack side is on top some means must be provided to adjust slack side tension.

Satisfactory arrangement for drives with short centers.

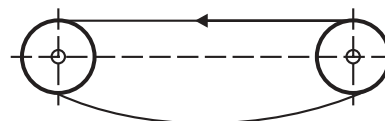
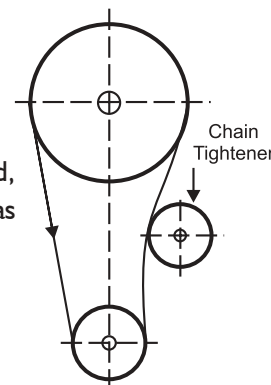


When slack side is on top some means must be provided to adjust slack side tension.



Best arrangement for vertical drives where means for adjusting slack is possible.

This arrangement, while sometimes used, is not as satisfactory as that shown above.



Unsatisfactory arrangement (no adjustment is provided.)

Drives Product Managers and Engineers are available to answer your questions.

1-800-435-0782

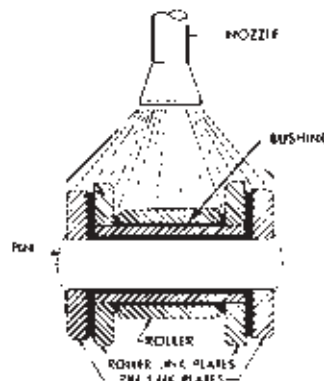
Drives Engineering Information

Lubrication Increases the Service Life

One of the most important factors in getting the best possible performance out of your roller chain is proper lubrication. No matter how well a transmission system is designed, if it is not properly lubricated, its service life will be shortened.

Lubrication

Wear between the pin and bushing causes the roller chain to elongate. These parts should, therefore, be well lubricated. The gap between the pin link plate and the roller link plate on the slack side of the chain should be filled with oil. This oil forms a film which minimizes wear on the pin and bushing, thus increasing the chain's service life. It also reduces noise and acts as a coolant when the chain runs at high speeds.



Manufacturer of:

USA ANSI

Power Transmission
Roller Chains

Conveyor Chain
Products

Pintle Chains

Auger Products

Engineering Class
Chains

Suggested Lubricants

Only high quality oil should be used to lubricate the roller chain. Neither heavy oil nor grease is suitable. The viscosity of the oil used will depend on the chain size, chain speed and ambient temperature. The lubricants suggested for specific temperature ranges are given in the table to the right

Temperature Degrees F	Recommended Lubricant
-20 - +20	SAE 10
20 - 40	SAE 20
40 - 100	SAE 30
100 - 120	SAE 40
120 - 140	SAE 50

Table V

The number of supply holes should equal $Z + 1$ where Z is the number of strands of chain.

The amount of oil supplied to each hole is constant.

Regardless of the lubricating system used, the roller chain must be cleaned periodically. Examine the pin and bushing after removing the chain. Any damage or reddish-brown color on their surfaces indicate that the system is not being adequately lubricated.

Chain Speed Ft./Min.	Chain Number			
	60 and under	80 - 100	120 - 140	160 and over
1,600-2,600	0.26 Gal./Min.	0.40 Gal./Min.	0.53 Gal./Min.	0.66 Gal./Min.
2,600-3,600	0.53 Gal./Min.	0.66 Gal./Min.	0.79 Gal./Min.	0.92 Gal./Min.
3,600-4,600	0.79 Gal./Min.	0.92 Gal./Min.	1.06 Gal./Min.	1.19 Gal./Min.

1-800-435-0782



Drives Engineering Information

The following three lubricating systems are suggested:

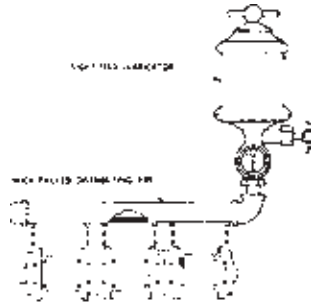
System A



Manual Lubrication (System A - top)

Oil is applied with an oil filler or brush in the gap between the pin link and roller link on the slack side of the chain. It should be applied about every eight hours or as often as necessary to prevent the bearing area of the chain from becoming dry.

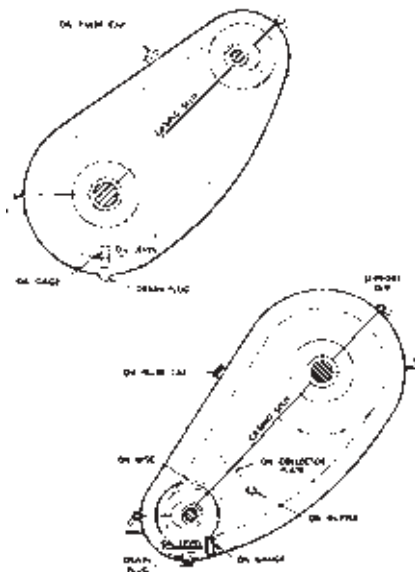
Always turn off and lockout the power switch before lubricating or servicing a chain system.



Drip Lubrication (System A - bottom)

A simple casing can be used. The oil is supplied by drip feed. Each strand of chain should ordinarily receive 5 to 20 drops of oil per minute, according to increases in the chain speed.

System B



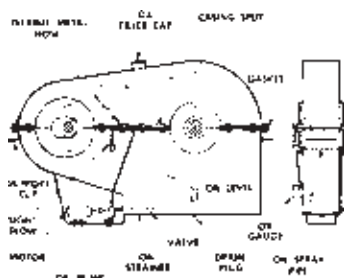
Oil Bath Lubrication (System B - top)

A leak proof casing is required. The chain dips into the oil at bottom of casing. The sprocket should dip into the oil approximately 1/2". If the sprocket is immersed more than 1/2" too much heat is generated.

Lubrication by Slinger Disc (System B - bottom)

A leak proof casing is required. The chain does not need to dip into the oil at the bottom of casing. The slinger disc should dip into the oil from 1/2" to 1".

System C



Lubrication Using a Pump (System C)

Use a leak-free casing. A pump is used to circulate the oil which is then cooled. (See Table V for lubrication supply holes.)

Customer Service provides immediate feedback on lead times. Sales service and product managers await your call.

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USA CHAIN

Drives Engineering Information

Troubleshooting Guide

Problem	Possible Causes	What to Do
Excessive noise	<ul style="list-style-type: none"> • Misalignment of sprockets • Loose casings or bearings • Too little or too much slack • Chain and/or sprocket wear • Inadequate lubrication or no lubrication • Chain pitch size too large 	<ul style="list-style-type: none"> • Realign sprockets and shafts • Tighten set-bolts • Adjust centers or idler take-up • Replace chain and/or sprocket • Lubricate properly • Check chain drive selection
Chain vibration	<ul style="list-style-type: none"> • Resonance to the vibration cycle of machine to be installed • High load fluctuation 	<ul style="list-style-type: none"> • Change vibration cycle of chain or machine • Use torque converter or fluid coupling
Wear on inside of link plate and one side of sprocket teeth.	<ul style="list-style-type: none"> • Misalignment 	<ul style="list-style-type: none"> • Realign sprockets and shafts
Chain climbs sprockets	<ul style="list-style-type: none"> • Excessive chain wear • Excessive chain slack • Heavy overload 	<ul style="list-style-type: none"> • Replace chain • Adjust centers or idler take-up • Reduce load or install stronger chain
Broken pins, bushings or rollers	<ul style="list-style-type: none"> • Chain speed is too high for pitch and sprocket size • Heavy shock or suddenly applied loads • Material build-up in sprocket tooth pockets • Inadequate lubrication • Chain or sprocket corrosion 	<ul style="list-style-type: none"> • Use shorter pitch chain or install larger diameter sprockets • Reduce shock load or install stronger chain • Remove material build-up or install side gashed sprockets (mud relief) • Lubricate properly • Install anti-corrosive chain or sprockets
Chain clings to sprocket	<ul style="list-style-type: none"> • Center distance too long or high load fluctuation • Excessive chain slack • Excessive chain wear 	<ul style="list-style-type: none"> • Adjust the center distance or install idler take-up • Same as above • Replace chain
Chain gets stiff	<ul style="list-style-type: none"> • Misalignment • Inadequate lubrication • Corrosion • Excessive load • Material build-up in chain joint • Peening of link plate edges 	<ul style="list-style-type: none"> • Realign sprockets and shafts • Lubricate properly • Replace with anti-corrosive chain • Reduce load or replace with chain or suitable strength • Shield drive from foreign matter • Check for chain interference
Breakage of link plate	<ul style="list-style-type: none"> • Subjected to shock load • Vibration • Moment of load inertia is too large 	<ul style="list-style-type: none"> • Reduce shock (e.g., install a shock absorber) • Install a device to absorb vibration (e.g., tensioner idler wheel) • Chain section should be checked (increase number of strands or select next larger size chain)

