

SUGIYAMA CHAIN CO., LTD.

Since being founded in 1946 as a bicycle chain manufacturer, Sugiyama Chain has concentrated its efforts on the manufacturing of high quality roller chain. With decades of experience and continuous research in the roller chain field, we offer a complete line of roller chain. Our chain is recognized throughout the world for its quality and innovation. Sugiyama Chain obtained ISO 9001 certification in December 2000 further enhancing its quality assurance. Our mission is to provide the highest quality roller chain with strength, durability, and reliability to our customer's satisfaction. We will continue to perfect our chain under our strict quality control system. Most of the items in this catalog are available from SY's distributors all over the world, or are in stock at Service Centers.

Certificate Number : **JQA-QM5873**

Organization :

SUGIYAMA CHAIN CO.,LTD.

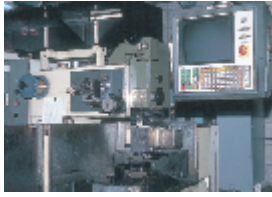


Scope of Registration :

DESIGN, DEVELOPMENT AND MANUFACTURE OF PRESSION POWER TRANSMISSION ROLLER CHAIN, LEAF CHAIN AND CONVEYOR CHAIN.



SY's advanced research and development



DIES AND OTHERS

Improved, sophisticated dies are studied and developed in our factory shop.



MODERNIZED HEAT TREATMENT EQUIPMENT

Our heat treatment equipments have been updated for severe control on heated parts.

Also, extreme attention is given to the quality control of the heat treated parts.



ADVANCED FULLY AUTOMATIC ASSEMBLY MACHINE

Our newly designed advanced automatic assembly machines provide greater uniformity and closer tolerance of the products.



QC DEPARTMENT

Your ordered chains are carefully and closely inspected at each production process by our QC-oriented specialists.



AUTOMATIC STORAGE AND HANDLING SYSTEM

Handling of many different parts and semi-finished products are effectively controlled for production.



COLD FORGING MACHINES

Main frame for SBR Solid Bushing and SBR Solid Roller are made with these machines.

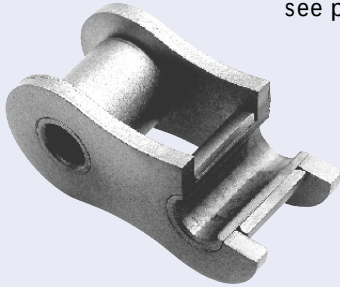


FATIGUE TEST MACHINE

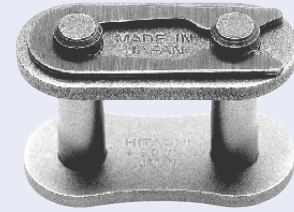
Very important for the quality evaluation for further improvement of the chain life.

SY's new products guide

Solid Bushing and Roller
see page 4~5

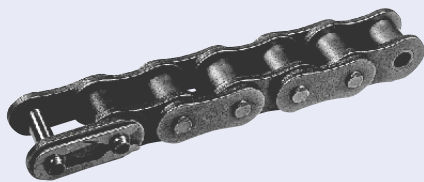


New Connecting Link
see page 4



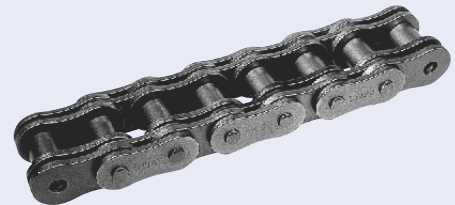
patent pending

Silver - SBR
see page 4



patent pending

Double Capacity Chain
see page 32



SSS series Stainless Steel Chain
see page 36



patent pending

Aqua - Proof Roller Chain
see page 40



Self - Lube Chain
see page 48



Maintenance Free Roller Chain
see page 56

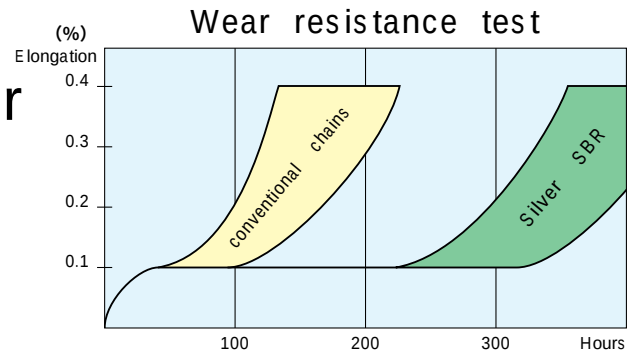


patent pending

Silver SBR®

NEW ROLLER CHAIN has up to 25%
Higher Working Loads
With big 5 point for R oller Chain

- ① Solid Bushing and R oller
- ② High Allowable Load
- ③ New Connecting Link
- ④ Long Life
- ⑤ Excellent appearance

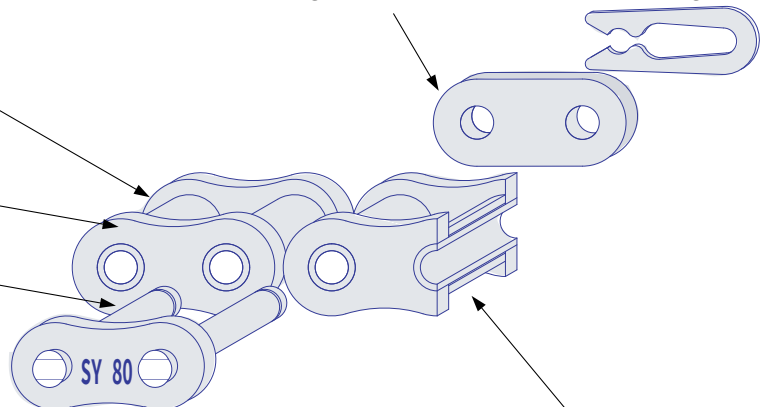


New Connecting Link

Connecting Link have the same strength as chain.

Excellent appearance by
Silver Color
Plate & Roller

High Allowable Load
Close to Super Chain By
Special Pin
(25% higher for #60 to #160)



Solid Bushing & Roller

Long Life by Bushing More than 2 time (by our test)
SY Solid Bushing assures perfect straight ID.
surface after assembly.

THE ULTIMATE ROLLER CHAIN LONG LIFE SERIES

SBR®

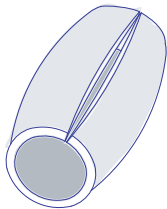
Silver SBR
ROLLER CHAIN

BS STANDARD ROLLER CHAINS
ANSI STANDARD ROLLER CHAINS
STRAIGHT SIDEBAR CHAINS
HEAVY-SERIES ROLLER CHAINS
OIL-FIELD CHAINS
SUPER ROLLER CHAINS
DOUBLE CAPACITY CHAINS
S-SERIES ROLLER CHAINS
DOUBLE PITCH ROLLER CHAINS
HOLLOW-PIN CHAINS

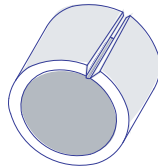
Silver

SBR[®]

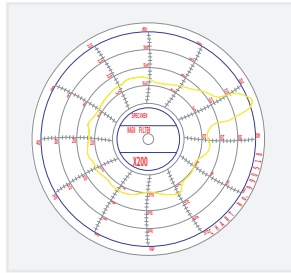
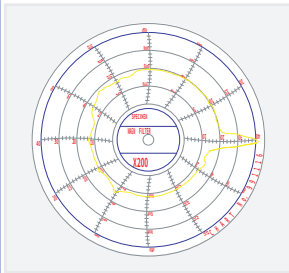
Conventional Chain



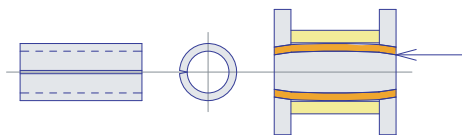
Curled Bushing



Curler Roller



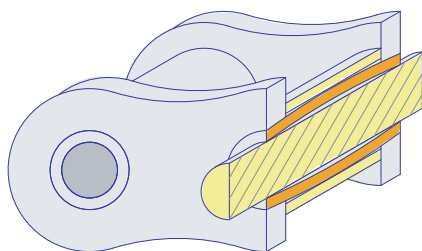
Roundness inside bushing



Before Assembly

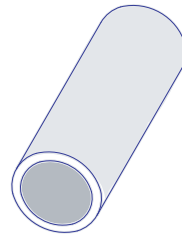
After Assembly

Bushing ID becomes barrel-shape a result of press fit and makes uneven contact between pin and bushing.

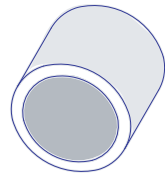


Wear stress causing elongation by barrel-shaped curled bushing.

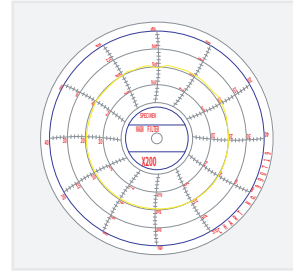
Silver SBR Chain



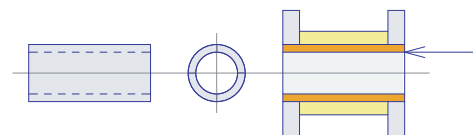
Solid Bushing



Solid Roller



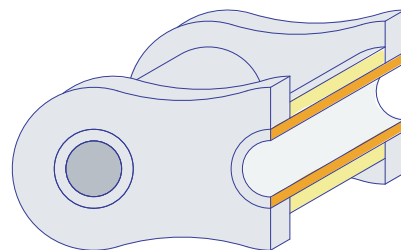
Excellent roundness inside bushing



Before Assembly

After Assembly

SY solid bushing assures perfect straight ID surface after assembly.



Optimal bearing surface due to perfectly cylindrical parts.



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SY Chain Products Contents

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ATTACHMENT CHAINS

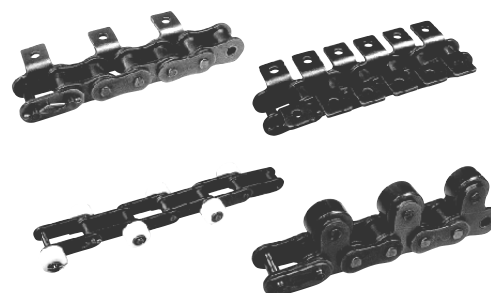
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ROLLER
CHAINSDOUBLE PITCH
ROLLER CHAINSRUSTLESS
CHAINSSIDE BOW
CHAINSHOLLOW PIN
CHAINSMAINTENANCE
FREE CHAINSLEAF
CHAINSATTACHMENT
CHAINSENGINEERING
CHAINSTECHNICAL
INFORMATION

STANDARD ROLLER CHAINS

RUN BETTER WITH SY SPECIFY
YOUR REQUIREMENTS



HOW TO ORDER

Chain number, type: riveted or cottered, length and quantity are the necessary information for us to fill in your order. At the very least, the chain pitch, roller diameter and roller link inside width should be given if the chain number is unknown.

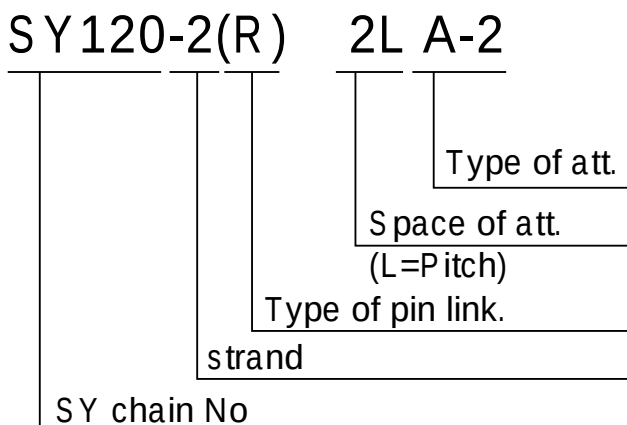
STANDARD PACKING

SY roller chains are packed for convenient handling and storing. Each 10feet length is packed in a carton. 50feet length and more are wound on reel.



specifically as possible when ordering a cut length of chain.

NOMENCLATURE



Plain chain consists of "SY chain No" and "Type of pin link". Attachment chain has one space between "Type of pin link" and "Space of attachment".

CHAIN PARTS



Roller Link
(Type R/L)



Pin Link
Riveted
(Type R)



Pin Link Cottered
(Type C)

CHAIN CONNECTION PARTS



Spring Clip
(Type Sp CL)



Cottered
(Type C)



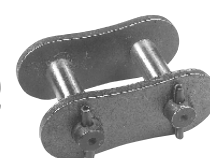
Offset
(Type O/L)



"S" Pin
(Type S)



Through "S" Pin
(Type TS)



Roll Pin

CHAIN CONSTRUCTION

RIVETED



Riveted chain is assembled by staking the pin heads on both sides of the chain

COTTERED



Cottered chain is assembled by staking the pin heads on one side of the chain and drilling a hole in the other end to accommodate a cotter pin. This type of chain is easily assembled and disassembled in the field.

SINGLE AND MULTIPLE



On multiple-strand types, all center plates are slip fitted (clearance-fitted) unless otherwise specified.

Roller chain with connecting link (C/L)

Ordinarily even number of pitches includes a C/L on one end.



Roller chain with offset link (O/L)

When an odd number of pitches is required, a C/L and an O/L are usually used.



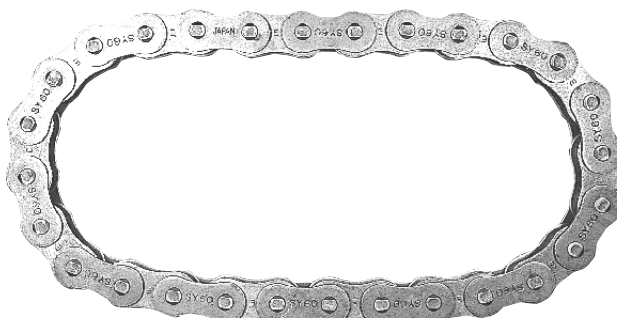
Roller chain with connecting links (C/L's) on both ends.

For odd pitches (not endless), 2C/L's are incorporated on request.



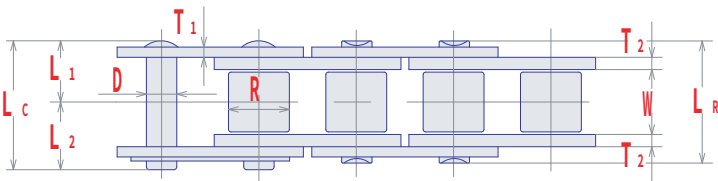
Roller chain endless

Usually chains are furnished unendless. If an endless chain assembly is required, specify whether it is to be riveted endless or cotter-connected.



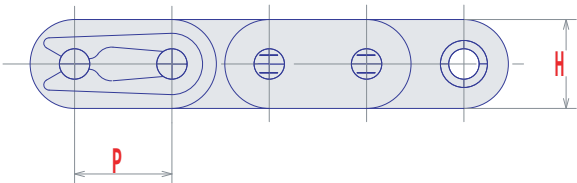
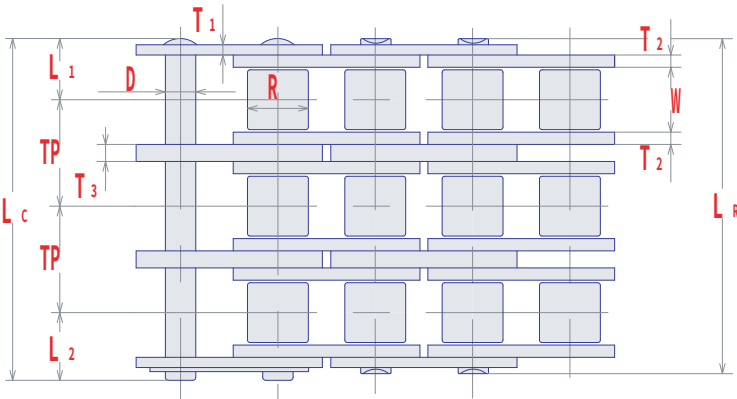
BS Standard Roller Chains

SY BS standard roller chains are standardized in accordance with ISO 606 B and fully interchangeable with chains manufactured according to BS 228 and DIN 8187. Supplied, in rivet type, to European countries as well as replacement on machinery employing BS standard chains.



Item	See Page		
Rust Less	36	40	42
Drive Chain Selection	76	77	

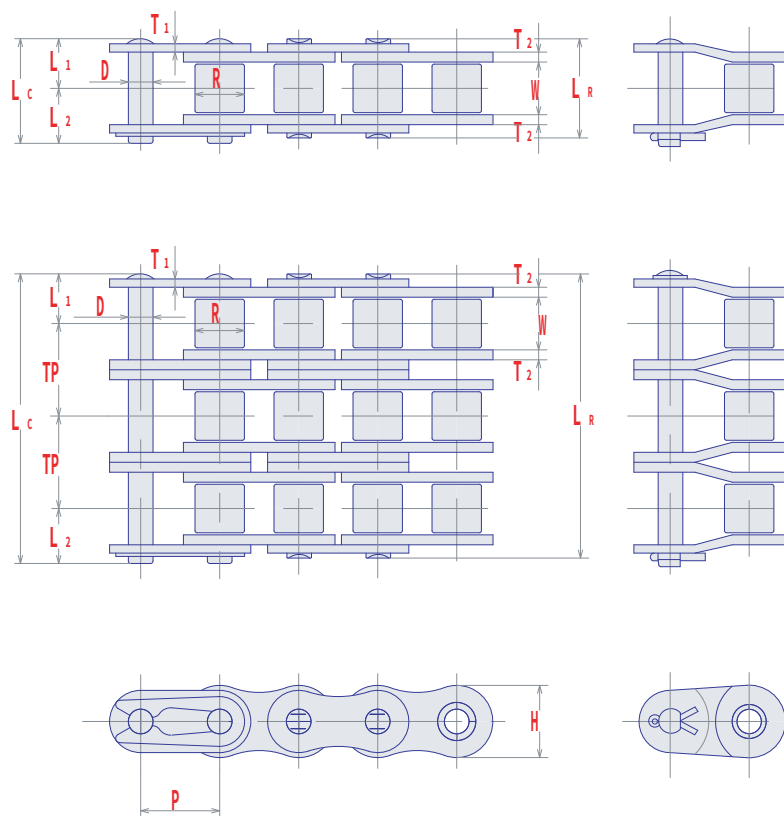
Standard Packing	06B
1 Unit (10')	320P
1 Unit (5m)	526P



06B

SY Chain No. (B S)	Pitch	Dimensions - mm												Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
		Roller		Pin						Plate			Trans. Pitch			
		Width	Dia.	Dia.	Length				Height	Thickness						
	P	W	R	D	LR	LC	L1	L2	H	T1	T2	T3	TP	kN	kN	kg/m
06B	9.525	5.72	6.35	3.28	12.6	13.4	6.3	7.1	8.2	1.0	1.25	1.6	10.24	8.92	1.7	0.41
-2					22.9	23.7								16.9	2.9	0.78
-3					33.2	33.7								24.9	4.2	1.18

Curled bushing is used.