Drives Sprocket Information

No. of Teeth	25 1/4" Pitch		35 3/8" Pitch		40, 41 1/2" Pitch		50 5/8" Pitch		60 3/4" Pitch		80 1" Pitch	
	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.
9	.731	.837	1.096	1.256	1.462	1.674	1.827	2.092	2.193	2.511	2.924	3.347
10	.809	.919	1.214	1.380	1.618	1.839	2.023	2.299	2.427	2.758	3.236	3.678
11	.887	1.002	1.331	1.502	1.775	2.003	2.219	2.504	2.662	3.004	3.549	4.006
12	.966	1.083	1.449	1.625	1.932	2.166	2.415	2.708	2.898	3.249	3.864	4.332
13	1.045	1.167	1.567	1.747	2.089	2.329	2.612	2.911	3.134	3.493	4.179	4.657
14	1.123	1.246	1.685	1.868	2.247	2.491	2.809	3.113	3.371	3.736	4.494	4.982
15	1.202	1.326	1.804	1.990	2.405	2.652	3.006	3.315	3.607	3.979	4.810	5.305
16	1.281	1.407	1.922	2.111	2.563	2.814	3.204	3.517	3.844	4.221	5.126	5.627
17	1.361	1.487	2.041	2.231	2.721	2.975	3.401	3.719	4.082	4.462	5.442	5.950
18	1.440	1.568	2.159	2.352	2.879	3.135	3.599	3.920	4.319	4.704	5.759	6.271
19	1.519	1.648	2.278	2.473	3.038	3.296	3.797	4.120	4.557	4.945	6.076	6.593
20	1.598	1.729	2.397	2.593	3.196	3.457	3.995	4.321	4.794	5.185	6.392	6.914
21	1.677	1.809	2.516	2.713	3.355	3.617	4.193	4.522	5.032	5.426	6.710	7.235
22	1.757	1.889	2.635	2.833	3.513	3.778	4.392	4.722	5.270	5.666	7.027	7.555
23	1.836	1.969	2.754	2.954	3.672	3.938	4.590	4.922	5.508	5.907	7.344	7.875
24	1.915	2.049	2.873	3.074	3.831	4.098	4.788	5.122	5.746	6.147	7.661	8.196
25	1.995	2.129	2.992	3.194	3.989	4.258	4.987	5.322	5.984	6.387	7.979	8.516
26	2.074	2.209	3.111	3.314	4.148	4.418	5.185	5.522	6.222	6.627	8.296	8.836
27	2.153	2.289	3.230	3.434	4.307	4.578	5.384	5.722	6.460	6.867	8.614	9.156
28	2.233	2.369	3.349	3.554	4.466	4.738	5.582	5.922	6.699	7.107	8.931	9.475
29	2.312	2.449	3.468	3.673	4.625	4.897	5.781	6.122	6.937	7.346	9.249	9.795
30	2.392	2.529	3.588	3.793	4.783	5.057	5.979	6.321	7.175	7.586	9.567	10.114
31	2.471	2.609	3.707	3.913	4.942	5.217	6.178	6.521	7.413	7.825	9.885	10.434
32	2.551	2.688	3.826	4.033	5.101	5.377	6.376	6.721	7.652	8.065	10.202	10.753
33	2.630	2.768	3.945	4.152	5.260	5.536	6.575	6.920	7.890	8.304	10.520	11.072
34	2.710	2.848	4.064	4.272	5.419	5.696	6.774	7.120	8.128	8.544	10.838	11.392
35	2.789	2.928	4.183	4.392	5.578	5.855	6.972	7.319	8.367	8.783	11.156	11.711
36	2.869	3.008	4.303	4.511	5.737	6.015	7.171	7.519	8.605	9.022	11.474	12.030
37	2.948	3.087	4.422	4.631	5.896	6.175	7.370	7.718	8.844	9.262	11.792	12.349
38	3.028	3.167	4.541	4.751	6.055	6.334	7.568	7.918	9.082	9.501	12.110	12.668
39	3.107	3.247	4.660	4.871	6.214	6.494	7.767	8.117	9.321	9.740	12.428	12.987
40	3.187	3.327	4.780	4.990	6.373	6.653	7.966	8.316	9.559	9.980	12.745	13.306
41	3.266	3.406	4.899	5.110	6.532	6.813	8.165	8.516	9.798	10.219	13.063	13.625
42	3.346	3.486	5.018	5.229	6.691	6.972	8.363	8.715	10.036	10.458	13.381	13.944
43	3.425	3.566	5.137	5.349	6.850	7.131	8.562	8.914	10.275	10.697	13.700	14.263
44	3.505	3.646	5.257	5.468	7.009	7.291	8.761	9.114	10.513	10.936	14.018	14.582
45	3.584	3.725	5.376	5.588	7.168	7.451	8.960	9.313	10.752	11.176	14.336	14.901
46	3.664	3.805	5.495	5.708	7.327	7.609	9.159	9.512	10.990	11.415	14.654	15.219
47	3.743	3.885	5.614	5.827	7.486	7.769	9.357	9.711	11.229	11.654	14.972	15.538
48	3.823	3.964	5.734	5.947	7.645	7.928	9.556	9.911	11.467	11.893	15.290	15.857
49	3.902	4.044	5.853	6.066	7.804	8.088	9.755	10.111	11.706	12.132	15.608	16.176
50	3.982	4.124	5.972	6.186	7.963	8.247	9.954	10.309	11.944	12.371	15.928	16.495
51	4.061	4.203	6.091	6.305	8.122	8.407	10.153	10.508	12.183	12.610	16.244	16.813
52	4.141	4.283	6.211	6.425	8.281	8.566	10.351	10.707	12.422	12.849	16.562	17.132
53	4.220	4.363	6.330	6.544	8.440	8.725	10.550	10.907	12.660	13.088	16.880	17.451
54	4.300	4.442	6.449	6.664	8.599	8.885	10.749	11.106	12.899	13.327	17.198	17.769
55	4.379	4.522	6.569	6.783	8.758	9.044	10.948	11.305	13.137	13.566	17.517	18.088
56	4.459	4.602	6.688	6.903	8.917	9.203	11.147	11.504	13.376	13.805	17.835	18.406
57	4.538	4.681	6.807	7.022	9.076	9.363	11.346	11.703	13.615	14.044	18.153	18.725
58	4.618	4.761	6.927	7.142	9.236	9.522	11.544	11.902	13.853	14.283	18.471	19.044
59	4.697	4.841	7.046	7.261	9.395	9.681	11.743	12.102	14.092	14.522	18.739	19.363
60	4.777	4.920	7.165	7.381	9.554	9.841	11.942	12.301	14.330	14.761	19.107	19.681
61	4.857	5.000	7.284	7.500	9.713	10.000	12.141	12.500	14.569	15.000	19.426	20.000
62	4.936	5.080	7.404	7.619	9.872	10.159	12.340	12.699	14.808	15.238	19.744	20.318
63	5.016	5.159	7.523	7.739	10.031	10.318	12.539	12.898	15.046	15.477	20.062	20.637

Outside diameter dimensions are nominal. Note: Bottom diameter = pitch diameter - chain roller diameter.

Drives Sprocket Information

No. of Teeth	25 1/4" Pitch		35 3/8" Pitch		40, 41 1/2" Pitch		50 5/8" Pitch		60 3/4" Pitch		80 1" Pitch	
	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.
64	5.095	5.239	7.642	7.858	10.190	10.478	12.738	13.097	15.285	15.716	20.380	20.955
65	5.175	5.319	7.762	7.978	10.349	10.637	12.936	13.296	15.524	15.955	20.698	21.274
66	5.254	5.398	7.881	8.097	10.508	10.796	13.135	13.495	15.762	16.194	21.016	21.593
67	5.334	5.478	8.000	8.217	10.667	10.956	13.334	13.694	16.001	16.433	21.335	21.911
68	5.413	5.558	8.120	8.336	10.826	11.115	13.533	13.893	16.240	16.672	21.653	22.230
69	5.493	5.637	8.239	8.456	10.986	11.274	13.732	14.092	16.478	16.911	21.971	22.548
70	5.572	5.717	8.358	8.575	11.145	11.434	13.931	14.292	16.717	17.150	22.289	22.867
71	5.652	5.796	8.478	8.694	11.304	11.593	14.130	14.491	16.956	17.388	22.607	23.185
72	5.732	5.876	8.597	8.814	11.463	11.752	14.328	14.690	17.194	17.628	22.926	23.504
73	5.811	5.956	8.716	8.933	11.622	11.911	14.527	14.889	17.433	17.866	23.244	23.822
74	5.891	6.035	8.836	9.053	11.781	12.071	14.726	15.088	17.672	18.105	23.562	24.141
75	5.970	6.115	8.995	9.172	11.940	12.229	14.925	15.287	17.910	18.344	23.880	24.459
76	6.050	6.195	9.074	9.292	12.099	12.389	15.124	15.486	18.149	18.583	24.198	24.778
77	6.129	6.274	9.194	9.411	12.258	12.548	15.323	15.685	18.387	18.822	24.517	25.096
78	6.209	6.354	9.313	9.531	12.417	12.708	15.522	15.884	18.626	19.061	24.835	25.415
79	6.288	6.433	9.432	9.650	12.577	12.867	15.721	16.083	18.865	19.299	25.153	25.733
80	6.368	6.513	9.552	9.770	12.736	13.026	15.920	16.282	19.104	19.539	25.471	26.052
81	6.448	6.593	9.671	9.889	12.895	13.185	16.118	16.481	19.342	19.777	25.790	26.370
82	6.527	6.672	9.790	10.008	13.054	13.345	16.317	16.681	19.581	20.016	26.108	26.689
83	6.607	6.752	9.910	10.128	13.213	13.504	16.516	16.879	19.820	20.255	26.426	27.007
84	6.686	6.832	10.029	10.247	13.372	13.663	16.715	17.079	20.058	20.494	26.744	27.326
85	6.766	6.911	10.148	10.367	13.531	13.822	16.914	17.277	20.297	20.733	27.063	27.644
86	6.845	6.991	10.268	10.486	13.690	13.981	17.113	17.476	20.536	20.971	27.381	27.962
87	6.925	7.070	10.387	10.605	13.849	14.141	17.312	17.676	20.774	21.210	27.699	28.281
88	7.004	7.150	10.506	10.725	14.009	14.299	17.511	17.874	21.013	21.449	28.017	28.599
89	7.084	7.230	10.626	10.844	14.168	14.459	17.710	18.074	21.252	21.688	28.335	28.918
90	7.164	7.309	10.745	10.964	14.327	14.618	17.909	18.272	21.490	21.927	28.654	29.236
91	7.243	7.389	10.864	11.083	14.486	14.777	18.107	18.471	21.729	22.165	28.972	29.554
92	7.323	7.468	10.984	11.202	14.645	14.937	18.306	18.671	21.968	22.404	29.290	29.873
93	7.402	7.548	11.103	11.322	14.804	15.096	18.505	18.869	22.206	22.643	29.608	30.191
94	7.482	7.628	11.223	11.441	14.963	15.255	18.704	19.069	22.445	22.882	29.927	30.510
95	7.561	7.707	11.342	11.561	15.122	15.414	18.903	19.267	22.684	23.121	30.245	30.828
96	7.641	7.787	11.461	11.680	15.282	15.573	19.102	19.466	22.922	23.359	30.563	31.146
97	7.720	7.866	11.581	11.799	15.441	15.733	19.301	19.666	23.161	23.598	30.881	31.465
98	7.800	7.946	11.700	11.919	15.600	15.892	19.500	19.864	23.400	23.837	31.200	31.783
99	7.880	8.026	11.819	12.038	15.759	16.051	19.699	20.064	23.638	24.076	31.518	32.102
100	7.959	8.105	11.939	12.158	15.918	16.210	19.898	20.262	23.877	24.315	31.836	32.420
101	8.039	8.185	12.058	12.277	16.077	16.370	20.097	20.462	24.116	24.554	32.154	32.739
102	8.118	8.264	12.177	12.396	16.236	16.529	20.295	20.661	24.355	24.793	32.473	33.058
103	8.198	8.344	12.297	12.516	16.395	16.688	20.494	20.860	24.593	25.032	32.791	33.376
104	8.277	8.424	12.416	12.635	16.555	16.847	20.693	21.059	24.832	25.271	33.109	33.695
105	8.357	8.503	12.535	12.755	16.714	17.006	20.892	21.258	25.071	25.510	33.428	34.013
106	8.437	8.583	12.655	12.874	16.873	17.166	21.091	21.457	25.309	25.749	33.746	34.332
107	8.516	8.662	12.774	12.994	17.032	17.325	21.290	21.656	25.548	25.987	34.064	34.650
108	8.596	8.742	12.893	13.113	17.191	17.484	21.489	21.854	25.787	26.226	34.382	34.968
109	8.675	8.822	13.013	13.232	17.350	17.643	21.688	22.054	26.025	26.465	34.701	35.287
110	8.755	8.901	13.132	13.352	17.509	17.803	21.887	22.253	26.264	26.704	35.019	35.605
111	8.834	8.981	13.251	13.471	17.669	17.962	22.086	22.452	26.503	26.943	35.337	35.924
112	8.914	9.060	13.371	13.591	17.828	18.122	22.285	22.651	26.742	27.182	35.655	36.243
113	8.994	9.140	13.490	13.710	17.987	18.280	22.484	22.850	26.980	27.421	35.974	36.561
114	9.073	9.220	13.609	13.830	18.146	18.440	22.682	23.049	27.219	27.660	36.292	36.879
115	9.153	9.229	13.729	13.948	18.305	18.597	22.881	23.246	27.458	27.896	36.610	37.194
116	9.232	9.379	13.848	14.068	18.464	18.757	23.080	23.447	27.696	28.136	36.929	37.515
117	9.312	9.458	13.968	14.187	18.623	18.917	23.279	23.647	27.935	28.376	37.247	37.835
118	9.391	9.538	14.087	14.307	18.783	19.077	23.478	23.846	28.174	28.615	37.565	38.135
119	9.471	9.662	14.206	14.427	18.942	19.235	23.677	24.045	28.413	28.853	37.883	38.471
120	9.550	9.679	14.326	14.545	19.101	19.394	23.876	24.243	28.651	29.091	38.202	38.789

Outside diameter dimensions are nominal. Note: Bottom diameter = pitch diameter - chain roller diameter.

Drives Sprocket Information

No. of Teeth	100 1 1/4" Pitch		120 1 1/2" Pitch		140 1 3/4" Pitch		160 2" Pitch		200 2 1/2" Pitch		240 3" Pitch	
	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.
9	3.655	4.184	4.386	5.021	5.117	5.858	5.848	6.695	7.310	8.367	8.771	10.044
10	4.045	4.597	4.854	5.516	5.663	6.436	6.472	7.355	8.090	9.195	9.708	11.034
11	4.437	5.007	5.324	6.008	6.212	7.010	7.099	8.011	8.872	10.015	10.649	12.018
12	4.830	5.415	5.796	6.498	6.762	7.581	7.727	8.664	9.660	10.830	11.591	12.996
13	5.223	5.821	6.268	6.986	7.313	8.150	8.357	9.314	10.447	11.642	12.536	13.971
14	5.617	6.227	6.741	7.472	7.864	8.718	8.988	9.963	11.235	12.455	13.482	14.943
15	6.012	6.631	7.215	7.957	8.417	9.283	9.620	10.609	12.025	13.262	14.429	15.912
16	6.407	7.034	7.689	8.441	8.970	9.848	10.252	11.255	12.815	14.067	15.377	16.881
17	6.803	7.437	8.163	8.924	9.524	10.411	10.885	11.899	13.605	14.872	16.327	17.847
18	7.198	7.839	8.638	9.407	10.078	10.975	11.518	12.543	14.397	15.677	17.276	18.813
19	7.594	8.241	9.113	9.889	10.632	11.537	12.151	13.185	15.190	16.482	18.227	19.779
20	7.991	8.642	9.589	10.370	11.187	12.099	12.785	13.828	15.982	17.285	19.177	20.742
21	8.387	9.043	10.064	10.851	11.742	12.660	13.419	14.470	16.775	18.087	20.129	21.705
22	8.783	9.444	10.540	11.332	12.297	13.221	14.053	15.110	17.567	18.887	21.080	22.665
23	9.180	9.844	11.016	11.813	12.852	13.782	14.688	15.751	18.360	19.687	22.032	23.628
24	9.577	10.245	11.492	12.294	13.407	14.343	15.323	16.392	19.152	20.490	22.984	24.588
25	9.973	10.645	11.968	12.774	13.963	14.903	15.958	17.032	19.947	21.290	23.936	25.548
26	10.370	11.045	12.444	13.254	14.518	15.463	16.593	17.671	20.740	22.090	24.889	26.508
27	10.767	11.444	12.921	13.733	15.074	16.022	17.228	18.311	21.535	22.890	25.841	27.468
28	11.164	11.844	13.397	14.213	15.630	16.582	17.863	18.951	22.330	23.687	26.794	28.425
29	11.561	12.244	13.874	14.692	16.186	17.141	18.498	19.590	23.122	24.487	27.747	29.385
30	11.958	12.643	14.350	15.172	16.742	17.700	19.134	20.229	23.917	25.285	28.700	30.342
31	12.356	13.043	14.827	15.651	17.298	18.259	19.769	20.868	24.712	26.085	29.654	31.302
32	12.753	13.442	15.303	16.130	17.854	18.818	20.405	21.506	25.505	26.882	30.607	32.259
33	13.150	13.841	15.780	16.609	18.410	19.377	21.040	22.145	26.300	27.680	31.560	33.219
34	13.547	14.240	16.257	17.088	18.966	19.936	21.676	22.784	27.095	28.480	32.514	34.176
35	13.945	14.639	16.734	17.566	19.523	20.494	22.312	23.422	27.890	29.277	33.467	35.133
36	14.342	15.038	17.211	18.045	20.079	21.052	22.947	24.060	28.685	30.075	34.421	36.090
37	14.740	15.437	17.687	18.524	20.635	21.611	23.583	24.698	29.480	30.872	35.375	37.047
38	15.137	15.835	18.164	19.002	21.192	22.169	24.219	25.336	30.275	31.670	36.329	38.004
39	15.534	16.234	18.641	19.481	21.748	22.728	24.855	25.975	31.070	32.467	37.283	38.961
40	15.932	16.633	19.118	19.959	22.305	23.286	25.491	26.613	31.865	33.265	38.237	39.918
41	16.329	17.032	19.595	20.438	22.861	23.844	26.127	27.251	32.660	34.062	39.191	40.875
42	16.727	17.430	20.072	20.916	23.418	24.402	26.763	27.888	33.455	34.860	40.145	41.832
43	17.124	17.829	20.549	21.394	23.974	24.960	27.399	28.526	34.250	35.657	41.099	42.789
44	17.522	18.227	21.026	21.873	24.531	25.518	28.035	29.164	35.045	36.455	42.053	43.746
45	17.919	18.626	21.503	22.351	25.087	26.076	28.671	29.802	35.840	37.252	43.007	44.703
46	18.317	19.024	21.980	22.829	25.644	26.634	29.307	30.439	36.635	38.047	43.961	45.657
47	18.715	19.423	22.458	23.308	26.201	27.192	29.943	31.077	37.430	38.845	44.915	46.614
48	19.112	19.821	22.935	23.786	26.757	27.750	30.580	31.714	38.225	39.642	45.869	47.571
49	19.510	20.219	23.412	24.264	27.314	28.308	31.216	32.352	39.020	40.440	46.824	48.528
50	19.908	20.618	23.889	24.742	27.871	28.865	31.852	32.989	39.815	41.237	47.778	49.485
51	20.305	21.017	24.366	25.220	28.427	29.423	32.488	33.626	40.610	42.032	48.732	50.439
52	20.703	21.415	24.843	25.698	28.984	29.980	33.124	34.263	41.405	42.830	49.687	51.396
53	21.100	21.813	25.320	26.176	29.541	30.538	33.761	34.901	42.200	43.627	50.641	52.353
54	21.498	22.212	25.798	26.654	30.097	31.096	34.397	35.539	42.996	44.422	51.595	53.307
55	21.896	22.610	26.275	27.132	30.654	31.654	35.033	36.176	43.792	45.220	52.550	54.264
56	22.293	23.008	26.752	27.610	31.211	32.211	35.669	36.813	44.587	46.015	53.504	55.221
57	22.691	23.407	27.229	28.088	31.768	32.769	36.306	37.451	45.382	46.812	54.458	56.175
58	23.089	23.805	27.707	28.566	32.324	33.327	36.942	38.088	46.177	47.610	55.413	57.132
59	23.486	24.203	28.184	29.044	32.881	33.885	37.578	38.725	46.972	48.407	56.368	58.089
60	23.884	24.601	28.661	29.522	33.438	34.442	38.215	39.362	47.767	49.202	57.322	59.043
61	24.282	25.000	29.138	30.000	33.995	35.000	38.851	39.999	48.565	50.000	58.277	60.000
62	24.680	25.397	29.616	30.477	34.551	35.557	39.487	40.636	49.360	50.795	59.231	60.954
63	25.077	25.796	30.093	30.955	35.108	36.114	40.124	41.274	50.155	51.592	60.185	61.911