Item	See Page		
Attachment Chain	64	65	
Rust Less	36	40	42
SLR Self-Lube Chain	51		
Drive Chain Selection	76	77	

Standard Packing	08B	10B
1 Unit (10')	240P	192P
1 Unit (5m)	394P	316P

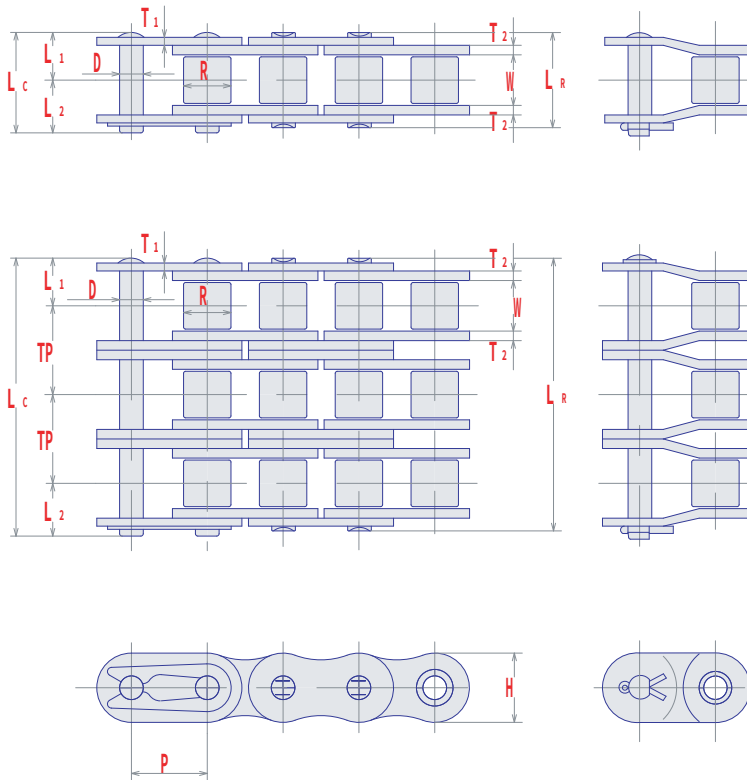
08B

SY Chain No. (B S)	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
		Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
	P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m
08B	12.70	7.75	8.51	4.45	16.7	18.0	8.4	9.6	11.8	1.5		13.92	17.8	3.14	0.61
-2					30.6	31.9							31.1	5.35	1.26
-3					44.5	45.8							44.5	7.85	1.88

10B

SY Chain No. (B S)	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
		Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
	P	W	R	D	LR	LC	L1	L2	H	T1	T2	TP	kN	kN	kg/m
10B	15.875	9.65	10.16	5.08	19.0	20.7	9.5	11.2	14.7	1.65		16.59	22.2	4.90	0.89
-2					35.6	37.3							44.5	8.33	1.79
-3					52.4	54.4							66.7	12.2	2.66

※Refer to page 80. "Selection of offset link"



Item	See Page		
Attachment Chain	64	65	
Rust Less	36	40	42
SLR Self-Lube Chain	51		
MF Maintenance Free	56	76	
Drive Chain Selection	76	77	

Standard Packing	12B	16B
1 Unit (10')	160P	120P
1 Unit (5m)	262P	198P

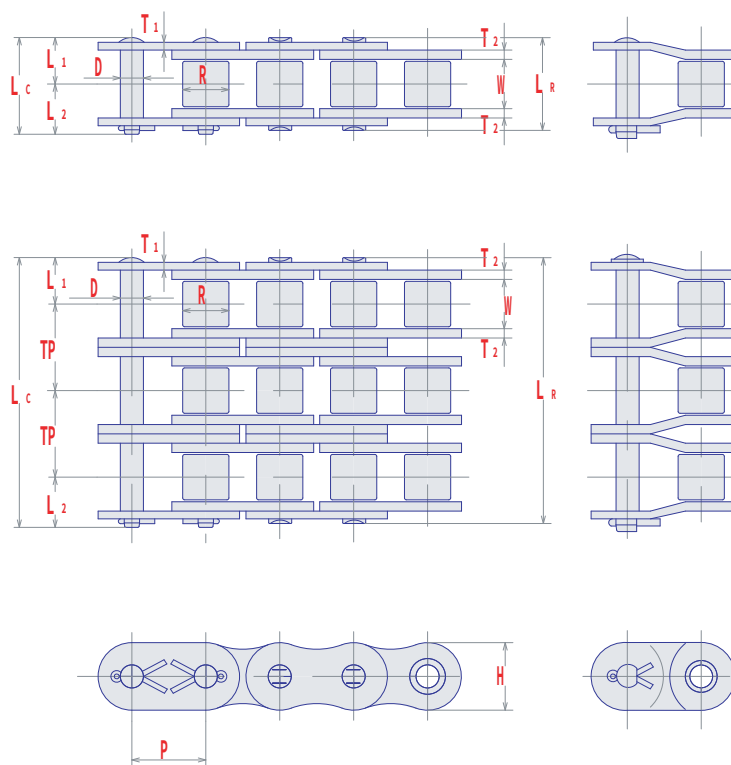
12B

SY Chain No. (B S)	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
		Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
	P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m
12B	19.05	11.68	12.07	5.72	22.0	23.6	11.0	12.6	16.1	1.8		19.46	28.9	7.06	1.14
-2					41.6	43.1							57.8	12.0	2.28
-3					61.1	62.7							86.7	17.6	3.36

16B

SY Chain No. (B S)	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight	
		Roller		Pin				Plate			Trans. Pitch					
		Width	Dia.	Dia.	Length			Height	Thickness							
	P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m	
16B	25.40	17.02	15.88	8.26	35.1	38.2	17.6	20.6	21.0	3.2	4.0	31.88	60	12.6	2.59	
-2																
-3																

※Refer to page 80. "Selection of offset link"



Item	See Page	
Attachment Chain	64	65
Rust Less	36	40 42
SLR Self-Lube Chain	51	
MF Maintenance Free	56	76
Drive Chain Selection	76	77

Standard Packing	20B	24B
1 Unit (10')	96P	80P
1 Unit (5m)	158P	132P

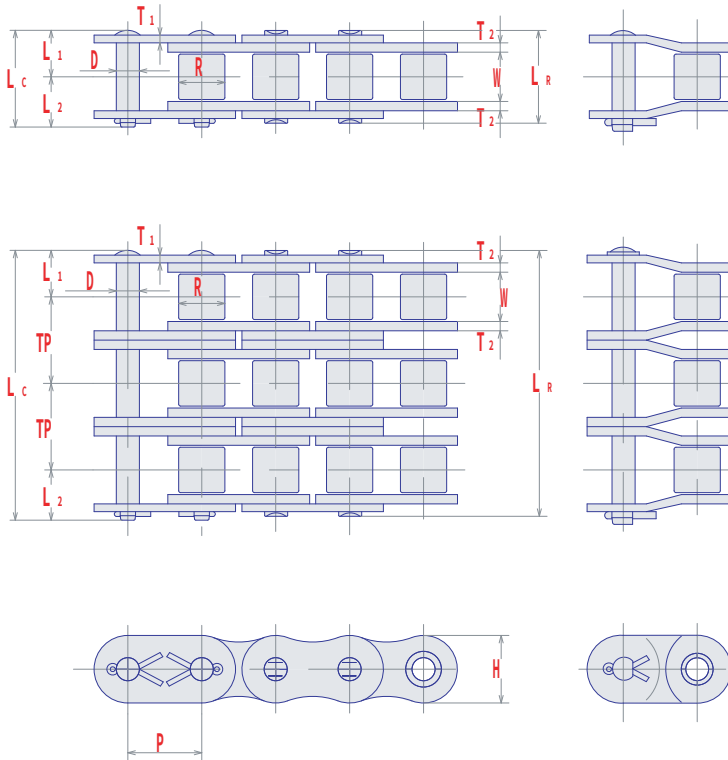
20B

SY Chain No. (B S)	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
		Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
	P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m
20B	31.75	19.56	19.05	10.16	40.2	44.0	20.1	23.9	26.4	3.5	4.5	36.45	95	19.6	3.76
-2					76.8	80.6							170	33.3	7.26
-3					113.3	117.2							250	49.0	10.86

24B

SY Chain No. (B S)	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight	
		Roller		Pin				Plate			Trans. Pitch					
		Width	Dia.	Dia.	Length			Height	Thickness							
	P	W	R	D	LR	LC	L1	L2	H	T1	T2	TP	kN	kN	kg/m	
24B	38.10	25.40	25.40	14.63	53.4	58.1	26.7	31.4	33.4	4.9	5.9	48.36	160	27.5	7.29	
-2					101.8	106.5								280	46.8	14.53
-3					150.2	154.9									425	68.8

※Refer to page 80. "Selection of offset link"



Item	See Page		
Rust Less	36	40	42
SLR Self-Lube Chain	51		
MF Maintenance Free	56	76	
Drive Chain Selection	76	77	

Standard Packing	28B	32B
1 Unit (10')	68P	60P
1 Unit (5m)	114P	100P

28B

SY Chain No. (B S)	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
		Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
	P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m
28B	44.45	31.00	27.94	15.88	65.1	70.5	32.6	37.9	37.0	6.3	7.4	59.56	200	34.3	9.26
-2					124.7	130.0							360	58.3	18.45
-3					184.2	189.6							530	85.8	27.65

32B

SY Chain No. (B S)	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
		Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
	P	W	R	D	LR	LC	L1	L2	H	T1	T2	TP	kN	kN	kg/m
32B	50.80	31.00	29.21	17.81	65.0	71.1	32.5	38.6	42.2	6.3	6.9	58.55	250	39.2	9.92
-2					123.4	129.7							450	66.6	19.76
-3					182.0	188.3							670	98.0	29.61

※Refer to page 80. "Selection of offset link"

Ecological BS Style Roller Chains

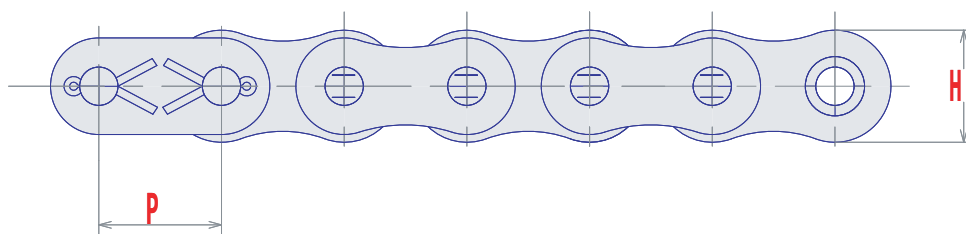
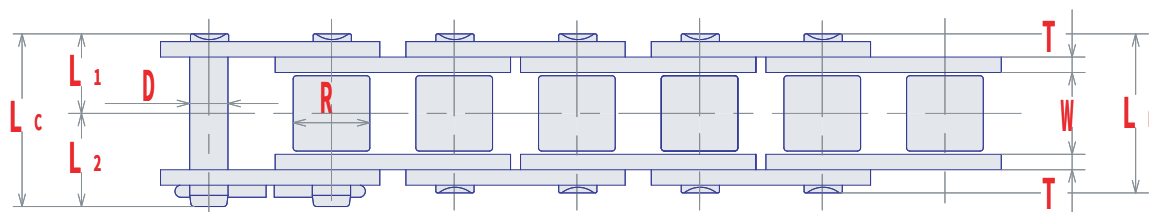
Quality is higher than BS standard chain

Price is lower than BS standard roller chain

It can be used BS sprocket.

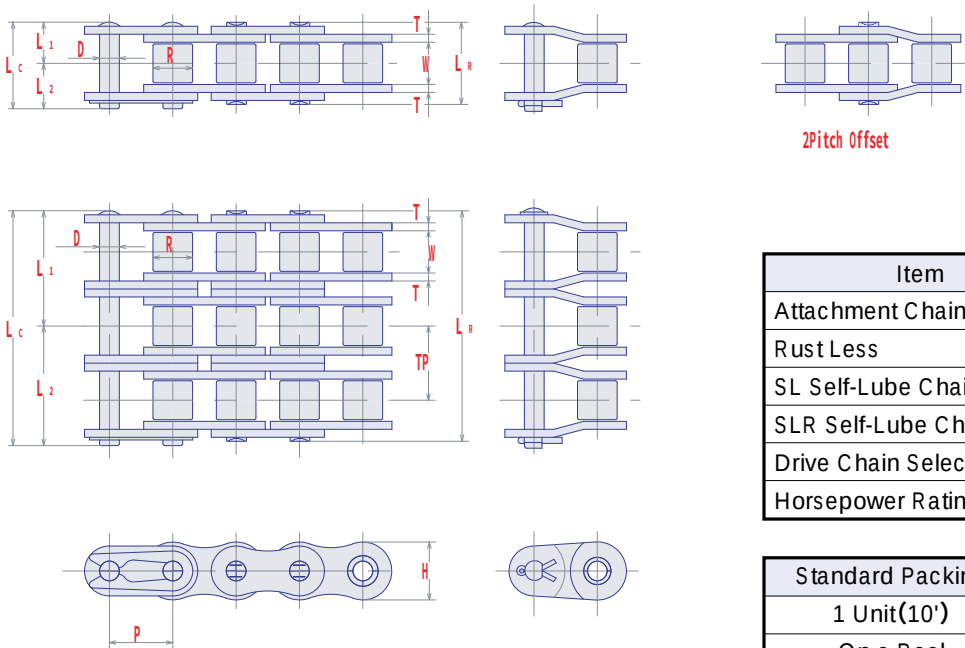
The pin diameter is different ..

It is not possible connect with BS standard roller chain.



SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
					P	W	R	D					
EC 16B	25.40	17.1	15.88	7.93	35.8	38.5	17.9	20.6	23.4	3.2	78.5	18.4	2.52
EC 20B	31.75	19.6	19.05	9.53	41.6	45.2	20.8	24.4	29.3	4.0	118.0	28.3	3.91
EC 24B	38.10	25.4	25.40	11.10	51.8	55.7	25.9	29.8	35.1	4.8	167.0	38.0	5.76
EC 28B	44.45	31.0	27.94	12.70	61.8	66.1	30.9	35.2	40.9	5.6	216.0	50.3	7.41
EC 32B	50.80	31.6	28.58	14.28	66.6	71.0	33.3	37.7	46.7	6.4	275.0	66.3	9.79
EC 40B	63.50	38.1	39.37	19.83	82.0	90.5	41.0	49.5	59.6	8.0	451.0	82.3	16.9
EC 48B	76.20	47.5	47.63	23.78	100.0	107.7	50.0	57.7	70.3	9.5	677.0	112.8	23.6

ANSI Standard Roller Chains



Item	See Page		
Attachment Chain	66	67	
Rust Less	36	40	43
SL Self-Lube Chain	49		
SLR Self-Lube Chain	52	53	
Drive Chain Selection	76	77	
Horsepower Rating	82		

Standard Packing	SY 35	SY 40
1 Unit(10')	320P	240P
On a Reel	250'	200'

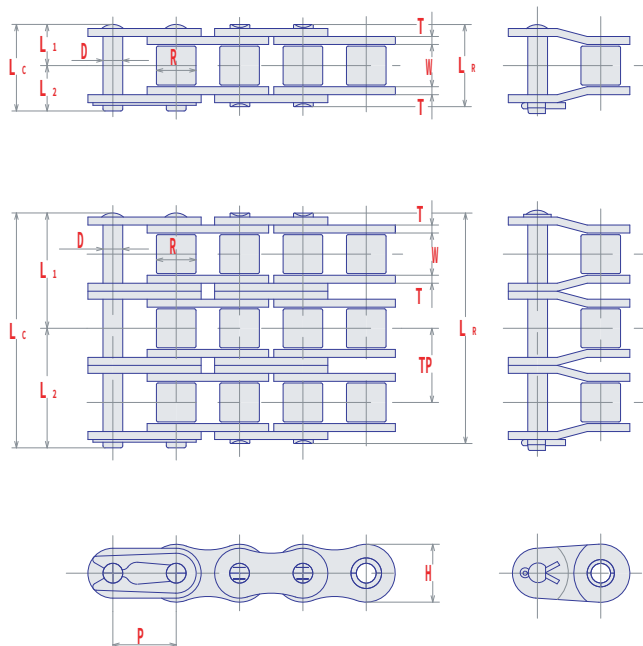
35 (BUSHED CHAIN)

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Bushing		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
		P	W	R	D	LR	LC	L1	L2		H			
SY 35	9.525	4.78	5.08	3.58	12.0	12.9	6.0	6.9	9.0	1.25	—	10.8	2.48	0.34
SY 35-2					22.1	23.0	11.1	11.9			10.1	21.6	3.67	0.63
SY 35-3					32.2	33.1	16.1	17.0				32.4	5.40	0.92
SY 35-4					42.3	43.2	21.2	22.0				43.2	7.13	1.22
SY 35-5					52.4	53.2	26.2	27.0				54.0	8.42	1.56
SY 35-6					62.5	63.5	31.3	32.2				64.8	9.94	1.89

40

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thick.					
		P	W	R	D	L _R	L _C	L ₁	L ₂		H			
SY 40	12.70	7.95	7.92	3.96	16.5	17.9	8.3	9.6	11.7	1.5	—	19.1	4.17	0.60
SY 40-2					30.8	32.2	15.4	16.8			14.4	38.2	6.17	1.22
SY 40-3					45.0	46.6	22.5	24.1				57.3	9.08	1.85
SY 40-4					60.0	60.8	30.0	30.8				76.4	12.0	2.46
SY 40-5					74.6	75.6	37.3	38.3				95.5	14.2	3.14
SY 40-6					89.0	89.9	44.5	45.4				115.0	16.7	3.31

※Refer to page 80. "Selection of offset link"



2Pitch Offset

Item	See Page	
Attachment Chain	60	67
Rust Less	36	40 43
SL Self-Lube Chain	49	
SLR Self-Lube Chain	52	53
Drive Chain Selection	76	77
Horsepower Rating	82	83

Standard Packing	SY50	SY60
1 Unit(10')	192P	160P
On a Reel	100'	100'

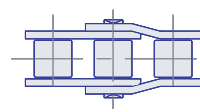
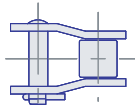
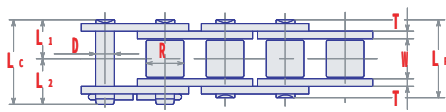
50

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Rollre		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY 50	15.875	9.53	10.16	5.08	20.4	22.0	10.2	11.8	14.6	2.0	—	31.9	7.22	0.98
SY 50-2					38.4	40.0	19.2	20.8			18.1	63.8	10.7	2.00
SY 50-3					56.7	58.2	28.4	29.8				95.7	15.7	3.07
SY 50-4					75.0	75.7	37.5	38.2				128.	20.7	3.97
SY 50-5					93.2	94.1	46.6	47.5				160.	24.5	5.02
SY 50-6					111.4	112.5	55.7	56.8				191.	28.9	6.01

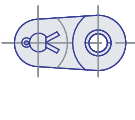
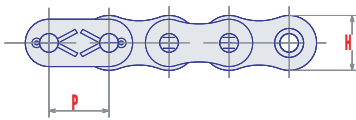
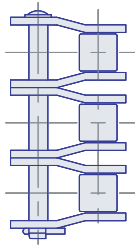
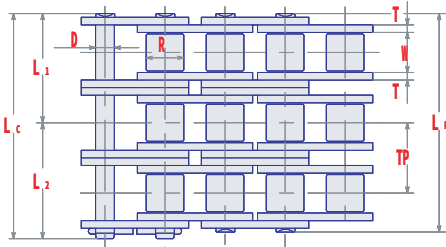
60

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY 60	19.05	12.70	11.91	5.95	25.5	26.9	12.8	14.1	17.5	2.4	—	43.1	10.7	1.46
SY 60-2					48.2	49.7	24.0	25.7			22.8	86.2	14.7	2.95
SY 60-3					71.2	72.6	35.2	37.4				129	21.6	4.43
SY 60-4					94.4	95.4	47.2	48.2				172	28.5	5.92
SY 60-5					117.0	118.2	58.5	59.7				216	33.7	7.41
SY 60-6					140.0	140.9	70.1	70.8				259	39.7	8.90
SY 60-8					185.0	186.6	92.5	94.1				345	53.5	13.36
SY 60-10					230.8	232.2	115.4	116.8				431	64.7	16.34

※Refer to page 80. “ Selection of offset link ”



2Pitch Offset



Item	See Page	
Attachment Chain	66	67
Rust Less	36	40 43
SL Self-Lube Chain	49	
SLR Self-Lube Chain	52	53
MF Maintenance Free	57	
Drive Chain Selection	76	77
Horsepower Rating	83	

Standard Packing	SY80	SY100
1 Unit(10')	120P	96P

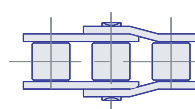
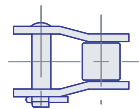
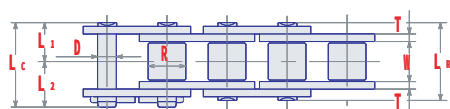
80

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY 80	25.40	15.88	15.88	7.93	32.8	35.5	16.4	19.1	23.4	3.2	—	78.5	18.4	2.52
SY 80-2					61.6	64.5	30.8	33.7			29.3	157	25.0	5.10
SY 80-3					90.9	94.1	45.5	48.6				236	36.8	7.68
SY 80-4					120.4	123.5	60.2	63.3				314	48.5	10.25
SY 80-5					149.8	152.8	74.9	77.9				393	57.3	12.84
SY 80-6					179.1	182.1	89.6	92.5				471	67.6	15.42
SY 80-8					237.6	240.6	118.8	121.8				628	91.1	20.58
SY 80-10					296.2	299.2	148.1	151.1				785	110	25.81

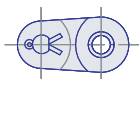
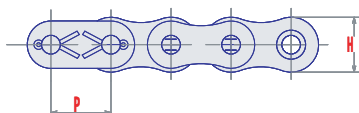
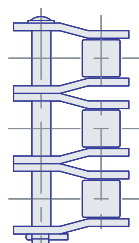
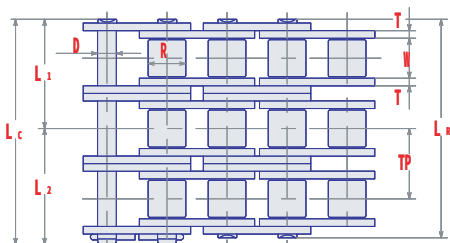
100

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thick.					
					P	W	R				D			
SY100	31.75	19.05	19.05	9.53	39.4	43.0	19.7	23.3	29.3	4.0	— 35.8	118	28.3	3.91
SY100-2					75.1	78.8	37.6	41.2				236	38.4	7.74
SY100-3					110.9	114.6	55.5	59.1				354	56.5	11.58
SY100-4					147.4	150.8	73.7	77.1				472	74.6	15.40
SY100-5					183.0	186.6	91.5	95.1				590	88.1	19.26
SY100-6					218.8	222.4	109.4	113.0				708	104	23.10
SY100-8					290.4	294.1	145.2	148.9				944	140	30.81
SY100-10					362.0	365.7	181.0	184.7				1180	170	38.54

※Refer to page 80. “ Selection of offset link ”



2Pitch Offset



Item	See Page	
Attachment Chain	66	67
Rust Less	36	40
SL Self-Lube Chain	49	
MF Maintenance Free	57	
Drive Chain Selection	76	77
Horsepower Ratings	84	

Standard Packing	SY120	SY140
1 Unit(10')	80P	68P

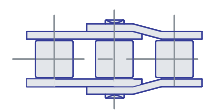
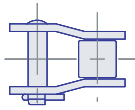
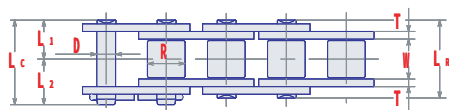
120

SY Chain No. No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY120	38.10	25.40	22.23	11.10	49.5	53.4	24.8	28.6	35.1	4.8	—	167	38.0	5.76
SY120-2					94.9	98.8	47.5	51.3			45.4	334	51.7	11.49
SY120-3					140.3	144.2	70.2	74.0				501	76.0	17.20
SY120-4					186.1	190.0	93.1	96.9				668	100	22.92
SY120-5					231.5	235.4	115.8	119.6				835	119	28.65
SY120-6					276.9	280.8	138.5	142.3				1002	140	34.36
SY120-8					367.5	371.7	183.8	187.9				1336	188	45.81
SY120-10					458.3	462.5	229.2	233.3				1670	228	57.38

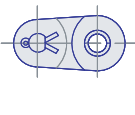
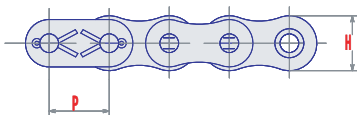
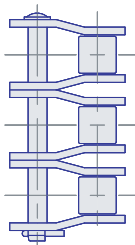
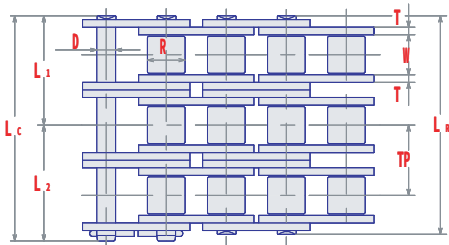
140

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thick.					
					P	W	R				D			
SY140	44.45	25.40	25.4	12.70	54.0	58.3	27.0	31.3	40.9	5.6	—	216	50.3	7.41
SY140-2					102.9	107.2	51.5	55.7			48.9	432	68.3	14.63
SY140-3					151.7	156.3	75.9	80.4				648	101	21.91
SY140-4					201.2	205.5	100.6	104.9				864	133	29.17
SY140-5					250.1	254.4	125.1	129.3				1080	157	36.45
SY140-6					299.0	303.3	149.5	153.8				1296	185	43.72
SY140-8					396.5	401.1	198.3	202.8				1728	249	58.28
SY140-10					494.3	498.9	247.2	251.7				2160	302	72.82

※Refer to page 80. " Selection of offset link "



2Pitch Offset



Item	See Page	
Attachment Chain	66	67
Rust Less	36	40
SL Self-Lube Chain	49	
MF Maintenance Free	57	
Drive Chain Selection	76	77
Horsepower Ratings	84	85

Standard Packing	SY160	SY180
1 Unit(10')	60P	54P

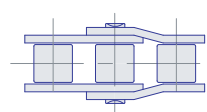
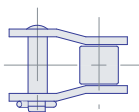
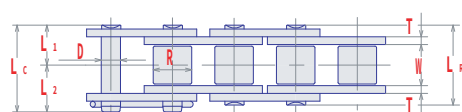
160

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY160	50.80	31.75	28.58	14.28	64.3	68.7	32.2	36.5	46.7	6.4	—	275	66.3	9.79
SY160-2					122.8	127.2	61.4	65.8			58.5	550	90.1	19.45
SY160-3					181.3	185.7	90.7	95.0				825	133	29.17
SY160-4					240.3	244.7	120.2	124.5				1100	175	38.77
SY160-5					298.8	303.3	149.4	153.9				1375	207	48.43
SY160-6					357.4	361.7	178.7	183.0				1650	244	58.08
SY160-8					474.4	478.8	237.2	241.6				2200	329	77.39
SY160-10					591.4	595.8	295.7	300.1				2750	398	102.86

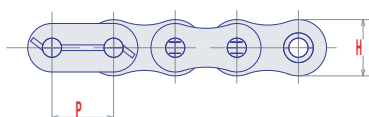
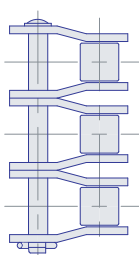
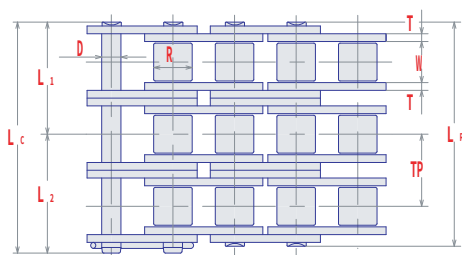
180

SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thick.					
		P	W	R	D	L _R	L _C	L ₁	L ₂		H			
SY180	57.15	35.70	35.70	17.45	72.5	78.4	36.3	42.1	52.5	7.2	—	353	70.6	13.39
SY180-2					138.2	144.0	69.1	74.9			65.8	706	98.4	26.62
SY180-3					204.5	210.2	102.3	107.9				1059	145	39.85
SY180-4					270.2	275.9	135.1	140.8				1412	191	53.08
SY180-5					336.0	341.6	173.6	173.7				1765	226	66.31
SY180-6					401.8	407.3	200.9	206.4				2118	266	79.54

※Refer to page 80. " Selection of offset link "



2Pitch Offset



Item	See Page	
Rust Less	40	
MF Maintenance Free	57	
Drive Chain Selection	76	77
Horsepower Ratings	85	

Standard Packing	SY200	SY240
1 Unit(10')	48P	40P

200

SY Chain No. No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thick.					
					P	W	R				D			
SY200	63.50	38.10	39.67	19.83	78.5	87.0	39.3	47.7	59.8	8.0	—	451	82.3	16.93
SY200-2					150.2	158.7	75.1	83.6			71.6	902	122	33.73
SY200-3					221.7	230.2	110.9	119.3				1353	179	50.53
SY200-4					293.3	302.4	146.7	155.7				1804	236	67.34
SY200-5					365.5	374.0	182.8	191.2				2255	279	84.14
SY200-6					437.1	445.6	218.6	227.0				2706	329	100.94

240

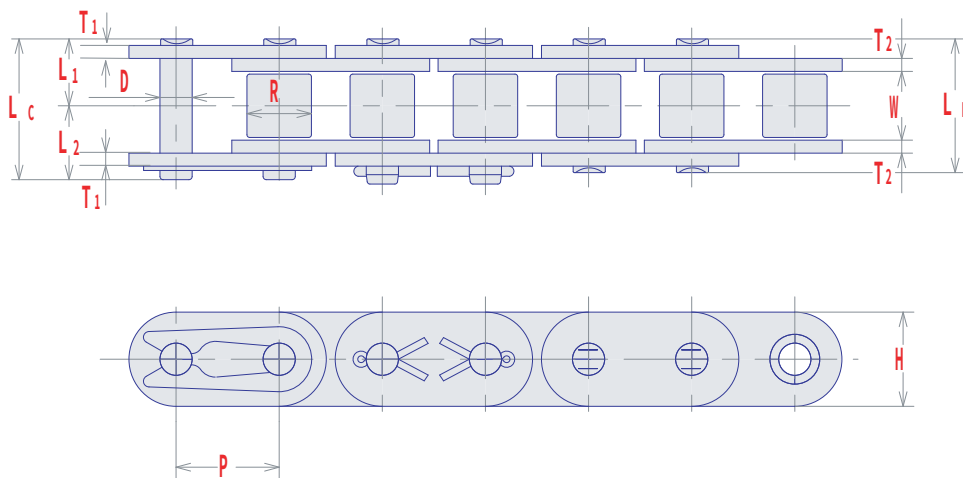
SY Chain No. (ANSI)	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load※	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
		P	W	R	D	LR	LC	L1	L2		H			
SY240	76.20	47.63	47.63	23.78	96.4	104.1	48.2	55.9	70.3	9.5	—	677	112.8	23.64
SY240-2					184.2	191.8	92.1	99.7			87.8	1354	167	47.13
SY240-3					272.0	279.6	136.0	143.6				2031	245	70.61
SY240-4					359.8	367.4	179.9	187.5				2708	324	94.09
SY240-5					447.6	455.2	223.8	231.4				3385	383	117.56
SY240-6					535.5	543.0	267.8	275.2				4062	451	141.06

※Refer to page 80. " Selection of offset link "

BS Straight Sidebar Chains

SY BS straight sidebar chains are identical with BS standard chains except for the straight side plates. Provided with higher fatigue resistance than the standard chains.

Sprockets for BS standard chains may be used for these chains. For identification, a suffix of F is added to the standard chain numbers as listed below.

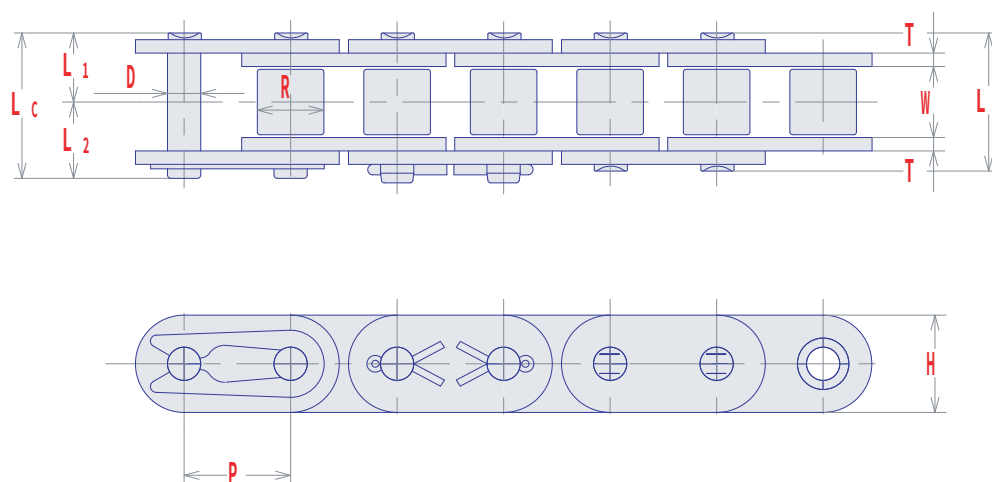


SY Chain No.	Dimensions - mm												Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight	Type of Conn Link
	Pitch	Roller		Pin				Plate			Trans. Pitch					
		Width	Dia.	Dia.	Length			Height	Thickness							
					P	W	R		D	L _R		L _C				
06B-F	9.525	5.72	6.35	3.28	12.6	13.4	6.3	7.1	8.2	1.0	1.25	8.92	8.92	1.77	0.48	Spcl
08B-F	12.70	7.75	8.51	4.45	16.7	18.0	8.4	9.6	11.8	1.5		17.8	17.8	3.14	0.68	
10B-F	15.875	9.65	10.16	5.08	19.0	20.7	9.5	11.2	14.7	1.65		22.3	22.3	4.90	0.99	
12B-F	19.05	11.68	12.07	5.72	22.0	23.6	11.0	12.6	16.1	1.8		28.9	28.9	7.06	1.27	
16B-F	25.40	17.02	15.88	8.26	35.1	38.2	17.6	20.5	20.3	3.2	4.0	60.8	60.8	12.6	2.9	C
20B-F	31.75	19.56	19.05	10.16	40.2	44.0	20.1	23.9	26.0	3.5	4.5	95.1	95.1	19.6	4.21	
24B-F	38.10	25.40	25.40	14.63	53.4	58.1	26.7	31.4	33.4	4.8	5.9	161.0	161.0	27.5	8.16	
28B-F	44.45	30.99	27.94	15.88	65.1	70.5	32.6	37.9	36.6	6.3	7.4	201.0	201.0	34.3	10.37	
32B-F	50.80	30.99	29.21	17.81	65.0	71.1	32.5	38.6	41.7	6.3	6.9	250.0	250.0	39.2	11.11	

ANSI Straight Sidebar Chains

SY ANSI straight sidebar chains are identical with ANSI standard chains except for the straight side plates. Provided with higher fatigue resistance than the standard chains.

Sprockets for ANSI standard chains may be used for these chains. For identification, a suffix of F is added to the standard chain numbers as listed below.