Outside diameter dimensions are nominal. Note: Bottom diameter = pitch diameter - chain roller diameter.

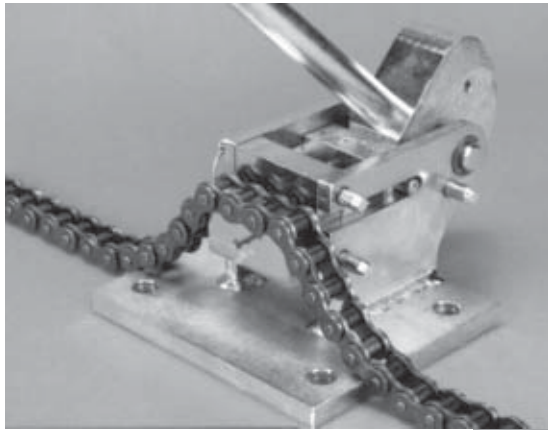
Drives Sprocket Information

No. of Teeth	100 1 1/4" Pitch		120 1 1/2" Pitch		140 1 3/4" Pitch		160 2" Pitch		200 2 1/2" Pitch		240 3" Pitch	
	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.	Pitch Dia.	Outside Dia.
64	25.475	26.194	30.570	31.433	35.665	36.672	40.760	41.911	50.950	52.387	61.140	62.868
65	25.873	26.593	31.047	31.911	36.222	37.229	41.396	42.548	51.745	53.185	62.095	63.822
66	26.271	26.991	31.525	32.389	36.779	37.787	42.033	43.185	52.540	53.982	63.049	64.779
67	26.668	27.389	32.002	32.867	37.336	38.345	42.669	43.822	53.337	54.777	64.004	65.733
68	27.066	27.787	32.479	33.345	37.892	38.902	43.306	44.459	54.132	55.575	64.958	66.690
69	27.464	28.185	32.957	33.822	38.449	39.459	43.942	45.096	54.927	56.370	65.913	67.644
70	27.862	28.584	33.434	34.301	39.006	40.017	44.578	45.734	55.722	57.167	66.868	68.601
71	28.259	28.981	33.911	34.778	39.563	40.574	45.215	46.370	56.517	57.962	67.822	69.555
72	28.657	29.380	34.388	35.256	40.120	41.132	45.851	47.008	57.315	58.760	68.777	70.512
73	29.055	29.778	34.866	35.733	40.677	41.689	46.488	47.644	58.110	59.555	69.731	71.466
74	29.453	30.176	35.343	36.212	41.234	42.247	47.124	48.282	58.905	60.352	70.686	72.423
75	29.850	30.574	35.820	36.689	41.790	42.803	47.760	48.918	59.700	61.147	71.641	73.377
76	30.248	30.973	36.298	37.167	42.347	43.362	48.397	49.556	60.495	61.945	72.595	74.334
77	30.646	31.370	36.775	37.644	42.904	43.918	48.933	50.192	61.292	62.741	73.550	75.288
78	31.044	31.769	37.252	38.123	43.461	44.476	49.670	50.830	62.087	63.537	74.505	76.245
79	31.441	32.166	37.730	38.600	44.018	45.033	50.306	51.466	62.882	64.332	75.459	77.199
80	31.839	32.565	38.207	39.078	44.575	45.591	50.943	52.104	63.677	65.130	76.414	78.156
81	32.237	32.963	38.684	39.555	45.132	46.148	51.579	52.740	64.475	65.925	77.369	79.110
82	32.635	33.361	39.162	40.034	45.689	46.706	52.216	53.378	65.270	66.722	78.323	80.067
83	33.033	33.759	39.639	40.511	46.246	47.262	52.852	54.014	66.065	67.517	79.278	81.021
84	33.430	34.158	40.116	40.989	46.803	47.821	53.489	54.652	66.860	68.315	80.233	81.978
85	33.828	34.555	40.594	41.466	47.359	48.377	54.125	55.288	67.657	69.110	81.188	82.932
86	34.226	34.953	41.071	41.943	47.916	48.934	54.761	55.924	68.452	69.905	82.142	83.886
87	34.624	35.351	41.548	42.422	48.473	49.492	55.398	55.562	69.247	70.702	83.097	84.843
88	35.022	35.749	42.026	42.899	49.030	50.048	56.034	57.198	70.042	71.497	84.052	85.797
89	35.419	36.148	42.503	43.377	49.587	50.607	56.671	57.836	70.837	72.295	85.006	86.754
90	35.817	36.545	42.981	43.854	50.144	51.163	57.307	58.472	71.635	73.090	85.961	87.708
91	36.215	36.943	43.458	44.331	50.701	51.720	57.944	59.108	72.430	73.885	86.916	88.665
92	36.613	37.341	43.935	44.810	51.258	52.278	58.580	59.746	73.225	74.682	87.871	89.619
93	37.011	37.739	44.413	45.287	51.814	52.834	59.216	60.382	74.020	75.477	88.825	90.576
94	37.408	38.138	44.890	45.765	52.371	53.393	59.853	61.020	74.815	76.275	89.780	91.530
95	37.806	38.535	45.367	46.242	52.928	53.949	60.489	61.656	75.612	77.070	90.735	92.484
96	38.204	38.933	45.845	46.719	53.485	54.506	61.126	62.292	76.407	77.865	91.690	93.441
97	38.602	39.331	46.322	47.198	54.042	55.064	61.762	62.930	77.202	78.662	92.645	94.395
98	39.000	39.729	46.800	47.675	54.599	55.620	62.399	63.566	77.997	79.457	93.599	95.352
99	39.397	40.128	47.277	48.153	55.156	56.179	63.035	64.204	78.795	80.255	94.554	96.306
100	39.795	40.525	47.754	48.630	55.713	56.735	63.672	64.840	79.590	81.050	95.509	97.263
101	40.193	40.924	48.232	49.109	56.270	57.294	64.309	65.478	80.385	81.847	96.464	98.217
102	40.591	41.322	48.709	49.586	56.827	57.851	64.945	66.115	81.182	82.642	97.418	99.171
103	40.989	41.720	49.187	50.064	57.384	58.408	65.582	66.752	81.977	83.440	98.373	100.128
104	41.387	42.118	49.664	50.542	57.941	58.966	66.218	67.389	82.772	84.235	99.328	101.082
105	41.784	42.517	50.141	51.020	58.498	59.523	66.855	68.027	83.567	85.030	100.283	102.039
106	42.182	42.915	50.619	51.498	59.055	60.081	67.492	68.664	84.365	85.827	101.238	102.993
107	42.580	43.312	51.096	51.975	59.612	60.637	68.128	69.299	85.160	86.622	102.192	103.947
108	42.978	43.710	51.574	52.452	60.169	61.194	68.765	69.936	85.955	87.420	103.147	104.904
109	43.376	44.108	52.051	52.930	60.726	61.751	69.401	70.573	86.752	88.215	104.102	105.858
110	43.774	44.506	52.528	53.408	61.283	62.309	70.038	71.210	87.547	89.012	105.056	106.815
111	44.171	44.905	53.006	53.886	61.840	62.867	70.674	71.848	88.342	89.807	106.011	107.769
112	44.569	45.304	53.483	54.364	62.397	63.425	71.311	72.486	89.137	90.602	106.967	108.723
113	44.967	45.701	53.960	54.841	62.954	63.982	71.948	73.122	89.935	91.400	107.921	109.680
114	45.365	46.099	54.438	55.319	63.511	64.539	72.584	73.759	90.730	92.195	108.876	110.634
115	45.763	46.493	54.915	55.792	64.068	65.090	73.220	74.388	91.525	92.992	109.831	111.591
116	46.161	46.893	55.393	56.272	64.625	65.651	73.857	75.030	92.322	93.787	110.786	112.545
117	46.558	47.293	55.870	56.752	65.182	66.210	74.494	75.669	93.117	94.582	111.740	113.499
118	46.956	47.691	56.348	57.230	65.739	66.768	75.130	76.306	93.912	95.380	112.695	114.456
119	47.354	48.089	56.825	57.707	66.296	67.325	75.767	76.943	94.707	96.175	113.650	115.410
120	47.752	48.486	57.302	58.183	66.853	67.880	76.403	77.577	95.502	96.970	114.605	116.364

Outside diameter dimensions are nominal. Note: Bottom diameter = pitch diameter - chain roller diameter.

Made in U.S.A.

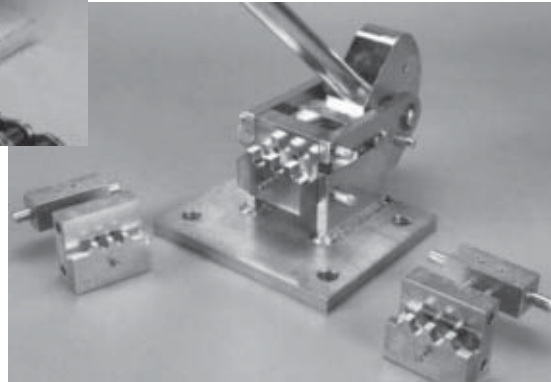
EZ Breaker®



Cut your chain breaking jobs down to size

EZ BREAKER is a compact, easy to use tool for cutting roller chain. This simple, rugged piece of equipment will stand up to the abuses of the shop, farm, or industrial environment.

EZ BREAKER will cut ANSI roller chain sizes 35 through 100H, 40-2 through 80-2, 2040 through 2060H, and 550 through 557 with a simple pull of the handle. No more grinding off pin heads! No more hammers and punches! No more ruined chain!



Each die set will cut only one size of chain. Die sets are sold separately from the base unit.

EZ BREAKER uses powerful cam-action to push both chain pins through the link plates with an easy pull of the handle. Breaking different chain sizes is EZ!

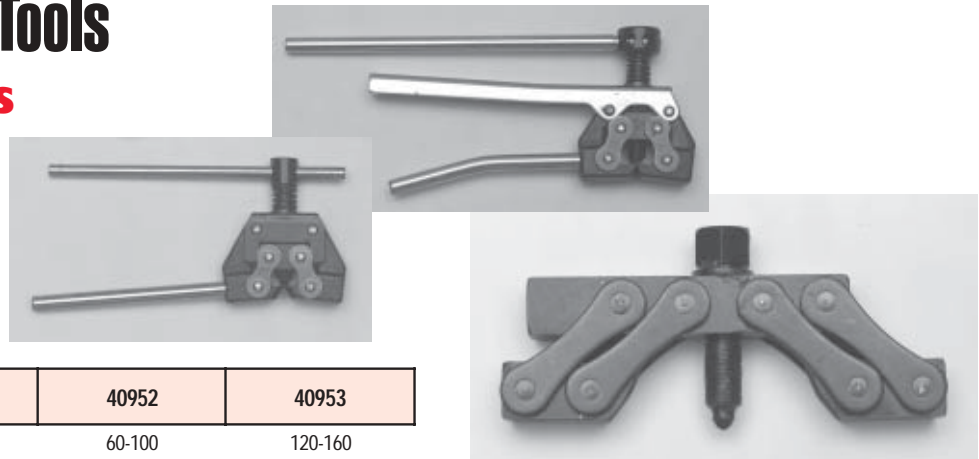
Precision Die Sets for each chain size are easily interchangeable. Changing from one Die Set to another can

be accomplished in a few seconds! The time consuming, tedious job of breaking chain is now accomplished with a single pull of the handle. EZ BREAKER links price and Value!

EZ BREAKER has interchangeable Die Sets that make it EZ to switch from one size chain to another!

Available Chain Tools

Chain Breakers



Part No.	1254	40952	40953
Chain No.	35-50	60-100	120-160

Chain Pullers

Part No.	36877
Chain No.	40-60



Replacement tips and screw assemblies available.

EZ Chain Wear Gauge®



CAUTION: Follow all standard safety measures while using the EZ Chain Wear Gauge. (i.e. - Lock-out/Tag-out, Power Off)

■ Accurately checks up to 9 sizes of American Standard roller chains and up to 7 sizes of British Standard roller chains. Quick and easy to use, go or no-go gauge system gives immediate feedback. Gauge will fit into limited spaces and quickly lets the user know if the chain is worn out.

Construction

- Precision ground, pre-hardened tool steel
- Convenient grip handle with pre-drilled holes for hanging, to keep you organized

Part Numbers

Available in three chain gauge sizes:

- #35 chain - #100 chain = Part #60637
- #06B chain - #24B chain = Part #61904
(Actual gauge dimensions: 8.75" L x 0.625" W x 0.188" H)
- #80 chain - #240 chain = Part #60638
(Actual gauge dimensions: 18" L x 1.5" W x 0.250" H)



EZ Chain Rack®

■ Using the EZ CHAIN RACK® is simple. Learn how, in three EZ steps, you can make it EZ to store and cut Drives brand precision roller chain. The EZ CHAIN RACK® is designed to be versatile, allowing four positions to hold fifty-foot reels of chain. It is as easy as 1-2-3.

Construction

- High quality welded construction
- Stand alone base
- 31" x 31" x 51" (rough dimensions)

Center Shafts

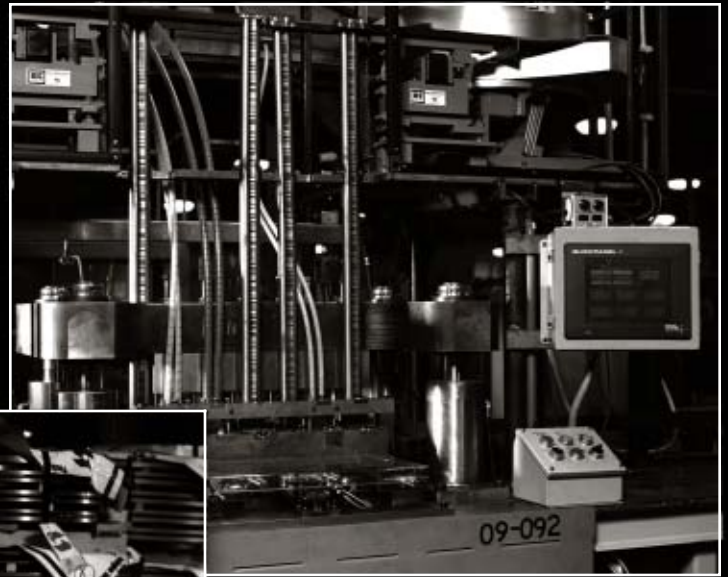
- Individually clutched to prevent chain from uncoiling
- Four stations
- Will hold two fifty-foot reels of #40 or #50 chain per station
- OR holds one fifty-foot reel of #60, #60H or #80 chain per station

Gear Box

- Allows EZ-Switch from size to size
- Rotates in both directions

Section 5

General Information



manufacturer

American National Standards

Chains, attachments, and sprockets for power transmission and conveying.

Precision Power Transmission Roller Chains, Attachments, and Sprockets	B29.1M-1993
Inverted Tooth (Silent) Chains and Sprockets	B29.2M-1982(R1994)
Double-Pitch Power Transmission Roller Chains and Sprockets	B29.3M-1994
Double-Pitch Conveyor Roller Chains, Attachments, and Sprockets	B29.4M-1994
Leaf Chains, Clevises, and Sheaves	B29.8M-1993
Heavy Duty Offset Sidebar Power Transmission Roller Chains and Sprocket Teeth	B29.10M-1994
Combination Chains, Attachments, and Sprocket Teeth	B29.11M-1994
Steel Bushed Rollerless Chains, Attachments, and Sprocket Teeth	B29.12M-1983(R1988)
"H" Type Mill Chains, Attachments, and Sprocket Teeth	B29.14M-1996
Steel Roller Type Conveyor Chains, Attachments, and Sprocket Teeth	B29.15M-1995
Welded Steel Type Mill Chains, Attachments, and Sprocket Teeth	B29.16M-1995
Hinge Type Flat Top Conveyor Chains and Sprocket Teeth	B29.17M-1983(R1995)
Welded Steel Type Drag Chains, Attachments, and Sprocket Teeth	B29.18M-1994
Drop Forged Rivetless Chains, Sprocket Teeth Drive Chain/ Drive Dogs	B29.19M-1996
Flexible Chain Couplings	B29.23M-1985(R1995)
Roller Load Chains for Overhead Hoists	B29.24M-1995
Open Barrel Steel Pintle Type Conveyor Chains, Attachments, and Sprockets	B29.25M-1994
700 Class Welded Steel and Cast Chains, Attachments, and Sprockets for Water and Sewage Treatment Plants	B29.21M-1996
Agricultural, Detachable, and Pintle Chains, Attachments and Sprockets	B29.300-1998

Member of



AMERICAN CHAIN ASSOCIATION

1-800-435-0782



Glossary

A

Angle of Flex: The total angle of chain joint articulation as a chain enters or leaves a sprocket or wheel. The angle is equal to 360 degrees divided by the number of teeth in the sprocket.