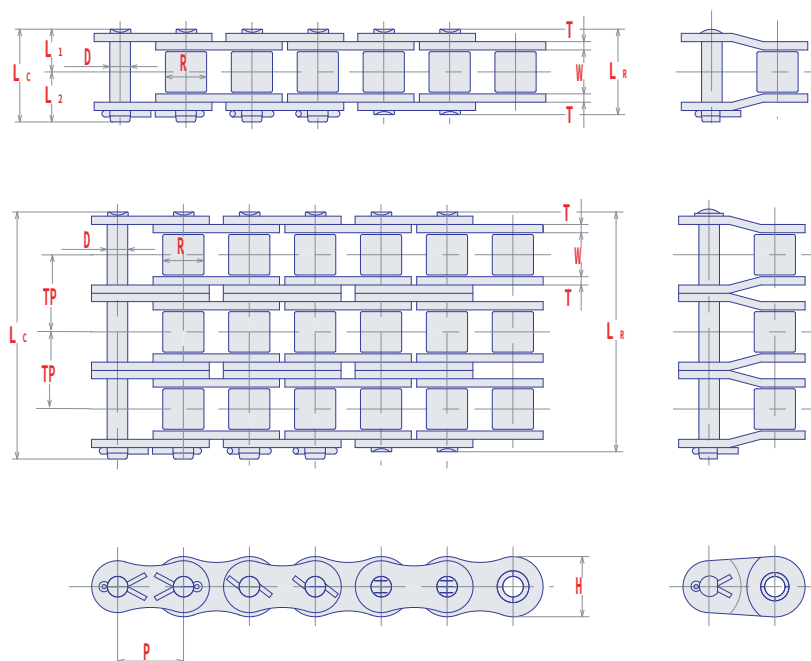


SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight	Type of Conn Link
	Pitch	Roller		Pin					Plate					
		Width	Dia.	Dia.	Length				Height	Thick.				
					P	W	R	D						
SY 35F	9.525	4.78	5.08	3.58	12.0	12.9	6.0	6.9	9.0	1.25	10.8	2.23	0.38	Spcl C
SY 40F	12.70	7.95	7.92	3.96	16.5	17.7	8.3	9.4	11.7	1.5	19.1	4.17	0.67	
SY 50F	15.875	9.53	10.16	5.08	20.4	21.9	10.2	11.7	14.6	2.0	31.9	7.22	1.1	
SY 60F	19.05	12.70	11.91	5.95	25.5	26.9	12.8	14.1	17.5	2.4	43.1	10.7	1.63	
SY 80F	25.40	15.88	15.88	7.93	32.8	35.0	16.4	18.6	23.4	3.2	78.5	18.4	2.82	
SY 100F	31.75	19.05	19.05	9.53	39.4	43.0	19.7	23.3	29.3	4.0	118	28.3	4.37	
SY 120F	38.10	25.40	22.23	11.1	49.5	53.4	24.8	28.6	35.1	4.8	167	38.0	6.45	
SY 140F	44.45	25.40	25.40	12.7	54.0	58.3	27.0	31.3	40.9	5.6	216	50.3	8.29	
SY 160F	50.80	31.75	28.58	14.28	64.3	68.7	32.2	36.5	46.7	6.4	275	66.3	10.96	
SY 200F	63.50	38.1	39.67	19.83	78.5	87.0	39.3	47.7	59.8	8.0	451	82.3	18.96	
SY 240F	76.20	47.63	47.63	23.78	96.4	104.1	48.2	55.9	70.3	9.5	677	112.8	26.47	

Heavy Series Roller Chains (H Series)

SY H-series roller chains are provided with greater shock and wear resistance and high breaking strength for general purpose applications. The side plate thickness is equal to the next larger ANSI roller chains and through-hardened high-tensile structural steel pins realize strong power transmission in limited equipment space, showing excellent shock absorption and fatigue strength and high ultimate strength of as much as 110-120 percent.

Single roller chains of this series run on standard single roller chain sprockets.



SINGLE STRANDS

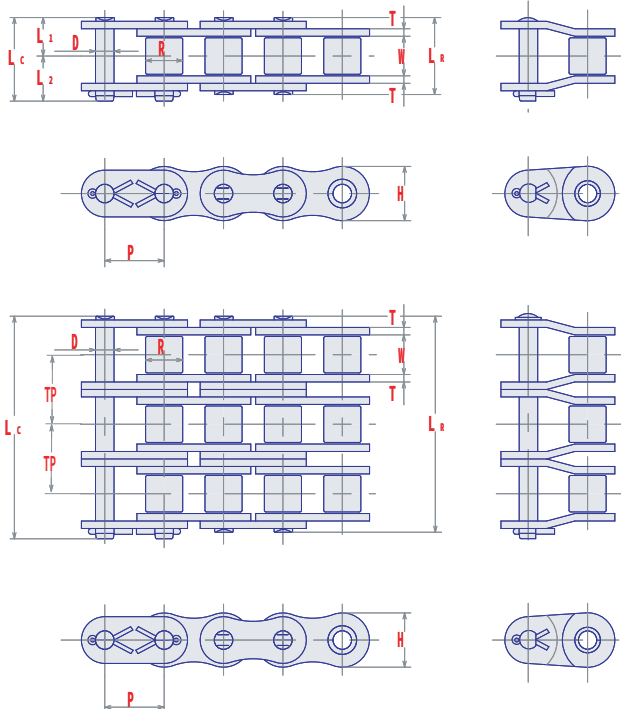
SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight	Type of Conn Link
	Pitch	Roller		Pin					Plate					
		Width	Dia.	Dia.	Length				Height	Thick.				
					P	W	R	D						
SY 60H	19.05	12.70	11.91	5.95	28.8	30.8	14.4	16.4	17.5	3.2	54.9	10.7	1.80	C
SY 80H	25.40	15.88	15.88	7.93	35.7	38.7	17.9	20.8	23.4	4.0	90.2	18.4	2.81	
SY100H	31.75	19.05	19.05	9.53	42.4	45.9	21.2	24.7	29.3	4.8	137	28.3	4.14	
SY120H	38.10	25.40	22.23	11.10	52.8	57.2	26.4	30.8	35.1	5.6	186	38.0	5.83	
SY140H	44.45	25.40	25.40	12.70	57.2	61.8	28.6	33.2	40.9	6.4	241	50.3	8.41	
SY160H	50.80	31.75	28.58	14.28	67.9	73.0	34.0	39.0	46.7	7.2	306	66.3	10.86	
SY180H	57.15	35.70	35.70	17.45	75.6	81.5	37.8	43.7	52.5	8.0	373	70.6	15.18	
SY200H	63.50	38.10	39.67	19.83	84.8	93.4	42.4	51.0	59.8	9.5	520	82.3	17.85	S
SY240H	76.20	47.63	47.63	23.78	109.8	118.2	54.9	63.3	70.3	12.7	726	112.8	32.29	

※Refer to page 80. "Selection of offset link"

MULTIPLE STRANDS

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY 60H-2	19.05	12.70	11.91	5.95	54.9	57.0	27.4	29.6	17.5	3.2	26.1	110	15.2	3.59
SY 60H-3					80.6	83.1	40.3	42.8				165	22.3	5.39
SY 60H-4					107.1	109.3	53.6	55.7				220	29.4	7.18
SY 80H-2	25.40	15.88	15.88	7.93	68.4	71.3	34.2	37.1	23.4	4.0	32.6	180	25.8	5.54
SY 80H-3					101.0	104.0	50.5	53.5				271	38.0	8.26
SY 80H-4					133.6	136.7	66.8	69.9				361	50.2	10.98
SY 80H-5					166.2	169.3	83.1	86.2				451	59.3	13.71
SY 80H-6					198.8	201.9	99.4	102.5				541	69.9	16.43
SY 80H-8					264.0	267.1	132.0	135.1				722	94.2	21.88
SY100H-2	31.75	19.05	19.05	9.53	81.6	85.0	40.8	44.2	29.3	4.8	39.1	274	39.1	8.20
SY100H-3					120.7	124.4	60.4	64.0				414	57.5	12.26
SY100H-4					159.4	163.2	79.7	83.5				548	75.9	16.33
SY100H-5					198.5	202.3	99.3	103.0				685	89.7	20.39
SY100H-6					238.2	241.8	119.1	122.7				822	106	24.45
SY100H-8					316.4	320.0	158.2	161.8				1096	143	32.58
SY100H-10					394.6	398.2	197.3	200.9				1370	173	40.70
SY120H-2	38.10	25.40	22.23	11.10	102.0	106.1	51.0	55.1	35.1	5.6	48.9	372	53.4	11.56
SY120H-3					150.6	154.6	75.3	79.3				558	78.5	17.29
SY120H-4					199.2	203.2	99.6	103.6				744	104	23.02
SY120H-5					247.8	252.6	123.9	128.7				930	123	28.75
SY120H-6					297.6	301.9	148.8	153.1				1116	144	34.48
SY120H-8					395.4	399.7	197.7	202.0				1488	195	45.94
SY120H-10					493.2	497.5	246.6	250.9				1860	236	57.40
SY140H-2	44.45	25.40	25.40	12.70	109.4	114.0	54.7	59.3	40.9	6.4	52.2	482	70.0	16.59
SY140H-3					161.8	166.4	80.9	85.5				723	103	24.77
SY140H-4					214.0	218.7	107.0	111.7				964	136	32.96
SY140H-5					266.2	270.9	133.1	137.8				1205	161	41.15
SY140H-6					318.4	323.1	159.2	163.9				1446	190	49.33
SY140H-8					422.8	427.5	211.4	216.1				1928	255	65.78
SY160H-2	50.8	31.75	28.58	14.28	129.8	134.9	64.9	70.0	46.7	7.2	61.9	612	93.3	21.21
SY160H-3					191.8	196.8	95.9	100.9				918	137	31.54
SY160H-4					253.7	258.8	126.9	131.9				1224	181	41.89
SY160H-6					377.5	382.6	188.8	193.8				1836	253	62.58
SY180H-2	57.15	35.70	35.70	17.45	144.2	149.8	72.1	77.7	52.5	8.0	68.6	746	102	31.06
SY180H-3					212.8	218.7	106.4	112.3				1119	149	44.94
SY180H-4					281.4	287.4	140.7	146.7				1492	197	59.83
SY200H-2	63.50	38.10	39.67	19.84	163.1	172.0	81.6	90.4	59.8	9.5	78.3	1040	127	35.20
SY200H-3					241.4	250.3	120.7	129.6				1560	186	62.53
SY200H-4					319.8	328.4	159.9	168.7				2080	246	69.94
SY240H-2	76.20	47.63	47.63	23.78	211.0	219.4	105.5	113.9	70.3	12.7	101.2	1452	173	62.06
SY240H-3					312.2	320.6	156.1	164.5				2178	255	91.82
SY240H-4					413.4	421.8	206.7	215.1				2904	336	121.58

Oil-Field Chains (E Series)



SY Oil-field chains are manufactured in accordance with ANSI, API standards, and officially approved by The American Petroleum Institute for high quality, reliability and long trouble-free service life. Used in oil-field drilling and producing operations such as hoisting, pumping and drawworks.

SY E & HE-series roller chains are manufactured in the same standards as Oil-field chains.

E TYPE

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY 80E	25.4	15.88	15.88	7.93	32.8	35.5	16.4	19.1	23.4	3.2	—	79.4	18.4	2.52
SY 80E-2					61.6	64.5	30.8	33.7			29.3	159	26.7	5.10
SY 80E-3					90.9	94.1	45.5	48.6			238	39.3	7.68	
SY 80E-4					120.4	123.5	60.2	63.3			318	51.8	10.25	
SY 80E-5					149.8	152.8	74.9	77.9			397	61.2	12.84	
SY 80E-6					179.1	182.1	89.6	92.5			476	72.2	15.42	
SY 80E-8					237.6	240.6	118.8	121.8			635	97.3	20.58	
SY100E	31.75	19.05	19.05	9.53	39.4	43.0	19.7	23.3	29.3	4.0	—	119	28.3	3.91
SY100E-2					75.1	78.8	37.6	41.2			35.8	238	40.8	7.74
SY100E-3					110.9	114.6	55.5	59.1			357	60.0	11.58	
SY100E-4					147.4	150.8	73.7	77.1			476	79.2	15.40	
SY100E-5					183.0	186.6	91.5	95.1			595	93.6	19.26	
SY100E-6					218.8	222.4	109.4	113.0			714	110	23.10	
SY100E-8					290.4	294.1	145.2	148.9			952	149	30.81	
SY100E-10					362.0	365.7	181.0	184.7			1190	180	38.54	
SY120E	38.10	25.40	22.23	11.10	49.5	53.4	24.8	28.6	35.1	4.8	—	174	38.0	5.76
SY120E-2					94.9	98.8	47.5	51.3			45.4	348	54.2	11.49
SY120E-3					140.3	144.2	70.2	74.0			522	79.8	17.20	
SY120E-4					186.1	190.0	93.1	96.9			696	105	22.92	
SY120E-5					231.5	235.4	115.8	119.6			870	124	28.65	
SY120E-6					276.9	280.8	138.5	142.3			1044	147	34.36	
SY120E-8					367.5	371.7	183.8	187.9			1392	198	45.81	
SY120E-10					458.3	462.5	229.2	233.3			1740	239	57.38	

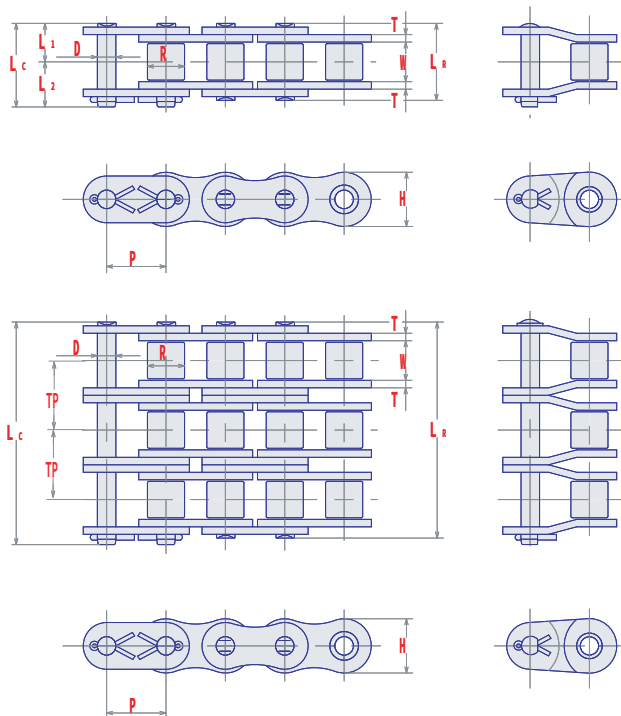
※Refer to page 80. "Selection of offset link"



BCL Connecting links provided with press-fit chains

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY140E	44.45	25.40	25.40	12.70	54.0	58.3	27.0	31.3	40.9	5.6	—	227	50.3	7.41
SY140E-2					102.9	107.2	51.5	55.7			48.9	454	73.2	14.63
SY140E-3					151.7	156.3	75.9	80.4			681	108	21.91	
SY140E-4					201.2	205.5	100.6	104.9			908	142	29.17	
SY140E-5					250.1	254.4	125.1	129.3			1135	168	36.45	
SY140E-6					299.0	303.3	149.5	153.8			1362	198	43.72	
SY140E-8					396.5	401.1	198.3	202.8			1816	267	58.28	
SY160E	50.80	31.75	28.58	14.28	64.3	68.7	32.2	36.5	46.7	6.4	—	294	66.3	9.79
SY160E-2					122.8	127.2	61.4	65.8			58.5	588	95.0	19.45
SY160E-3					181.3	185.7	90.7	95.0			882	140	29.17	
SY160E-4					240.3	244.7	120.2	124.5			1176	184	38.77	
SY160E-6					298.8	303.3	149.4	153.9			1764	257	58.08	
SY180E	57.15	35.70	35.70	17.45	72.5	78.4	36.3	42.1	52.5	7.2	—	363	70.6	13.39
SY180E-2					138.2	144.0	69.1	74.9			65.8	726	102	26.62
SY180E-3					204.5	210.2	102.3	107.9			1089	150	39.85	
SY180E-4					270.2	275.9	135.1	140.8			1452	197	53.08	
SY200E	63.50	38.10	39.67	19.83	78.5	87.0	39.3	47.7	59.8	8.0	—	470	82.3	16.93
SY200E-2					150.2	158.7	75.1	83.6			71.6	940	130	33.73
SY200E-3					221.7	230.2	110.9	119.3			1410	191	50.53	
SY200E-4					293.3	302.4	146.7	155.7			1880	252	67.34	
SY240E	76.20	47.63	47.63	23.78	96.4	104.1	48.2	55.9	70.3	9.5	—	677	112.8	23.64
SY240E-2					184.2	191.8	92.1	99.7			87.8	1354	179	47.13
SY240E-3					272.0	279.6	136.0	143.6			2031	263	70.61	
SY240E-4					359.8	367.4	179.9	187.5			2708	347	94.09	

OIL-FIELD CHAINS(HE SERIES)



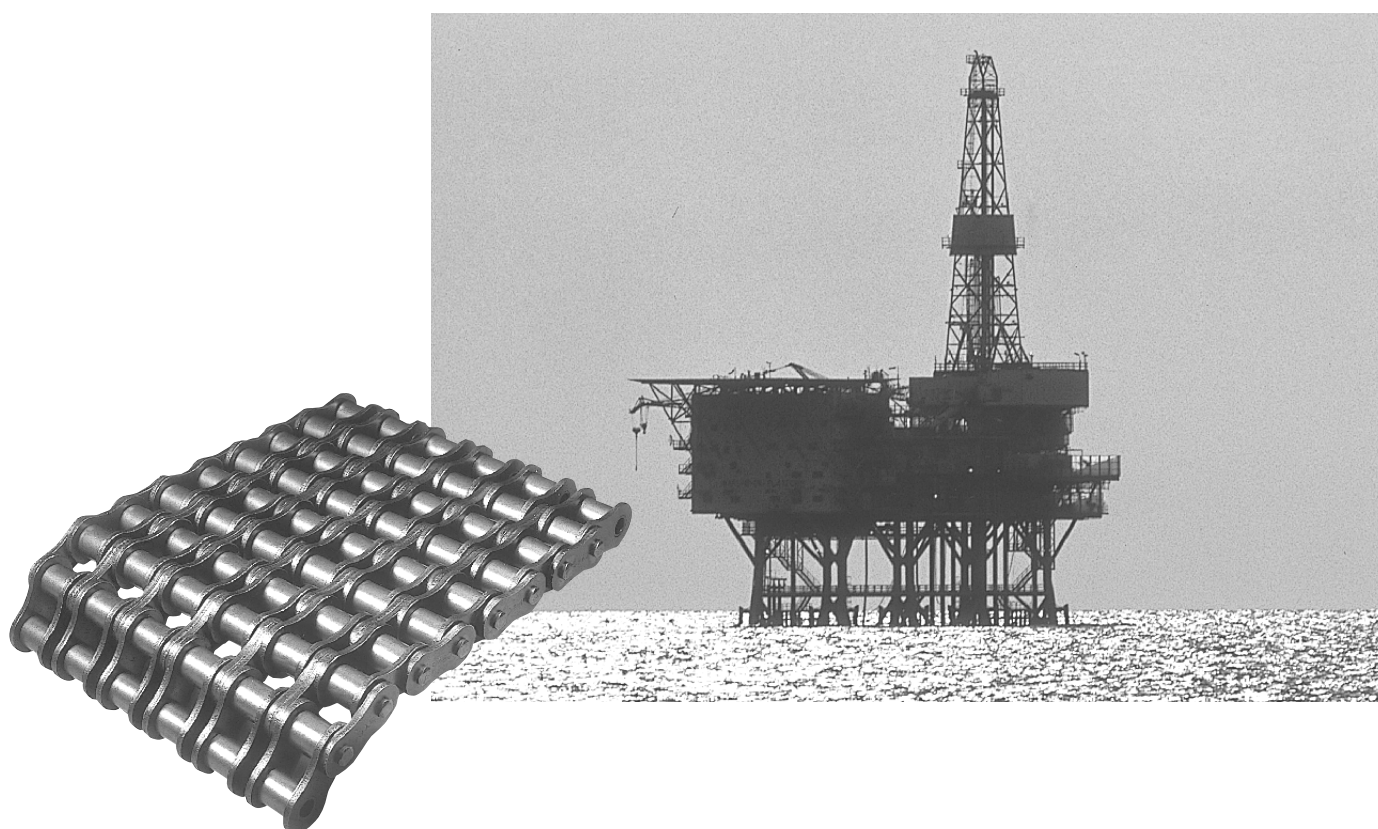
SY Heavy series roller chains are designed with thicker side plates to insure greater capacity for absorbing shock loads without fatigue failure of side plates. Also manufactured to close tolerances in accordance with ANSI specifications and are mainly used for applications where space and design limitations prohibit the use of a large size roller chain, and yet greater load carrying capacities are needed in oil-field drilling operations.