ANSI: The abbreviation for “American National Standards Institute”, the organization who sets the standards by which chains should be manufactured.

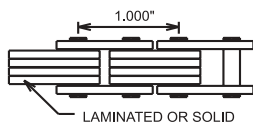
Articulation (v, “articulate”): The action of a chain joint flexing from straight, to an angle and back to straight as the joint enters and leaves the sprocket or other path, causing it to flex.



B

Backlash: Movement (if any) of the chain along the pitch line of the sprocket when the direction of chain travel is reversed.

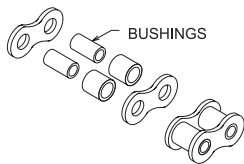
Block Chain: An alternative name used by some manufacturers for bar-link chain or for certain styles of leaf chain.



Bottom Diameter: The diameter of a circle measured between one toothgap and the opposite gap for a sprocket with even number of teeth.



Bushing: Internal component in a roller chain which the pin articulates around and the roller rotates on.



C

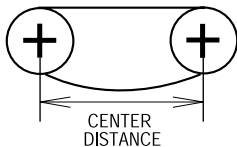
Cable Chain: See Leaf Chain.

Caliper Diameter: The distance measured between one tooth gap and the nearest opposite gap for a sprocket with an odd number of teeth.



Caterpillar Drive Chain: Chain with pushers which is used to drive Drop Forged chain.

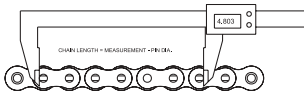
Center Distance: The distance between the centers of the shafts of a chain drive.



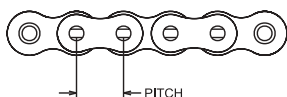
Chain Casing: An oil-retaining safety enclosure around a chain drive.

Chain Guard: An open guard of sheet metal, expanded metal, or similar construction around a chain drive.

Chain Length: The actual chain length between the joint centers at each end of a taut chain strand. This distance is usually expressed in feet and/or inches or in pitches.



Chain Pitch (Nominal): The average distance between the joints (except for staggered pitch chains) of an assembled chain. In some cases, “joint”, as defined here, will be a center of flexure not specifically identified with individual parts of the chain.



Chain Pitch Elongation or Chain Elongation: Increase in measured length due to wear or excessive load. Normally expressed in percent of length.

Chain Take-up: A mechanical device which takes-up chain slack. This could be an idler sprocket or similar device mounted on an adjustable bracket to adjust the slack in a chain installation.

Chain Width: Defined somewhat differently for various chains, but usually the inside width of the chain, between roller link plates.

Chordal Effect (Chordal Action): The effect produced by the chain joint centers being forced to follow arcs instead of chords of the sprocket pitch circle.

Clevis Connector: A connector which is used to connect a strand of leaf chain that has an inner link end to a clevis block that has an inner link configuration.

Clevis Pin: A pin which is used to connect a strand of leaf chain that has an inner link end to a clevis block that has an outer link configuration. The clevis manufacturer should supply this part so that one can be assured that it will be compatible with the clevis block.

Compressive Stresses: Stresses that act to compress a material and place the material in compression.

Connecting Link: For a Roller Chain, a pin link made with one link plate easily detachable to facilitate connecting or disconnecting the chain.

Cotter Key: The retaining pin for a connecting link.

Creep: The flow of plastic deformation of metals held for long periods of time at stresses lower than the normal yield strength. The effect is particularly important if the temperature of stressing is in the vicinity of the recrystallization temperature of the metal.

Crescent Chain: Standard chain with a crescent shape top plate.

Curve Chain: Chain designed to bend around curves in the horizontal position.

Cycle: Change in load level as a chain completes a cycle around a system. Usually the change is from negligible load to a load peak on a regular basis as the chain undergoes a complete cycle of operation.

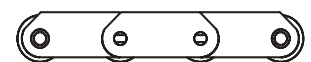
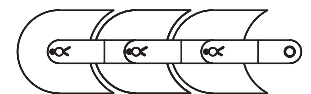
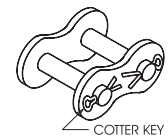
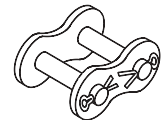
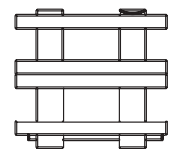
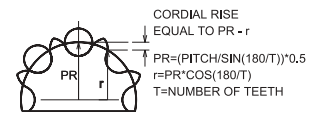
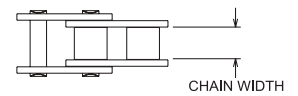
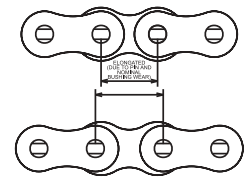
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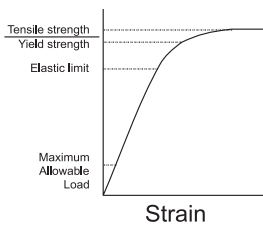
Deep Link Conveyor Chain: Chain design with a carrier roller which protrudes down below the side bar but does not protrude above the side bar.

Design Horsepower: The specified horsepower for a chain drive multiplied by a service factor. It is the value used to select the chain size for the drive.

Double-Pitch Roller Chain: A Roller Chain having double the pitch of a standard Roller Chain, but otherwise having standard pins and bushings and standard or over-size rollers.

Duplex Roller Chain: Double strand chain (80-2)
(Double Strand)



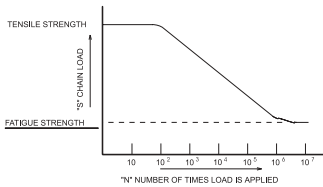
**E**

Elastic Limit: The highest load a part (i.e., chain strand) can sustain without incurring a permanent change in length.

Embrittlement: Reduction in ductility of materials due to exposure to certain environments or temperatures.

F

Fatigue Strength: Fatigue is the phenomenon leading to fracture under repeated fluctuating stresses having a maximum value less than the yield strength of material. Fatigue strength is the maximum stress that can be sustained for a specified number of cycles ($10E7$) without failure.

**G**

Galling: Developing a condition on the live bearing surface of a pin or bushing of a chain where excessive friction between high spots results in localized welding with subsequent tearing and a further roughening of the contact surfaces.

Gap Tooth Sprocket: An even number tooth sprocket designed with clearance for a thru rod or saddle. D-5 or GKI attachment chains are used on this style sprocket.

**H**

Hardness: Chain hardness is typically measured in Vickers, Brinell or Rockwell.

Hollow Pin Roller Chain: Chain manufactured using a bushing as the pin holding the pin link plates. This chain is generally used in pairs with the two strands running parallel and a thru rod tying them together.

Hoist Chain: Chain manufactured strictly for a lifting application.

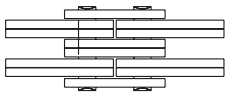
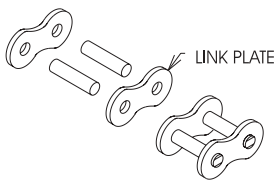
J

Joining Link: See Connecting Link.

L

Length Tolerance: The length new chain must be within when measured under a given load.

Link Plate: One of the side plates of either a pin link or a roller link in a Roller Chain.



Leaf Chain: Is a chain manufactured from standard chain parts consisting of interlacing side plates and riveted pins. These chains are manufactured in accordance with ANSI standard B29.8. This chain is typically used in lifting and/or tensioning applications.

Load Classification: A classification of drive loads based on the intensity of shock that is imposed on the drive.

Loading Frequency (Time): Loading frequency is the number of times per unit of time that the chain is exposed to a complete cycle of loading. A complete loading cycle normally occurs when a particular link moves completely around the system and returns to its starting point.

M

Master Link: See Connecting Link.

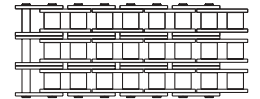
Matching & Tagging: 2 or more strands are to vary within a given tolerance. Chains are to be measured under a specified measuring load.

Maximum Allowable Load: A maximum tension a chain may be safely subjected to. This value should never be exceeded by actual design load factored by speed, temperature and dynamic adjustments as applicable.

Measuring Load: The specified standard load under which a chain is to be measured for length. (1% of tensile strength)

Multiple Strand Chain: A Roller Chain (or other chain) made up of two or more strands assembled as a single structure on pins extending through the entire assembly.

Multiple Strand Factor: A factor by which the horsepower rating of a single-strand chain is multiplied to obtain the horsepower capacity of a chain with two or more strands.



NUMBER OF ROLLER CHAIN STRANDS	MULTIPLE STRAND FACTOR
2	1.7
3	2.5
4	3.3
5	3.9
6	4.6

O

Offset Link: A special offset link, as termed in Roller Chain descriptions, made for use in straight link chain when an uneven number of links in the total strand is required.

Offset Section: For a Roller Chain, a factory-assembled section, made up of a roller link and an offset link. Offset sections are used to connect strands of chain having an odd number of pitches.

Overchaining: A drive is overchained when it incorporates a chain of substantially higher rating than that indicated by normal selection procedures to have been necessary.

P

Pin Oven Chain: A chain used to convey cans through a drying oven. Typically 60 chain with an extended pin every 7th pitch is used.

Pitch: See Chain Pitch; Pitch Diameter.

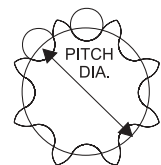
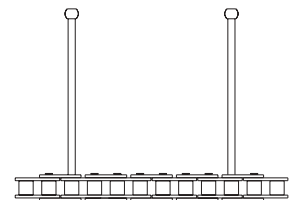
Pitch Diameter: The diameter of the sprocket pitch circle.

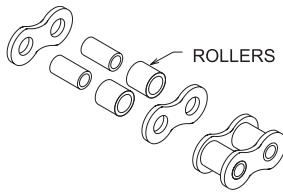
Press Fit: Standard designed interference fit between side plate pitch hole and pin/bushing.

Prestressing Dynamic: Dynamic prestressing is the process of subjecting chain to a load as it is articulated or wrapped around multiple sprockets. Dynamic prestressing is done to seat the chain components and to reduce initial (break in) elongation in chain drives.

Prestressing Static: Static prestressing is the process of subjecting chain to a load at a minimum of 20% of the ultimate strength. The chain is pulled in a straight line. Static is done to seat the chain components and to minimize the variation in strand lengths of attachment chain used in pairs.

Pulsation: Fluctuations of a cyclic nature in load or speed. (see cordal action)





R

Rollers: The component on the chain which engages the sprocket. The roller allows the chain to roll into the sprocket. The roller rotates on the bushing.

Root Diameter: The theoretical bottom diameter of a sprocket, equal to the pitch diameter minus the chain roller or barrel diameter. (see Bottom Diameter)

Run-in: The initial period of operation of any mechanism, during which the component parts seat themselves.

S

Scoring: Marring or scratching of pin or bushing caused by metallic debris being picked up in the contact surfaces on one of the parts.

Seating Curve: A specific term for the pocket curve of a Roller Chain sprocket.

Seizing: Stiffening (or “freezing”) of a chain joint as a result of roughness and high friction caused by galling. This occurs between the pin & bushing and/or link plates.

Semi-Press Fit (Tap Fit): Min. interference fit between side plate and pin.

Service Factor: A factor by which the specified horsepower or working load of a chain is multiplied to compensate for operating conditions.

Sheave: A grooved wheel or pulley. Typically used with leaf chain to change its direction.

Shot Peening: Process which is used on the side plates to improve fatigue strength.

Sidebar: Another name for Link Plate.

Side Bow Chain: See Curve Chain.

Simplex Roller Chain: Single strand chain (80).
(Single Strand)

Sinter Bushing: Bushing made from powdered metal and then oil impregnated.

Skip Tooth: A sprocket designed such that the chain engages only every other tooth on the sprocket. Typically used with staggered pitch chain.

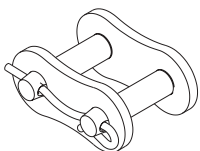
Slip Fit: No interference fit between side plate and pin.

Slip Stick : Slip stick occurs when the motor drives continually, sprocket rotates, but the chain moves ahead by stopping and starting at intervals. This could be caused by the following:

- a) Fluctuations in the coefficient of friction between bushing and rollers (i.e. rotating, sticking, rotating, sticking)
- b) Insufficient chain hardness on conveyor lines
- c) Insufficient drive equipment or frame hardness

Special Hook Cotter: The retaining pin for cotter-style chain and connecting links.

Staggered Pitch Chain: A chain with alternate links of differing pitches, one usually being considerably greater than the other.



T

Tensile Strength: See Ultimate Strength

Tension Linkage: A chain application primarily transmitting motion back and forth or up and down at low speeds. Typical example is a forklift reciprocating system.

T-head/T-pin: The retaining pin for cotter-style chain and connecting links.

Tight Joint: See stiff joint

Top Roller Chain: Chain which has a roller on top to allow for accumulation of product on top of chain while the chain is moving.

Torque: Torsional force, expressed in inch-pounds in chain calculations, which is the product of chain pull and one-half the sprocket pitch diameter.

Transverse Clearance: Clearance between roller link plate and pin link plate.

Transverse Pitch: The lateral distance between the centerlines of each strand of multiple strand chain, or between the tooth profiles on a sprocket for a multiple strand chain.

Triplex Roller Chain: Triple strand chain (80-3).
(Triple Strand)

U

Ultimate Strength: The Ultimate Strength of a chain is the single maximum load that breaks the chain. Typically specified as either average or minimum.

Underchaining: A drive is underchained when it incorporates a chain of substantially lower rating than that indicated to be needed from normal selection procedures.

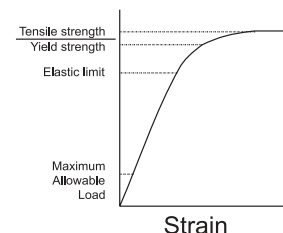
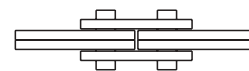
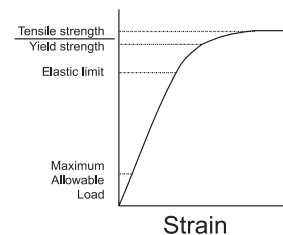
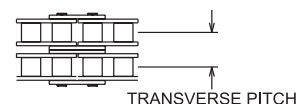
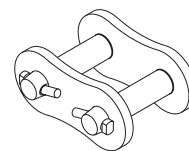
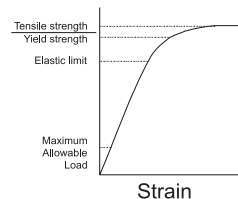
W

Working Load: An allowable recommended chain load used on conveyors, drives with nonstandard chains, or other applications of lower relative speed.

Wrench Chain: Wrench chains are leaf chains with pins extending beyond both sides of the chain. It serves as a tension linkage for holding pipe securely in pipe wrenches. The extended pins permit this chain to support a load not in line with the chain without danger of pulling the link plates off the pins. The pins are used to lock on a mechanism to accommodate various pipe sizes.

Y

Yield Strength: The elastic limit or yield strength of a chain is the load that causes permanent elongation of the chain.



DRIVES, LLC STANDARD TERMS AND CONDITIONS OF SALE

ANY PURCHASE ORDER PURSUANT TO ANY QUOTATION SHALL NOT RESULT IN A CONTRACT UNTIL IT IS APPROVED AND ACCEPTED BY THE FULTON, ILLINOIS, OFFICE OF DRIVES, LLC ("SELLER").

1. CONDITIONS OF SALE

All orders shall be subject to these terms and conditions of sale; no terms and conditions may be added to, modified, superseded or otherwise altered except by a written instrument signed by an authorized executive of Seller. Failure of Seller to object to any terms or conditions that may be contained in any acknowledgment, invoice or other form from Buyer shall not be construed as a waiver of these conditions nor an acceptance of any such provision.

2. TAXES

The amount of the present or future sales, revenue, excise, occupation, use or other applicable taxes shall be added to the purchase price and shall be paid or reimbursed by Buyer.

3. DELIVERY

Delivery terms are F.O.B., Seller's factory or warehouse unless otherwise specifically provided in Seller's acknowledgment. Buyer shall assume all risk of loss or damage upon delivery to the carrier at the point of shipment. Any reference by Seller to a date of delivery shall be deemed to refer to the approximate date of shipment from factory and is a careful estimate of the approximate date of delivery, not a guaranty of a particular day of delivery. Seller shall not be liable for any delay in delivery. Without limiting the generality of the preceding sentence, Seller shall not be liable for failure to deliver the goods specified where such failure to deliver is due to contingencies beyond Seller's control, including strikes, lockouts and differences with workmen, when these events affect either Seller or its suppliers of material, or individuals or corporations upon whom Seller is dependent for transportation of supplies and delivery of its manufactured goods, and also including war, insurrection, embargoes, fire, flood, injuries to works when the goods or raw materials are manufactured, government regulations of fuel, transportation, labor or production, and inability for whatever reason to secure necessary labor, materials or supplies. In case of curtailment of production for any of the above reasons, Seller reserves the right to deliver pro rata the goods which it produces to all customers from whom it may have orders, and to invoice Buyer for partial shipment accordingly, and Buyer shall make payment on the purchase price in amounts as so invoiced. When a shipment is deferred at Buyer's request beyond the date of completion, the order will be subject to invoicing, payment and storage charges from date of completion.

4. TITLE

Title to all products sold by Seller to Buyer and all replacements, substitutions, repairs and additions thereto, and all proceeds of the foregoing, shall remain in Seller until full payment of the purchase price and all other amounts due Seller hereunder has been made. Buyer shall indemnify and hold Seller harmless from and against all claims of parties claiming under or through Buyer with respect to the products.

5. CREDIT APPROVAL

Shipments, deliveries and performance of work shall at all times be subject to the requirements of the Credit Department of Seller, including the requirement that Buyer may be required to pay part or all of the purchase price in advance.

6. TERMS OF PAYMENT

Subject to the provisions of "Credit Approval" above, terms of payment shall be 1% 10, NET 30 days and shall be effective from date of invoice.

7. QUOTATIONS

Prices stated on Seller's most recent published price list are in effect on the date listed and are subject to change by Seller at any time. Prices are for Seller's standard packaging specifications. All written quotations automatically expire thirty (30) calendar days from the date issued and are subject to termination by notice within that period. Verbal quotations expire the same day they are made. Quotations shall only be deemed to be binding if they specifically identify product or component part and list the actual quantities involved. All stenographic and clerical errors are subject to correction.