HE TYPE

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY 80HE	25.4	15.88	15.88	7.93	35.5	38.8	17.8	21.1	23.4	4.0	—	93.2	18.4	2.80
SY 80HE-2					68.4	71.3	34.2	37.1			32.6	186	28.4	5.54
SY 80HE-3					101.0	104.0	50.5	53.5			280	41.8	8.26	
SY 80HE-4					133.6	136.7	66.8	69.9			373	55.1	10.98	
SY 80HE-5					166.2	169.3	83.1	86.2			466	65.1	13.71	
SY 80HE-6					199.0	201.9	99.4	102.5			559	76.8	16.43	
SY 80HE-8					264.0	267.1	132.0	135.1			746	104	21.88	
SY100HE	31.75	19.05	19.05	9.53	42.2	45.7	21.1	24.6	29.3	4.8	—	142	28.3	4.14
SY100HE-2					81.6	85.0	40.8	44.2			39.1	284	45.1	8.20
SY100HE-3					120.7	124.4	60.4	64.0			426	66.3	12.26	
SY100HE-4					159.0	163.5	79.7	83.5			568	87.5	16.33	
SY100HE-5					198.5	202.3	99.3	103.0			710	103	20.39	
SY100HE-6					238.2	241.8	119.1	122.7			852	122	24.45	
SY100HE-8					316.4	320.0	158.2	161.8			1136	164	32.58	
SY100HE-10					394.6	398.2	197.3	200.9			1420	199	40.70	
SY120HE	38.10	25.40	22.23	11.10	52.6	57.0	26.3	30.7	35.1	5.6	—	191	38.0	5.83
SY120HE-2					102.0	106.1	51.0	55.1			48.9	382	58.3	11.56
SY120HE-3					150.6	154.6	75.3	79.3			573	85.8	17.29	
SY120HE-4					199.2	203.7	99.6	104.1			764	113	23.02	
SY120HE-5					247.8	252.6	123.9	128.7			955	134	28.75	
SY120HE-6					297.6	301.5	148.8	152.7			1146	158	34.48	
SY120HE-8					395.4	399.7	197.7	202.0			1528	213	45.94	
SY120HE-10					493.2	497.5	246.6	250.9			1910	257	57.40	

※Refer to page 80. "Selection of offset link"

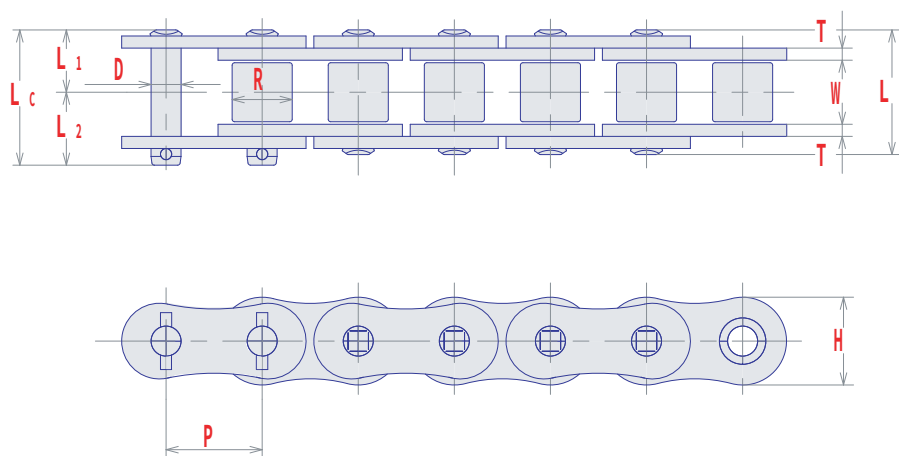
SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
		P	W	R	D	LR	LC	L1	L2		H			
SY140HE	44.45	25.40	25.40	12.70	57.0	61.6	28.5	33.1	40.9	6.4	52.2	252	50.3	8.41
SY140HE-2					109.4	114.0	54.7	59.3				504	76.7	16.59
SY140HE-3					161.8	166.4	80.9	85.5				756	113	24.77
SY140HE-4					214.0	218.7	107.0	111.7				1008	149	32.96
SY140HE-5					266.2	270.9	133.1	137.8				1260	176	41.15
SY140HE-6					318.4	323.1	159.2	163.9				1512	207	49.33
SY140HE-8					422.8	427.5	211.4	216.1				2016	280	65.78
SY160HE	50.80	31.75	28.58	14.28	67.7	72.9	33.9	39.1	46.7	7.2	61.9	319	66.3	10.86
SY160HE-2					129.8	134.9	64.9	70.0				638	100.	21.21
SY160HE-3					191.8	196.8	95.9	100.9				957	147	31.54
SY160HE-4					253.7	258.8	126.9	131.9				1276	194	41.89
SY160HE-6					377.5	382.6	188.8	193.8				1914	270	62.58
SY180HE	57.15	35.70	35.70	17.45	75.7	81.3	37.9	43.5	52.5	8.0	68.6	441	70.6	15.18
SY180HE-2					144.2	149.8	72.1	77.7				882	121	30.06
SY180HE-3					212.8	218.7	106.4	112.3				1323	179	44.94
SY180HE-4					281.4	287.4	140.7	146.7				1764	236	59.83
SY200HE	63.50	38.10	39.67	19.83	84.9	93.2	42.5	50.8	59.8	9.5	78.3	559	82.3	17.85
SY200HE-2					163.1	172.0	81.6	90.4				1118	138	35.20
SY200HE-3					241.4	250.3	120.7	129.6				1677	204	52.53
SY200HE-4					319.8	328.6	159.9	168.7				2236	269	69.94
SY240HE	76.20	47.63	47.63	23.78	110.2	117.7	55.6	62.0	70.3	12.7	101.2	883	112.8	32.29
SY240HE-2					211.6	218.9	105.8	113.1				1766	192	62.06
SY240HE-3					312.6	320.1	156.3	163.8				2649	283	91.82
SY240HE-4					414.0	421.3	207.0	214.3				3532	373	121.58



SUPER ROLLER CHAINS

SY Super standard series roller chains are developed to offer you longer service life , thus leading to labor-savings. Thorough consideration to fitting portions and the use of high-grade special alloy steel components ensure the chain's greater resistance of fatigue and shock. Operative on standard roller chain sprockets.

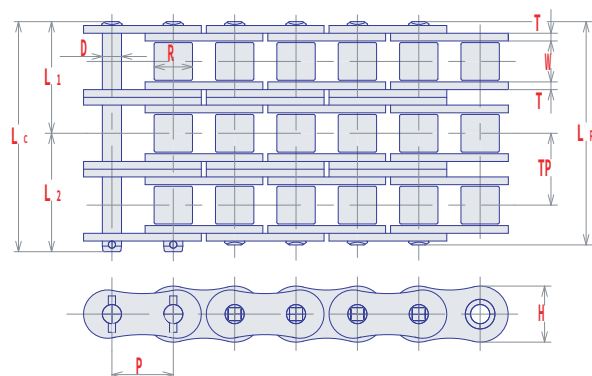
SY super heavy series roller chains provided with link plates of next larger chain size promise you higher performance and superior quality.



- Note: 1. Offset links are not available.
 2. Riveted type chain will be provided unless otherwise specified.
 Cottered type chain will be provided upon request.
 3. Press-fitted type connecting links will be supplied.

SINGLE STRANDS

SY Chain No. (ANSI)	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
					P	W	R	D					
SUPER 80	25.40	15.88	15.88	7.93	32.6	35.5	16.3	19.2	24.1	3.2	84.3	18.6	2.81
SUPER 100	31.75	19.05	19.05	9.53	39.8	43.2	19.9	23.3	30.1	4.0	127	30.4	4.26
SUPER 120	38.10	25.40	22.23	11.10	49.7	53.7	24.9	28.8	36.2	4.8	186	39.2	6.30
SUPER 140	44.45	25.40	25.40	12.70	54.0	58.3	27.0	31.3	42.2	5.6	245	53.9	8.04
SUPER 160	50.80	31.75	28.58	14.28	64.4	69.0	32.2	36.8	48.2	6.4	314	70.6	10.8
SUPER 200	63.50	38.10	39.67	19.83	78.6	86.2	39.3	46.9	60.3	8.0	490	94.1	17.6
SUPER 240	76.20	47.63	47.63	23.78	96.4	103.4	48.2	55.2	72.4	9.5	726	132	25.6
SUPER 80H	25.40	15.88	15.88	7.93	35.9	38.9	18.0	20.9	24.1	4.0	98.1	20.6	3.33
SUPER 100H	31.75	19.05	19.05	9.53	42.6	46.2	21.3	24.9	30.1	4.8	145	32.4	4.88
SUPER 120H	38.10	25.40	22.23	11.10	52.8	57.3	26.4	30.9	36.2	5.6	196	42.2	6.94
SUPER 140H	44.45	25.40	25.40	12.70	57.2	61.9	28.6	33.3	42.2	6.4	255	56.9	8.87
SUPER 160H	50.80	31.75	28.58	14.28	67.9	72.8	34.0	38.8	48.2	7.1	324	73.5	11.7



MULTIPLE STRANDS

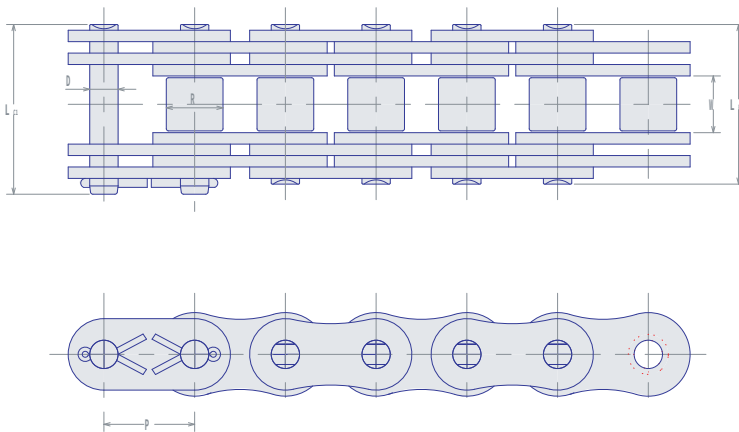
SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
		P	W	R	D	LR	LC	L1	L2		H			
SUPER80-2	25.40	15.88	15.88	7.93	62.0	64.9	31.0	33.9	24.1	3.2	29.3	169	31.6	5.63
SUPER80-3					91.3	94.2	45.7	48.5				253	46.5	8.41
SUPER80-4					120.6	123.5	60.3	63.2				337	61.4	11.18
SUPER100-2	31.75	19.05	19.05	9.53	75.4	79.0	37.7	41.3	30.1	4.0	35.8	254	51.7	8.38
SUPER100-3					111.2	114.8	55.6	59.2				381	76.0	12.57
SUPER100-4					147.0	150.6	73.5	77.1				508	100	16.77
SUPER120-2	38.10	25.40	22.23	11.10	95.4	99.4	47.7	51.7	36.2	4.8	45.4	372	66.6	12.44
SUPER120-3					140.8	144.8	70.4	74.4				558	98.0	18.65
SUPER120-4					186.2	190.2	93.1	97.1				744	129	24.85
SUPER140-2	44.45	25.40	25.40	12.70	103.3	107.6	51.7	55.9	42.2	5.6	48.9	490	91.6	15.92
SUPER140-3					152.2	156.5	76.1	80.4				735	135	23.84
SUPER140-4					201.1	205.4	100.6	104.8				980	178	30.72
SUPER160-2	50.80	31.75	28.58	14.28	123.2	127.8	61.6	66.2	48.2	6.4	58.5	628	120	21.44
SUPER160-3					181.7	186.3	90.9	95.4				942	177	32.10
SUPER160-4					240.2	244.8	120.1	124.7				1256	233	42.84
SUPER200-2	63.50	38.10	39.67	19.83	150.6	158.2	75.3	82.9	60.3	8.0	71.6	980	160	34.91
SUPER200-3					222.2	229.8	111.1	118.7				1470	235	52.44
SUPER200-4					293.8	301.4	146.9	154.5				1960	311	69.74
SUPER240-2	76.20	47.63	47.63	23.78	184.2	191.2	92.1	99.1	72.4	9.5	87.8	1452	224	50.88
SUPER240-3					272.0	279.0	136.0	143.0				2178	330	76.12
SUPER240-4					359.8	366.8	179.9	186.9				2904	436	101.40
SUPER 80H-2	25.40	15.88	15.88	7.93	68.6	399.4	34.3	365.1	24.1	4.0	32.6	196.2	35.02	6.67
SUPER 80H-3					101.2	432.0	50.6	381.4				294.3	51.5	9.96
SUPER100H-2	31.75	19.05	19.05	9.53	81.6	85.4	40.8	44.6	30.1	4.8	39.1	290	55.08	9.6
SUPER100H-3					120.7	124.5	60.4	64.1				435	81.0	14.4
SUPER120H-2	38.10	25.40	22.23	11.10	102.0	173.4	51.0	122.4	36.2	5.6	48.9	392	71.74	13.71
SUPER120H-3					150.9	222.3	75.5	79.6				588	105.5	20.55
SUPER140H-2	44.45	25.40	25.40	12.70	109.6	274.5	54.8	219.7	42.2	6.4	52.2	510	96.73	17.56
SUPRR140H-3					161.8	326.7	80.9	245.8				765	142.25	26.3
SUPER160H-2	50.80	31.75	28.58	14.28	223.7	388.6	111.9	276.8	48.2	7.1	61.9	648	124.95	23.15
SUPER160H-3					285.6	450.5	142.8	100.7				972	183.75	34.67

Double Capacity Chains

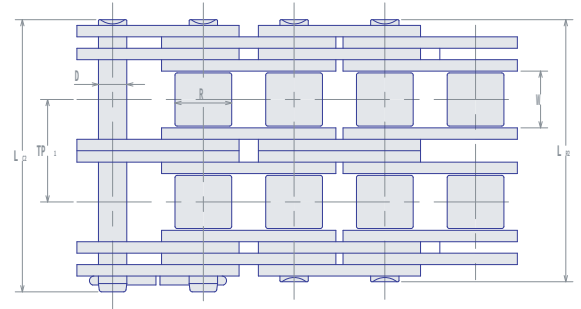
Double Capacity Chain is a single strand chain that offers the same ultimate tensile strength as a double strand chain with a saving of 50%.

Double Capacity Chain consists of twice the amount of side plates as single strand chain.

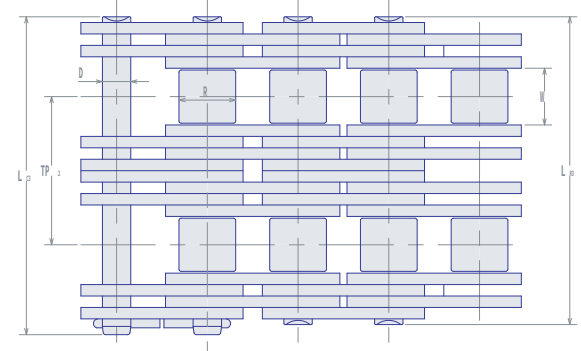
DC(×2)



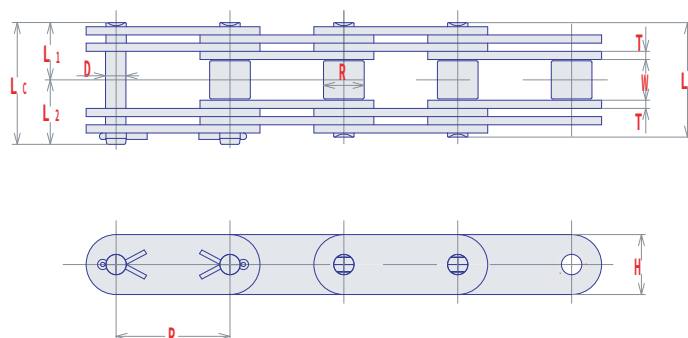
TC(×3)



FC(×4)



SY Chain No.	Dimensions - mm								Average Ultimate Strength (kN)			Maximum Allowable Load (kN)
	Pitch	Roller		Pin		Transverse Pitch						
		Width	Dia.	Dia.	Length							
	P	W	R	D	LR1	LC1	TP1	TP2	DC	TC	FC	DC
16BDC • TC • FC	25.40	17.02	15.88	8.26	50.0	53.2	31.9	44.7	137	205	274	19.5
20BDC • TC • FC	31.75	19.56	19.05	10.16	56.0	60.4	36.5	50.5	212	318	424	30.2
24BDC • TC • FC	38.10	25.40	25.40	14.63	75.4	80.5	48.4	68.0	359	538	718	51.2
28BDC • TC • FC	44.45	31.00	27.94	15.88	93.0	98.8	59.6	84.8	447	670	894	63.8
32BDC • TC • FC	50.80	31.00	29.21	17.81	92.4	98.5	58.6	83.8	549	823	1098	78.4
80DC • TC • FC	25.40	15.88	15.88	7.93	45.6	48.7	29.3	42.1	157	235	314	22.4
100DC • TC • FC	31.75	19.05	19.05	9.53	55.8	59.5	35.8	51.8	235	352	470	33.5
120DC • TC • FC	38.10	25.40	22.23	11.10	69.0	73.3	45.4	64.2	343	514	686	49.0
140DC • TC • FC	44.45	25.40	25.40	12.70	76.4	81.1	48.9	71.3	451	676	902	64.4
160DC • TC • FC	50.80	31.75	28.58	14.28	90.0	95.1	58.5	84.1	559	838	1118	79.8
180DC • TC • FC	57.15	35.70	35.70	17.45	101.6	107.7	65.8	94.6	726	1089	1452	103.0
200DC • TC • FC	63.50	38.10	39.67	19.83	111.2	120.0	71.6	103.6	932	1398	1864	133.0
240DC • TC • FC	76.20	47.63	47.63	23.78	135.6	143.2	87.8	125.8	1353	2029	2706	193.0

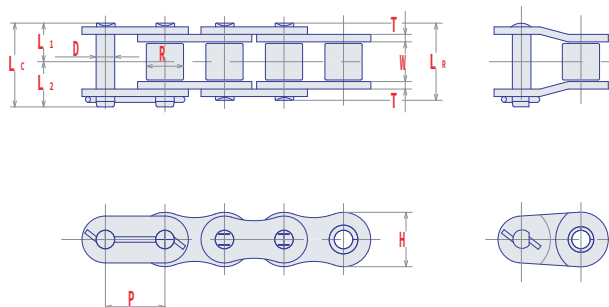


DOUBLE PITCH TYPE

SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
					P	W	R	D					
2040 DC	25.40	7.95	7.92	3.96	23.0	24.7	11.5	13.2	11.4	1.5	38.2	4.02	0.50
2050 DC	31.75	9.53	10.16	5.08	28.8	30.5	14.4	16.1	15.0	2.0	63.8	6.72	0.85
2060H DC	38.10	12.70	11.91	5.95	42.2	44.2	21.1	23.1	17.0	3.2	109.8	11.56	1.46
2080H DC	50.80	15.88	15.88	7.93	52.0	55.1	26.0	29.1	22.6	4.0	180.4	18.99	2.50
2100H DC	63.50	19.05	19.05	9.53	62.0	65.6	31.0	34.6	28.6	4.8	274.0	28.84	3.81
2120H DC	76.20	25.40	22.23	11.10	77.8	82.1	38.9	43.2	34.9	5.6	372.0	39.16	5.50
2160H DC	101.60	31.75	28.58	14.28	97.4	102.6	48.7	53.9	47.6	7.2	612.0	64.42	9.27

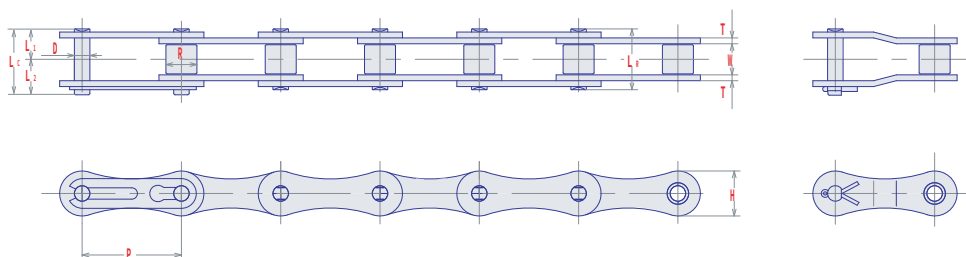
S-SERIES ROLLER CHAINS

S-series roller chains are designed for high breaking strength and maximum endurance in pursuit of greater chain rigidity. Combination of plates one size thicker than standard's and thick, tough pins ensures accurate operations and long performance life under harsh, heavy loads. Single strand roller chains of this series run on standard single roller chain sprockets.



SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximu Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate					
		Width	Dia.	Dia.	Length			Height	Thick.				
					P	W	R			D			
SY 251S	50.80	31.75	28.58	15.88	67.9	73.2	34.0	39.2	46.7	7.2	333	58.8	11.31
SY 264S	63.50	38.10	39.67	22.22	85.8	94.5	42.9	51.6	59.8	9.5	556	81.4	19.27

DOUBLE PITCH ROLLER CHAINS (DRIVE SERIES)

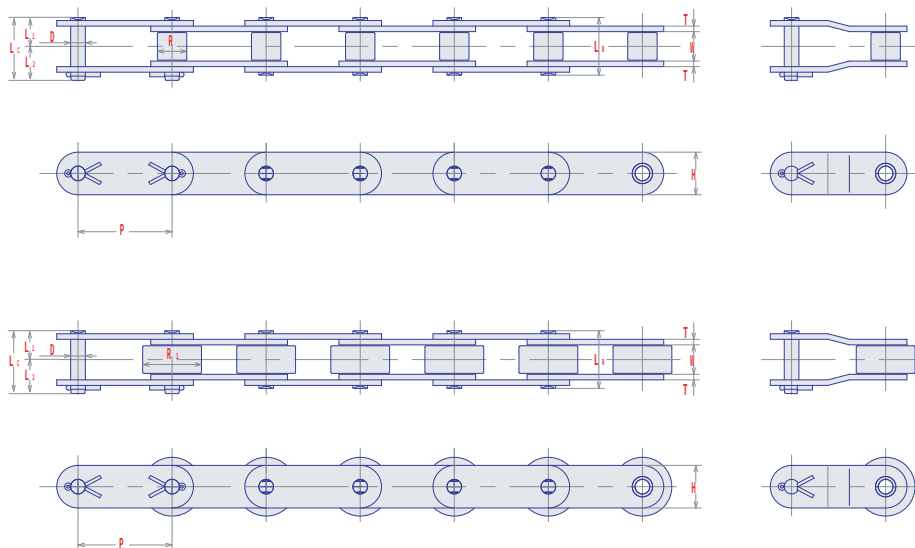


DRIVE SERIES

SY Chain No. (ANSI)	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
		P	W	R	D	LR	LC	L1	L2	H			
A2040	25.40	7.95	7.92	3.96	16.5	17.9	8.3	9.6	11.4	1.5	16.7	2.65	0.43
A2050	31.75	9.53	10.16	5.08	20.4	22.0	10.2	11.8	15.0	2.0	27.5	4.31	0.73
A2060	38.10	12.70	11.91	5.95	25.5	26.9	12.8	14.1	17.0	2.4	40.2	6.23	1.03
A2080	50.80	15.88	15.88	7.93	32.8	35.2	16.4	18.8	22.6	3.2	68.2	10.7	1.71



DOUBLE PITCH ROLLER CHAINS (CONVEYOR SERIES)



STANDARD ROLLER TYPE

SY Chain No. (ANSI)	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
	P	W	R	D	LR	LC	L1	L2	H	T	kN	kN	kg/m
C2040	25.40	7.95	7.92	3.96	16.5	18.5	8.2	10.3	11.4	1.5	16.9	3.63	0.48
C2050	31.75	9.53	10.16	5.08	20.4	22.0	10.2	11.8	15.0	2.0	27.5	6.28	0.82
C2060H	38.10	12.70	11.91	5.95	28.7	31.0	14.4	16.6	17.0	3.2	40.2	8.63	1.38
C2080H	50.80	15.88	15.88	7.93	35.5	38.8	17.8	21.0	22.6	4.0	68.6	14.7	2.32
C2100H	63.50	19.05	19.05	9.53	42.2	45.7	21.1	24.6	28.6	4.8	107.9	22.6	3.46
C2120H	76.20	25.40	22.23	11.10	52.6	57.0	26.3	30.7	34.9	5.6	151.0	30.4	4.92
C2160H	101.60	31.75	28.58	14.28	67.7	72.9	33.9	39.0	47.6	7.2	257.9	53.0	8.02

CARRIER ROLLER TYPE

SY Chain No. (ANSI)	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
	P	W	R	D	LR	LC	L1	L2	H	T	kN	kN	kg/m
C2042	25.40	7.95	15.88	3.96	16.5	18.5	8.2	10.3	11.4	1.5	16.9	3.63	0.82
C2052	31.75	9.53	19.05	5.08	20.4	22.0	10.2	11.8	15.0	2.0	27.5	6.28	1.26
C2062H	38.10	12.70	22.23	5.95	28.7	31.0	14.4	16.6	17.0	3.2	40.2	8.63	2.08
C2082H	50.80	15.88	28.58	7.93	35.5	38.8	17.8	21.0	22.6	4.0	68.6	14.7	3.36
C2102H	63.50	19.05	39.67	9.53	42.2	45.7	21.1	24.6	28.6	4.8	107.9	22.6	5.64
C2122H	76.20	25.40	44.45	11.10	52.6	57.0	26.3	30.7	34.9	5.6	151.0	30.4	7.87
C2162H	101.60	31.75	57.15	14.28	67.7	72.9	33.9	39.0	47.6	7.2	257.9	53.0	12.77

Stainless Steel Chains

SS series stainless steel roller chains provide excellent corrosion protection against low or high temperature, acid, alkali, moisture, scale, oil and magnetism.

SS series stainless steel roller chains are manufactured in accordance with the dimensions ANSI standards.

INTRODUCTION OF SY NEW HIGH POWER NEW SSS SERIES PRODUCTS

SSS series stainless steel roller chains with solid rollers.

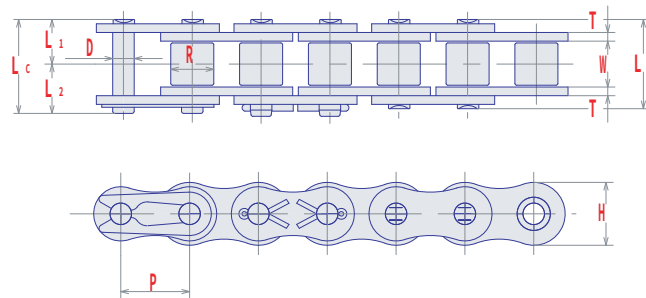
Anti-magnetic of solid roller has superior permeability than the common curled roller.

High Power New SSS Chain use a specially treated pin and roller.

Extremely long life is engaged by this surface treatment.

SSS series chain life is more than 2 times longer than that of normal SS series Chain.

50% Higher Allowable Loads



BS AND ANSI STAINLESS STEEL CHAIN

SY Chain No.	Dimensions - mm										Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
					P	W	R	D					
06B-SS	9.525	5.72	6.35	3.28	12.6	13.4	6.3	7.1	8.2	1.0/1.25	6.18	0.27	0.43
08B-SS	12.70	7.75	8.51	4.45	16.7	17.8	8.4	9.4	11.8	1.5			
10B-SS	15.875	9.65	10.16	5.08	19.0	20.6	9.5	11.1	14.7	1.65			
12B-SS	19.05	11.68	12.07	5.72	22.0	23.6	11.0	12.6	16.1	1.8			
16B-SS	25.40	17.02	15.88	8.26	35.1	38.2	17.6	20.6	20.3	3.2/4.0			
	P	W	R	D	LR	LC	L1	L2	H	T1/T2	kN	kN	kg/m
SY 35-SS	9.525	4.78	▲5.08	3.58	12.2	13.7	6.1	7.6	9.0	1.25	5.68	0.26	0.34
SY 40-SS	12.70	7.95	7.92	3.96	16.9	18.5	8.5	10.0	11.7	1.5	11.1	0.44	0.60
SY 50-SS	15.875	9.53	10.16	5.08	20.8	22.3	10.4	11.9	14.6	2.0	17.6	0.68	0.98
SY 60-SS	19.05	12.70	11.91	5.95	26.0	27.9	13.0	14.9	17.5	2.4	24.5	1.03	1.46
SY 80-SS	25.40	15.88	15.88	7.93	32.8	35.5	16.4	19.1	23.4	3.2	42.3	1.77	2.52
SY 100-SS	31.75	19.05	19.05	9.53	40.0	43.3	20.0	23.3	29.3	4.0	51.0	2.55	3.91
※SY 120-SS	38.10	25.40	22.23	11.10	50.4	54.2	25.2	29.0	35.1	4.8	68.6	3.92	5.76
※SY 140-SS	44.45	25.40	25.40	12.70	54.0	58.3	27.0	31.3	40.9	5.6	88.2	4.66	7.41
※SY 160-SS	50.80	31.75	28.58	14.28	64.3	68.7	32.2	36.5	46.7	6.4	109.8	6.37	9.79

▲Chain is rollerless R shows bushing dia.

※304 Stainless steel.



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※304 Stainless steel

Selection of Stainless Steel Chain

Chain selection should be made based on the bearing pressure as shown below

$$\text{Max. Allowable Load : } \frac{\left(\frac{\text{PIN DIA. (mm)}}{1000} \right) \times \left(\frac{\text{BUSHING LENGTH (mm)}}{1000} \right) \times P \text{ (Mpa)}}{1000} = \text{kN}$$

$$\text{Max. Allowable Load} \geq f_1 \times f_2 \times f_3 \times f_4 \times f_5 \times [\text{Calculated Chain Tension}]$$

		NEW Chain			
		SS SERIES		SSS SERIES	600 SERIES
Material	Plate	SUS304	SUS316	SUS304	SUS304
	Pin	SUS304	SUS316	SUS304	600
	Bushing	SUS304	SUS316	SUS304	SUS304
	Roller	SUS304	SUS316	SUS304	600
Shap of roller		Solid	Solid	Solid	Solid
Bearing Pressure (P)		9.8	9.8	14.7	14.7
Non-Magnetize		○	◎	○	△
Corrosion Resistance		○	◎	○	△
Heat Resistance		○	◎	○	○
Wear Resistance		△	△	○	◎
Stress Corrosin		✕	◎	✕	✕
Cracking Resistance					
Chain Number		#35 - #120	#35 - #120	#35 - #160	#40 - #100
		- C2100H	- C2080H	- C2100H	- C2100H

Rating :
 ◎Excellent
 ○Good
 △Fair
 ×Not Recommended

Service Factor (f1)

Condition	(f1)
Smooth	1.0
Some Impact	1.2
Large Impact	1.5

Service Factor (f2)

Chain Speed (m/s)	(f2)
0 - 15	1.0
15 - 30	1.2
30 - 50	1.4
50 - 70	1.6

Service Factor (f3)

Temperature (°C)	304SS	316SS	600
-40 to -20	1.0	1.0	×
-20 - 400	1.0	1.0	1.0
400 - 500	1.2	1.2	1.8
500 - 600	1.5	1.5	×
600 - 700	1.8	1.8	×
700 - 800	×	2.0	×

×:Not Recommended

Service Factor (f4)

See next page

Corrosion Rating	(f4)
1	1.00
2	1.23
3	1.44
4	×

×: Not Recommended

Service Factor (f5)

Lubrication	(f5)
Lubricate	1.00
dry	1.44

STAINLESS CHAIN CORROSION RESISTANCE GUIDE

CORROSION RATING

Agent	Stainless Steel			Agent	Stainless Steel		
	304	600	316		304	600	316
Acidic acid 20 ºC	1	1	1	Linseed Oil	1	1	1
Boiling	2	2	1	Lye 20 ºC	1	1	1
Acidic Vapors	3	4	2	Boiling	2	3	1
Acetone	1	1	1	Magnesium Chloride 20 ºC	2	3	1
Alcohol	1	1	1	Hot	3	4	2
Aluminum Chloride	3	4	2	Malic acid	1	1	1
Aluminum Sulfate 20 ºC	1	1	1	Marsh gas	1	1	1
Boiling	2	3	1	Mayonnaise	2	3	1
Ammonia	1	1	1	Mercury	1	1	1
Ammonium Chloride 20 ºC	1	1	1	Milk	1	1	1
Boiling	2	3	1	Mine water (acid)	1	1	1
Ammonium Nitrate	1	1	1	Molasses	1	1	1
Baking Soda	1	1	1	Nickel Chloride	2	3	1
Barium Carbonate	1	1	1	Nickel Sulfate	1	1	1
Barium Chloride 20 ºC	1	1	1	Nitric Acid 20 ºC	1	1	1
Hot	2	3	1	Concentrated Boiling	3	4	2
Beer	1	1	1	Fuming	3	4	2
Beet Juice	1	1	1	Oleic Acid	2	3	1
Benzine	1	1	1	Oils Mineral	1	1	1
Bleaching Powder	2	4	1	Vegetable	1	1	1
Blood(meat juices)	1	1	1	Refined	1	1	1
Boric Acid	1	1	1	Crude	2	3	1
Calcium Chloride(Alkaline)	2	2	1	Oxalic Acid	1	1	1
Calcium Chloride	3	4	2	Paraffin	1	1	1
Calcium Sulfate	1	1	1	Phenol (Carbolic acid)	1	1	1
Carbolic Acid	1	1	1	Phosphoric Acid boiling	4	4	3
Carbon Tetrachloride	1	2	1	Potash	1	1	1
Caustic Lime, Potassium	1	1	1	Potassium Chloride	2	3	1
Chlorine gas Dry	3	4	2	Potassium Cyanide	1	1	1
Moist	4	4	3	Potassium Nitrate	1	1	1
Chlorinated water	2	3	1	Potassium Sulfate	1	1	1
Chromic Acid 20 ºC	1	1	1	Potassium Sulfide	1	1	1
Boiling	3	4	1	Salt 20 ºC	1	2	1
Citric Acid 20 ºC	1	1	1	65 ºC	2	3	1
Boiling	3	4	1	Sea Water	2	3	1
Ferric Chloride	3	4	2	Sewage(sulfuric acid)	2	3	1
Formic Acid	2	3	1	Sodium Acetate	1	1	1
Fruit juices	1	2	1	Sodium Chloride 20 ºC	1	1	1
Fuel Oil	1	1	1	Boiling	2	3	1
Fuel oil with sulfuric	3	4	3	Sodium Cyanide	1	1	1
Gasoline	1	1	1	Sodium Fluoride	2	3	1
Glue	1	1	1	Sodium Hydroxide	1	1	1
Glue acidified	2	3	1	Sodium Peroxide	1	1	1
Glycerin	1	1	1	Sodium Sulfate	1	1	1
Grape juices	1	1	1	Sodium Sulfide	2	3	1
Gypsum(Calcium Sulfate)	1	1	1	Sodium Sulfite	1	1	1
Hydrochloric acid 2%	4	4	4	Soap	1	1	1
Hydrogen Peroxide 30%	1	2	1	Sulfuric Acid 20 ºC	2	3	1
Hydrogen Sulfide Dry	1	1	1	Boiling	4	4	2
Moist	4	4	4	Fuming	3	4	1
Iodine Dry	1	1	1	Vapor	2	3	1
Moist	4	4	3	Vinegar(Acetic Acid)	1	1	1
Ketchup	1	1	1	Whiskey	1	1	1
Lactic acid 20 ºC	1	1	1	Wood Pulp	1	1	1
65 ºC	3	4	1	Zinc Chloride 20 ºC	1	1	1
Lard	1	1	1	Boiling	3	4	2

AQUA-PROOF ROLLER CHAINS

Feature

Excellent corrosion resistance without plating same strength and working load values as standard chain No hydrogen embrittlement by surface treatment.