8. SHIPPING WEIGHTS AND DIMENSIONS

Published weights are careful estimates but are not guaranteed.

9. CANCELLATION

Orders accepted by Seller are subject to cancellation by Buyer only upon the consent of Seller. Upon such cancellation and consent, Seller shall cease work and hold for Buyer all completed and partially completed articles and work in process and Buyer shall pay Seller for all work and materials that have been committed and/or identified to the order plus a cancellation charge as prescribed by Seller, in addition to Seller's reasonably projected profit on the entire contract. Changes in design or construction requested by Buyer are Buyer's expense.

10. INSTALLATION

Seller's products shall be installed by Buyer at the expense of Buyer.

11. INSURANCE

After delivery to the carrier, Buyer assumes the risk of all loss or damage resulting from any cause. Buyer shall provide and maintain insurance protecting each party against loss or damage.

12. CLAIMS

Seller will not consider claims for shortage or error unless made promptly upon receipt of products.

13. RETURNED GOODS

No goods will be accepted for return without prior approval. Freight must be prepaid on all returned goods. A minimum 25% handling and restocking charge will be applied to all authorized returns. Special products or made-to-order products are not returnable.

14. MINIMUM ORDER REQUIREMENTS

A minimum charge of \$100 net per order applies to all orders. Minimum run quantity for made-to-order assemblies is 250 feet per order or a setup fee of \$50 may apply.

15. ILLINOIS LAW

The validity, interpretation and performance of any agreement shall be governed by the laws of the State of Illinois (including without limitation the Uniform Commercial Code). Any agreement shall be deemed to have been made in the City of Fulton, Whiteside County, Illinois, and the parties shall submit to the jurisdiction of the Circuit Court of the Fourteenth Judicial Circuit, Whiteside County, Illinois, for the purpose of adjudication of all their respective rights and liabilities.

16. DEFAULT

In the case of default or breach of Buyer in the performance of any or all of the provisions of any agreement, Seller may cancel any outstanding order(s) from Buyer, and declare all obligations immediately due and payable, and Buyer shall, in addition, be liable for Seller's expenses incurred in exercising any remedies available to it, including reasonable attorney's fees and legal expenses. All unpaid obligations shall bear interest at the highest lawful rate from the date they become due and payable.

17. WARRANTY

Seller warrants that the products of Seller's manufacture which are delivered by Seller hereunder shall be free from defects in material and workmanship during the warranty period. The warranty period for all such products is one year, which shall begin from date of shipment. If during the warranty period any such products are proven to be defective upon Seller's inspection, Seller's sole obligation is to repair any such products, or, at Seller's option, to supply a replacement product or component part, F.O.B., Seller's factory or warehouse upon receipt of the defective product or component part at Seller's factory, transportation charges prepaid. Seller shall not be responsible for charges for correcting defects, nor will Seller accept returns of allegedly defective products unless Seller is first notified in writing and the return is authorized by Seller in writing. Seller shall be released from all obligations under this warranty as to any products which have been subject to neglect, accident, misuse or improper operation or care, and any products on which repairs or modifications are made by persons other than Seller.

THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED BY SELLER AND EXCLUDED FROM ANY AGREEMENT.

18. LIMIT OF LIABILITY

In no event shall Seller be responsible or liable for penalty clauses of any description, or for indemnification of Buyer or others for costs, damages or expenses whether based in tort or contract, or for indirect or consequential damages under any circumstances. THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE. SELLER EXPRESSLY EXCLUDES, DENIES AND DISCLAIMS ANY LIABILITY FOR ANY OTHER WARRANTIES OTHER THAN THOSE SPECIFIED IN SECTION 17 ABOVE, INCLUDING BUT NOT LIMITED TO ALL CLAIMS FOR BREACH OF CONTRACT OR WARRANTY, NEGLIGENCE OR FOR ANY LOSS OR DAMAGE ARISING OUT OF, CONNECTED WITH, OR RESULTING DIRECTLY OR INDIRECTLY FROM THE CONTRACT BETWEEN BUYER AND SELLER OR ITS SUBJECT MATTER.

19. NOTICE OF BREACH

Buyer must give Seller written notice of each and every alleged breach of any of the warranties provided herein no later than sixty (60) days after Buyer has discovered or, by the exercise of reasonable diligence, should have discovered, such alleged breach. Failure to give timely written notice of an alleged breach of warranty as provided herein shall be deemed a complete waiver by Buyer of any claim for any such breach. Any written notice of breach shall be deemed to be notice only with respect to the product or component part addressed by the notice and only with respect to the alleged problem specified therein.

20. TIME TO BRING SUIT

Any action against Seller arising out of, in connection with, or resulting directly or indirectly from this Agreement or the products sold pursuant hereto must be filed within one year after the date of delivery to Buyer's F.O.B. point, regardless of Buyer's knowledge or lack of knowledge of the alleged breach; failure to bring such action within said period shall be deemed to constitute a waiver by Buyer of any such claim.

21. NON-ASSIGNABLE

Neither this Agreement nor any part hereof is assignable by Buyer without the prior written consent of Seller.

22. ENTIRE AGREEMENT

This Agreement and Seller's price lists (as revised from time to time by Seller) shall constitute the entire Agreement between Buyer and Seller irrespective of inconsistent or additional terms and conditions in Buyer's purchase orders or other documents submitted to Seller, whether or not the same have been executed or otherwise accepted by Seller. Except as specifically set forth herein all other agreements, proposals and understandings with respect to the subject matter hereof are merged herein, and there are no promises, terms, conditions or obligations with respect thereto other than those contained herein and in Seller's currently published price lists (as revised from time to time by Seller). Any and all representations, promises, warranties or statements by Seller's agents that differ in any way from the terms and conditions of this Agreement shall be of no force or effect.

Drives

Since 1959, Drives has become a leading manufacturer of ANSI Precision Roller Chain, Pintle Chain, Agricultural Conveyor Chain, Engineering Class Chain and Auger products. The company's markets include North and South America, Europe, Asia, Africa and Australia.

Today Drives employs approximately 400 team members with manufacturing facilities exceeding 370,000 sq. ft. Our company's philosophy is shared below and expresses our objectives.

Company Philosophy

Each employee in respecting his own dignity, must respect the rights and privileges of his fellow employees, including the necessity of Drives to achieve it's fair and reasonable objectives.

Citizenship

We will conduct our business in a professional and ethical manner with high integrity.

Golden Rule

We believe we must treat others as we would like to be treated. This applies to employees, shareholders, customers, and suppliers.

People

People are our most important asset. We believe that by building our people we will build our company. We will promote teamwork and active participation in decision-making.

Be the Best

We believe we must strive each day to be the best in quality and service. Keep it simple. Strive each day to bring "what is" closer to "what it should be".

Profit

Profit is a measurement of accomplishment.

Communication

We believe effective communication is important to all employees, customers, and suppliers. We support the open door and open floor policy.

BE THE BEST

We believe we must strive each day to be the best in quality and service.

Keep it simple.

Strive each day to bring

"what is" closer to

"what it should be".



**American
Petroleum
Institute**

**LICENSED UNDER
SPEC 7F-0022**



ISO 9001: 2000 Registered

The American Petroleum Institute's Quality Plus program goes beyond the ordinary to the extraordinary. The API Quality Plus program confirms that Drives meets the strictest quality standards ever established.

Drives registration to API Spec Q1 combined with ISO 9001:2000 is a world class quality system. It means if you meet these requirements, you've shown you live up to the expectations of one of the most demanding industries in the world – the oil and natural gas industry.

Drives manufactures quality products without compromise.

ISO 9001: 2000 Requires a Continuous Team Effort

Productivity

PEOPLE

*People are our most
important asset.*

*We believe that by building our people
we will build our company.*

*We promote teamwork and active
participation in decision-making.*



ISO 9001

Registration #0358

Satisfaction

Drives Chain Products

Authorized Distribution Countries

Algeria • Argentina • Australia • Brazil
 Canada • Croatia • Egypt • France • Germany
 Holland • India • Italy • Malaysia • Mexico
 Morocco • Poland • Qatar • Singapore
 Spain • Sweden • Tunisia • Ukraine
 United Arab Emirates
 United Kingdom • United States
 Venezuela • Vietnam • Yemen

Sales Offices

Arlington • Birmingham • Chicago
 Dallas • Davenport • Denver
 Des Moines • Detroit • Fort Worth
 Houston • Indianapolis • Kansas City
 Los Angeles • Mexico City • Milwaukee
 Minneapolis • Mississauga • Modesto
 Montreal • Newcastle
 Philadelphia • Portland • Richmond
 Rochester • St. Louis • Salt Lake City
 Tampa • Tucson • Vancouver

Service Center Locations

Sparks, Nevada
 Crossville, Tennessee
 Denver, Colorado
 Houston, Texas
 Newcastle, UK

Fulton, Illinois

Home Office & Manufacturing
 Fulton, Illinois 61252-0350
 Phone 1-800-435-0782 • Fax 1-815-589-4420

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American Chain Association
 (ACA)

Conveyor Equipment
 Manufacturers Association
 (CEMA)

Association of Equipment
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Grain Elevator and
 Processing Society
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 Distributors Association
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