Results of corrosion resistant tests

Salt spray test

CHAINS	Hour for Rust developed(hours)
Special surface treated	1000 No rust
Glossy chromating	72~96
Colored chromating	120~240
Molten zinc plating	120~240

Salt spray test

CHAINS	Hour for Rust developed(hours)
Nickel plated	48
Special surface treated	600~840
Made of SUS304 stainless steel	above 840 No rust

Applications

Outdoor service
Sea water applications
Stacking crane, Car parking

Applicable Chains

#40~#240
Attachment chain is available.

Purpose of Special surface treatment

Linkplate : for anticorrosion
Other parts : for anticorrosion and to reduce friction

Caution

For the food products industry where the chain may be exposed to direct food contact, stainless steel chain is recommended.

Applicable Chains

SY40AP~SY240AP
Attachment chain is available.
For identification, a suffix is added to the chain numbers.

THE ULTIMATE ROLLER CHAIN LONG LIFE SERIES

SBR
AQUA-PROOF
ROLLER CHAIN

BS STANDARD ROLLER CHAINS
ANSI STANDARD ROLLER CHAINS
HEAVY-SERIES ROLLER CHAINS
S-SERIES ROLLER CHAINS
SUPER ROLLER CHAINS
OIL-FIELD CHAINS
ROLLERLESS CHAINS
STRAIGHT SIDEBAR CHAINS
DOUBLE PITCH ROLLER CHAINS etc.

ANTICORROSION TEST

STANDARD	NP	STAINLESS STEEL	AP	Open air, splashed water morning&evening
				3days after

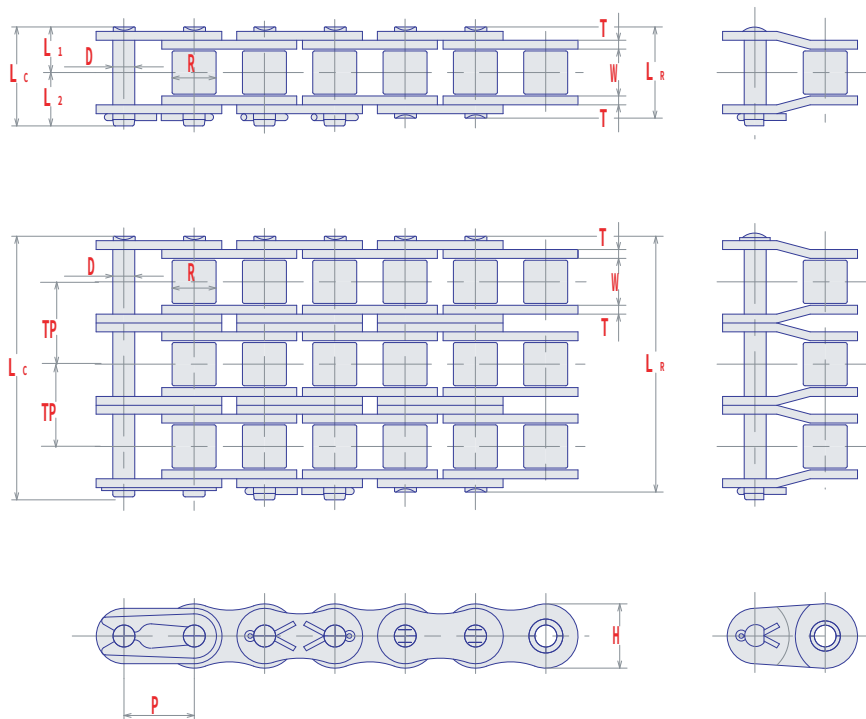
STANDARD	NP	STAINLESS STEEL	AP	Open air, splashed water morning&evening
				15days after

STANDARD	NP	STAINLESS STEEL	AP	Indoors, splashed 5% salty water morning&evening
				15days after

Nickel-Plated BS Chains

Ideal for outdoor operations and in situations where machinery and equipment must be run in a lightly corrosive atmosphere or where good chain appearance may be desired.

For identification, a suffix NP is added to the chain numbers.



NP BS STANDARD

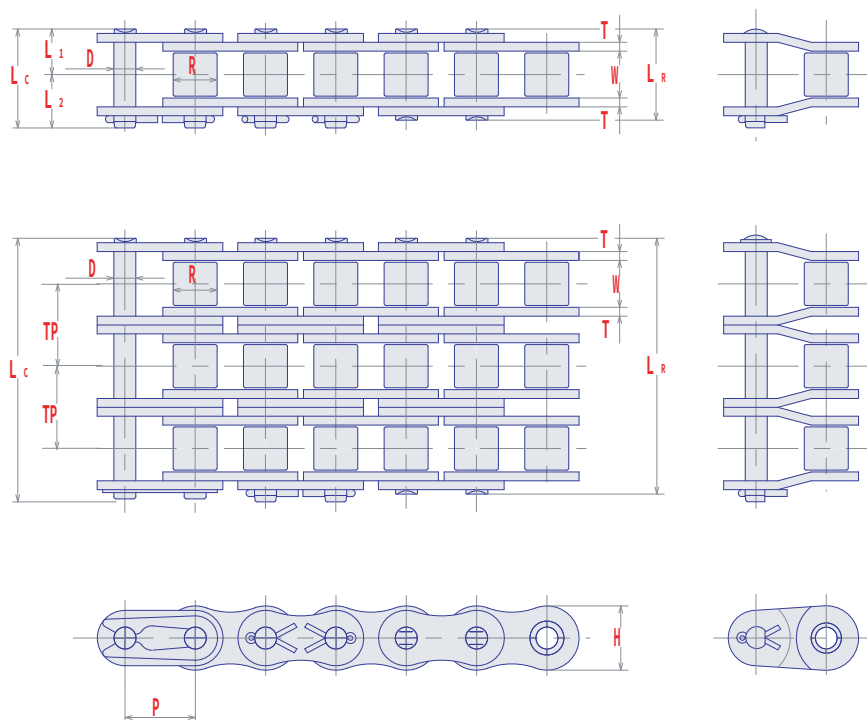
SY Chain No.	Dimensions - mm												Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
					L _R	L _C	L ₁		L ₂	T ₁		T ₂			
P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m	
06B-NP	9.525	5.72	6.35	3.28	12.6	13.4	6.3	7.1	8.2	1.0	1.25	10.24	8.92	1.77	0.43
08B-NP	12.70	7.75	8.51	4.45	16.7	18.0	8.4	9.6	11.8	1.5	1.5	13.92	17.8	3.14	0.61
10B-NP	15.875	9.65	10.16	5.08	19.0	20.7	9.5	11.2	14.7	1.65	1.65	16.59	22.2	4.90	0.89
12B-NP	19.05	11.68	12.07	5.72	22.0	23.6	11.0	12.6	16.1	1.8	1.8	19.46	28.9	7.06	1.14
16B-NP	25.40	17.02	15.88	8.26	35.1	38.2	17.6	20.5	20.6	3.2	4.0	31.88	60	12.6	2.59
20B-NP	31.75	19.56	19.05	10.16	40.2	44.0	20.1	23.9	26.4	3.5	4.5	36.45	95	19.6	3.76
06B-NP-2	9.525	5.72	6.35	3.28	22.9	23.7	11.5	12.2	8.2	1.0	1.25	10.24	16.9	3.00	0.81
08B-NP-2	12.70	7.75	8.51	4.45	30.6	31.9	15.3	16.6	11.8	1.5	1.5	13.92	31.1	5.35	1.26
10B-NP-2	15.875	9.65	10.16	5.08	35.6	37.3	17.8	19.5	14.7	1.65	1.65	16.59	44.5	8.33	1.79
12B-NP-2	19.05	11.68	12.07	5.72	41.6	43.1	20.8	22.3	16.1	1.8	1.8	19.46	57.8	12.0	2.28
16B-NP-2	25.40	17.02	15.88	8.26	67.2	70.1	33.6	36.5	20.6	3.2	4.0	31.88	106	21.4	5.13
20B-NP-2	31.75	19.56	19.05	10.16	76.8	80.6	38.4	42.2	26.4	3.5	4.5	36.45	170	33.3	7.26

※Refer to page 80. " Selection of offset link "

Nickel-Plated ANSI Chains

Ideal for outdoor operations and in situations where machinery and equipment must be run in a lightly corrosive atmosphere or where good chain appearance may be desired.

For identification, a suffix NP is added to the chain numbers.



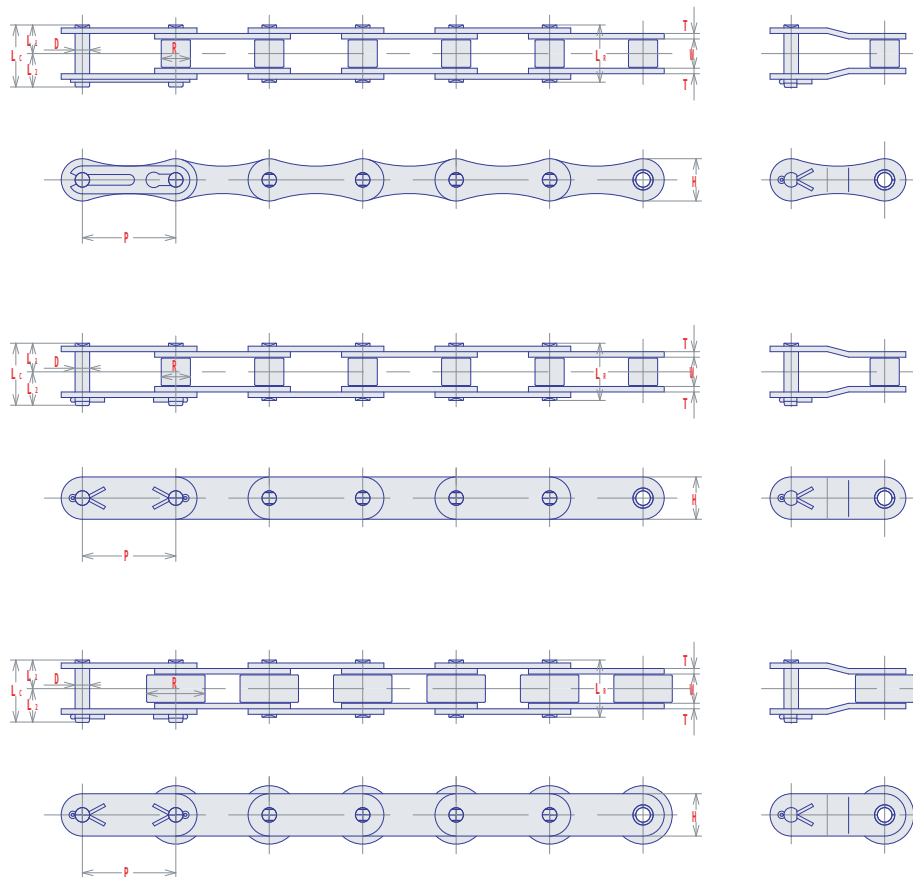
NP ANSI STANDARD

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thick.					
		P	W	R	D	LR	LC	L1	L2		H			
SY 35NP	9.525	4.78	*5.08	3.58	12.0	12.9	6.0	6.9	9.0	1.25		10.8	1.86	0.34
SY 40NP	12.70	7.95	7.92	3.96	16.5	17.7	8.3	9.4	11.7	1.5		19.1	3.04	0.60
SY 50NP	15.875	9.53	10.16	5.08	20.4	21.9	10.2	11.7	14.6	2.0		31.9	5.39	0.98
SY 60NP	19.05	12.70	11.91	5.95	25.5	26.9	12.8	14.1	17.5	2.4		43.1	7.26	1.46
SY 80NP	25.40	15.88	15.88	7.93	32.8	35.5	16.4	19.1	23.4	3.2		78.5	12.7	2.52
SY100NP	31.75	19.05	19.05	9.53	39.4	43.0	19.7	23.3	29.3	4.0		118	19.1	3.91
SY 35NP-2	9.525	4.78	*5.08	3.58	22.1	23.0	11.1	11.9	9.0	1.25	10.1	21.6	3.16	1.63
SY 40NP-2	12.70	7.95	7.92	3.96	30.8	32.2	15.4	16.8	11.7	1.5	14.4	38.2	5.17	1.22
SY 50NP-2	15.875	9.53	10.16	5.08	38.4	40.0	19.2	20.8	14.6	2.0	18.1	63.8	9.06	2.00
SY 60NP-2	19.05	12.70	11.91	5.95	48.2	49.7	24.0	25.7	17.5	2.4	22.8	86.2	12.3	2.95
SY 80NP-2	25.40	15.88	15.88	7.93	61.6	64.5	30.8	33.7	23.4	3.2	29.3	157	21.6	5.10
SY100NP-2	31.75	19.05	19.05	9.53	75.1	78.8	37.6	41.2	29.3	4.0	35.8	236	32.5	7.74

*Chain is rollerless ;R shows bushing dia.

※Refer to page 80. "Selection of offset link"

Nickel-Plated Double Pitch Chains

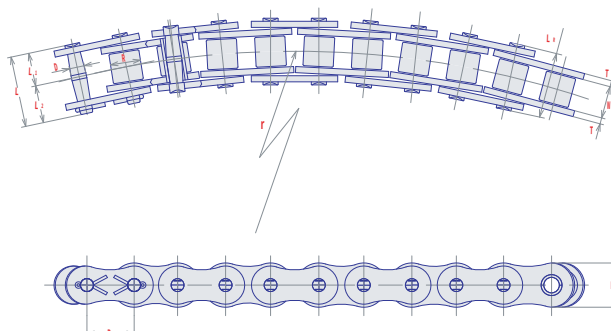


NP DOUBLE PITCH

SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
					P	W	R	D					
A2040-NP	25.40	7.95	7.92	3.96	16.4	18.5	8.2	10.3	11.4	1.5	16.9	2.65	0.43
A2050-NP	31.75	9.53	10.16	5.08	20.3	22.0	10.2	11.8	15.0	2.0	27.5	4.31	0.73
A2060-NP	38.10	12.70	11.91	5.95	25.4	27.5	12.7	14.8	17.0	2.4	40.2	6.23	1.03
A2080-NP	50.80	15.88	15.88	7.93	32.4	35.5	16.4	19.1	22.6	3.2	68.6	10.7	1.71
C2040-NP	25.40	7.95	7.92	3.96	16.4	18.5	8.2	10.3	11.4	1.5	16.9	2.65	0.48
C2050-NP	31.75	9.53	10.16	5.08	20.3	22.0	10.2	11.8	15.0	2.0	27.5	4.31	0.82
C2060H-NP	38.10	12.70	11.91	5.95	28.7	31.0	14.4	16.6	17.0	3.2	40.2	8.29	1.38
C2080H-NP	50.80	15.88	15.88	7.93	35.5	38.8	17.8	21.0	22.6	4.0	68.6	15.2	2.32
C2100H-NP	63.50	19.05	19.05	9.53	42.2	45.7	21.1	24.6	28.6	4.8	107.9	23.0	3.46
C2042-NP	25.40	7.95	15.88	3.96	16.4	18.5	8.2	10.3	11.4	1.5	16.9	2.65	0.82
C2052-NP	31.75	9.53	19.05	5.08	20.3	22.0	10.2	11.8	15.9	2.0	27.5	4.31	1.26
C2062H-NP	38.10	12.70	22.23	5.95	28.7	31.0	14.4	16.6	17.0	3.2	40.2	8.29	2.08
C2082H-NP	50.80	15.88	28.58	7.93	35.5	38.8	17.8	21.0	22.6	4.0	68.6	15.2	3.36
C2102H-NP	63.50	19.05	39.67	9.53	42.2	45.7	21.1	24.6	28.6	4.8	107.9	23.0	5.64

Side Bow Chains

SY Side Bow chains provide extra clearance between pins, bushings, and link plates to allow freedom of operation around a curve or twist. The basic dimensions and quality are the same as those of ANSI standard roller chains. Side bow chain is widely used for live roll conveyors, and with attachments to convey material around curves. For identification, the suffix SB is added the number.



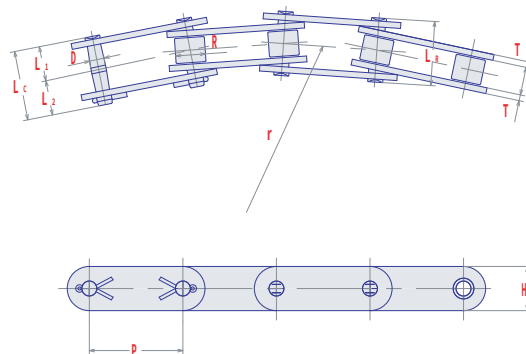
SB STANDARD

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Min. Curve Radius				
		Width	Dia.	Out Dia.	Length				Height		Thick.			
					P	W	R	D						
SY 40-SB	12.70	7.95	7.92	3.96	16.9	18.9	8.5	10.4	11.7	1.5	350	14.9	1.77	0.63
SY 50-SB	15.875	9.53	10.16	5.08	21.1	23.1	10.6	12.5	14.6	2.0	400	22.1	3.14	1.03
SY 60-SB	19.05	12.70	11.91	5.95	26.3	28.1	13.2	14.9	17.5	2.4	500	29.4	4.22	1.46
SY 80-SB	25.40	15.88	15.88	7.93	33.4	36.4	16.7	19.7	23.4	3.2	600	57.9	7.65	2.42

○Stainless steel, nickel plated, and with attachments are supplied on request.

Side Bow Double Pitch Chains

SY Double pitch side bow chains are manufactured to the same high standards as our regular side bow chains but are better suited when shaft centers are relatively long. Available in standard roller or carrier roller type.

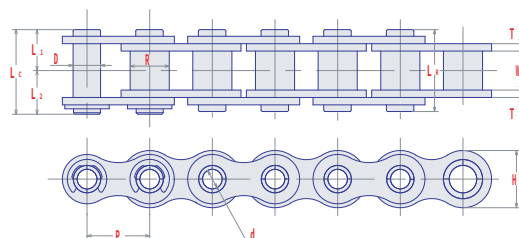


SB DOUBLE PITCH

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Min. Curve Radius				
		Width	Dia.	Out Dia.	Length			Height	Thick.					
					L _R	L _C	L ₁				L ₂			
P	W	R	D	L _R	L _C	L ₁	L ₂	H	T	r	kN	kN	kg/m	
C2040-SB	25.40	7.95	7.92	3.96	16.9	18.9	8.5	10.4	11.4	1.5	700	14.9	1.77	0.48
C2050-SB	31.75	9.53	10.16	5.08	21.1	23.1	10.6	12.5	15.0	2.0	800	22.1	3.14	0.82
C2060-SB	38.10	12.70	11.91	5.95	26.3	28.1	13.2	14.9	17.0	2.4	1000	29.4	4.22	1.20
C2042-SB	25.40	7.95	15.88	3.96	16.9	18.9	8.5	10.4	11.4	1.5	700	14.9	1.77	0.82
C2052-SB	31.75	9.53	19.05	5.08	21.1	23.1	10.6	12.5	15.0	2.0	800	22.1	3.14	1.26
C2062-SB	38.10	12.70	22.23	5.95	26.3	28.1	13.2	14.9	17.0	2.4	1000	29.4	4.22	2.01

HOLLOW PIN CHAINS

SY Hollow pin chains are identical to ANSI roller chains, and run on standard ANSI sprockets. The unique hollow pin feature provides unlimited conveyor versatility, allowing easy insertion of cross rods or attachments to pre-assembled chain at desired spacing. For identification, the suffix HP is added to the chain numbers.



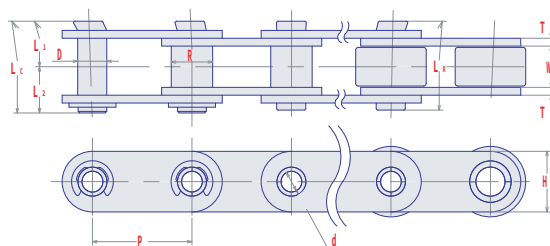
HP STANDARD

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Hollow Pin						Plate				
		Width	Dia.	Outside	Inside	Length				Height	Thick.			
						P	W	R	D					
SY 40-HP	12.70	7.95	7.92	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	12.7	1.77	0.58
SY 50-HP	15.875	9.53	10.16	7.09	5.13	20.1	21.3	10.1	11.2	15.0	2.0	19.6	3.14	0.97
SY 60-HP	19.05	12.70	11.91	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	28.4	4.22	1.46
SY 80-HP	25.40	15.88	15.88	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	51.0	7.65	2.47

HP standard are rollerless; R given above shows bushing dia.

DOUBLE PITCH HOLLOW PIN CHAINS

SY Hollow pin chains with oil less parts are quality chains functioning rationally, combining both advantages of hollow pin chains and self-lube chains. Available on the same sprockets as double-pitch roller chains.

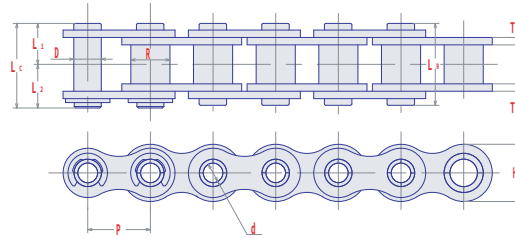


HP DOUBLE PITCH

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Hollow Pin						Plate				
		Width	Dia.	Outside	Inside	Length				Height	Thick.			
						P	W	R	D					
C2040-HP	25.40	7.95	7.92	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	12.7	1.77	0.46
C2050-HP	31.75	9.53	10.16	7.09	5.13	20.1	21.3	10.1	11.2	15.0	2.0	19.6	3.14	0.76
C2060-HP	38.10	12.70	11.91	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	28.4	4.22	1.12
C2080-HP	50.80	15.88	15.88	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	51.0	7.65	1.98
C2042-HP	25.40	7.95	15.88	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	12.7	1.77	0.81
C2052-HP	31.75	9.53	19.05	7.09	5.13	20.1	21.3	10.1	11.2	15.0	2.0	19.6	3.14	1.25
C2062-HP	38.10	12.70	22.23	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	28.4	4.22	1.79
C2082-HP	50.80	15.88	28.58	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	51.0	7.65	3.17
C2082H-HP	50.80	15.88	28.58	11.34	8.08	35.8	37.7	17.9	19.8	24.1	4.0	58.0	7.65	3.22

SY Chains C2040-HP thru C2080-HP are rollerless; R given above shows bushing dia.

Stainless Hollow Pin Chains

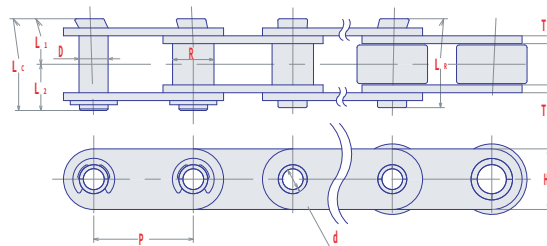


HP-SS STANDARD

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin						Plate				
		Width	Dia.	Outside	Inside	Length				Height	Thick.			
		P	W	R	D	d	L _R	L _C	L ₁	L ₂	H			
40HP-SS	12.70	7.95	7.92	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	7.65	0.44	0.58
50HP-SS	15.875	9.53	10.16	7.09	5.13	20.1	21.3	10.1	11.2	15.0	2.0	11.8	0.69	0.97
60HP-SS	19.05	12.70	11.91	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	17.1	1.03	1.46
80HP-SS	25.40	15.88	15.88	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	31.0	1.77	2.47

HP standard are rollerless; R given above shows bushing dia.

Double Pitch Stainless Hollow Pin Chains



HP-SS DOUBLE PITCH

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin						Plate				
		Width	Dia.	Outside	Inside	Length				Height	Thick.			
						P	W	R	D					
C2040HP-SS	25.40	7.95	7.92	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	7.65	0.44	0.46
C2050HP-SS	31.75	9.53	10.16	7.09	5.13	20.1	21.3	10.1	11.2	15.0	2.0	11.8	0.69	0.76
C2060HP-SS	38.10	12.70	11.91	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	17.1	1.03	1.12
C2080HP-SS	50.80	15.88	15.88	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	31.0	1.77	1.98
C2042HP-SS	25.40	7.95	15.88	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	7.65	0.44	0.81
C2052HP-SS	31.75	9.53	19.05	7.09	5.13	20.1	21.3	10.1	11.2	15.0	2.0	11.8	0.69	1.25
C2062HP-SS	38.10	12.70	22.23	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	17.1	1.03	1.79
C2082HP-SS	50.80	15.88	28.58	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	31.0	1.77	3.17
C2082H-HP-SS	50.80	15.88	28.58	11.34	8.08	35.8	37.7	17.9	19.8	24.1	4.0	31.0	1.77	3.22

SY Chains C2040-HP thru C2080-HP are rollerless; R given above shows bushing dia.

Sintered Steel Bushing Self-Lube Chains

Oil-impregnated sintered steel bushing roller chain is self-lubricating. No additional lubrication is necessary. SL type self-lube chain is made with a one-piece sintered bushing, i.e. bushed chain. The extra solid volume of the bushing offers longer life capacity, compared to SLR type chain. The SLR is a self-lube chain with rollers to reduce friction and to smooth the action of the chain over the sprockets. These are two types of SLR chain: one, with an inner link plate thickness that is of the next larger size chain to maintain the same strength of standard roller chain; and another with the same thickness of the standard link plate that provides approximately 80% of the maximum allowable load of standard roller chain.

(Chain size)	#40 - #120SL #40 - #120SLR and 08B - 32B SLR
(Sprocket)	Standard size
(Other applicable chains)	Hollow Pin Chain, Attachment Chain
(Operating temperature)	- 10°C to + 60°C
(Range of speed)	From slow speed 25m/min to high speed 75m/min

(Selection and Caution)

- 1) In dusty environments, dusts absorb the lubrication of sintered steel bushings resulting in premature wear.
- 2) Used in water, the chain wears quickly.
- 3) When lubrication depletes in the sintered steel bushing, the chain wears abruptly.
- 4) When ambient temperature is over 80°C, lubrication seeps out quickly.
- 5) The sintered bushings are heat-treated, and allow standard chain selection.
- 6) Due to the use of sintered steel bushing, an application associated with shock load is not appropriate.

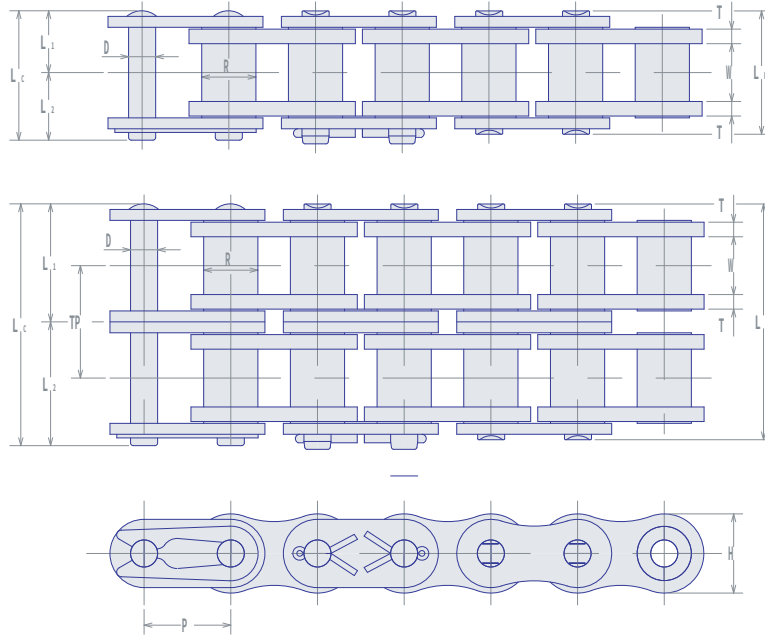


SL Standard Chain



SLR Standard Chain

Sintered Steel Bushing SL ANSI Standard Roller Chains



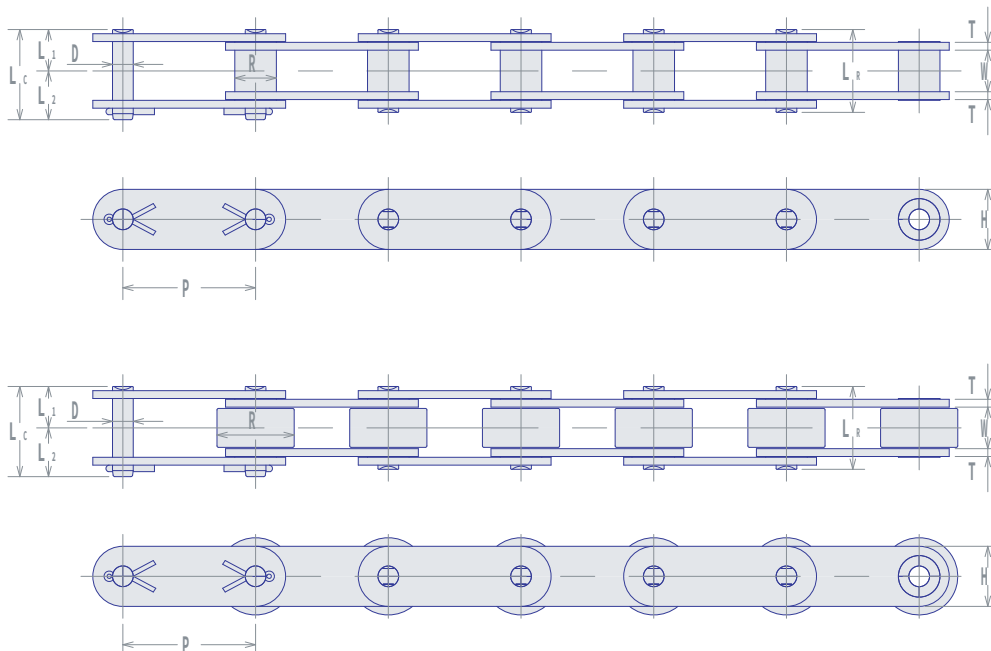
SINGLE STRANDS

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thick.					
	P	W	R	D	LR	LC	L1	L2	H	T	TP			
SY40-SL	12.70	7.7	7.92	3.96	16.5	17.9	8.3	9.6	12.0	1.5	—	12.7	2.94	0.63
SY50-SL	15.875	9.4	10.16	5.08	20.4	22.0	10.2	11.8	15.1	2.0	—	19.6	4.90	1.03
SY60-SL	19.05	12.5	11.91	5.95	25.5	26.9	12.8	14.1	18.2	2.4	—	28.4	6.86	1.46
SY80-SL	25.40	15.8	15.88	7.93	32.8	35.5	16.4	18.6	24.1	3.2	—	51.0	11.8	2.60
SY100-SL	31.75	19.0	19.05	9.53	39.4	43.0	19.7	23.3	30.2	4.0	—	82.4	17.7	3.79
SY120-SL	38.10	25.4	22.23	11.10	49.5	53.4	24.8	28.6	36.2	4.8	—	118.0	25.5	5.58
SY140-SL	44.45	25.4	25.40	12.70	54.0	58.3	27.0	31.3	42.2	5.6	—	162.0	34.3	7.59
SY160-SL	50.80	31.8	28.58	14.28	64.3	68.7	32.2	36.5	48.3	6.4	—	211.0	44.1	9.82

MULTIPLE STRANDS

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thick.					
					P	W	R				D			
SY40-SL-2	12.70	7.7	7.92	3.96	30.8	32.2	15.4	16.8	12.0	1.5	14.4	25.4	5.0	1.3
SY50-SL-2	15.875	9.4	10.16	5.08	38.4	40.0	19.2	20.8	15.1	2.0	18.1	39.2	8.3	2.1
SY60-SL-2	19.05	12.5	11.91	5.95	48.2	49.7	24.0	25.7	18.2	2.4	22.8	56.8	11.6	3.0
SY80-SL-2	25.40	15.8	15.88	7.93	61.6	64.5	30.8	33.7	24.1	3.2	29.3	102.0	20.0	5.2
SY100-SL-2	31.75	19.0	19.05	9.53	75.1	78.8	37.6	41.2	30.2	4.0	35.8	164.8	30.0	7.9
SY120-SL-2	38.10	25.4	22.23	11.10	94.9	98.8	47.5	51.3	36.2	4.8	45.4	236.0	43.3	11.5
SY140-SL-2	44.45	25.4	25.40	12.70	102.9	107.2	51.5	55.7	42.2	5.6	48.9	324.0	58.3	14.7
SY160-SL-2	50.80	31.8	28.58	14.28	122.8	127.2	61.4	65.6	48.3	6.4	58.5	422.0	75.0	19.5

Sintered Steel Bushing SL Double Pitch Roller Chains



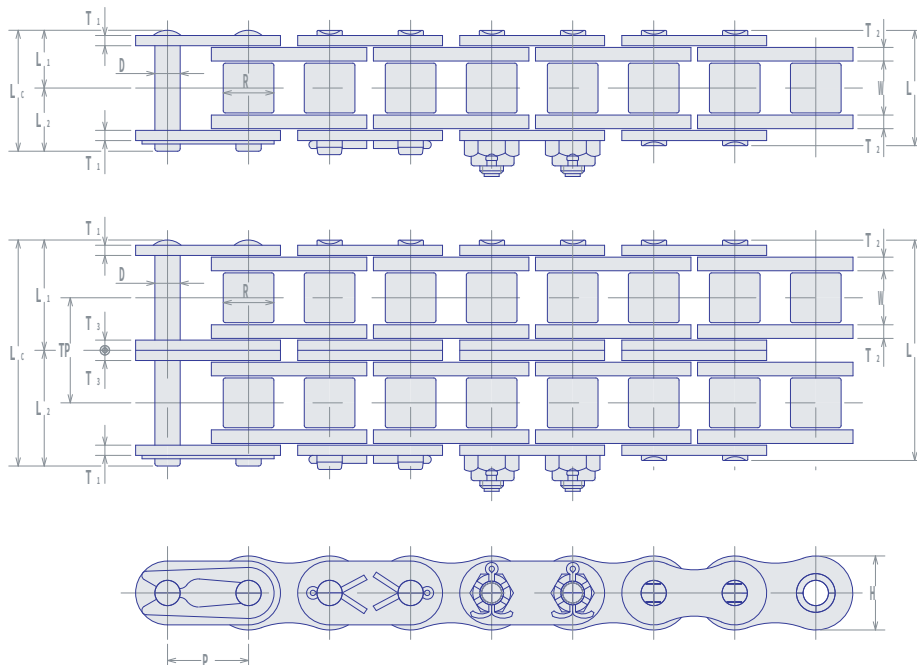
CONVEYOR SERIES (STANDARD ROLLER TYPE)

SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
					P	W	R	D					
C 2040-SL	25.40	7.95	7.92	3.96	16.5	17.9	8.3	9.6	12.0	1.5	12.7	2.94	0.48
C 2050-SL	31.75	9.53	10.16	5.08	20.4	22.0	10.2	11.8	15.0	2.0	19.6	4.90	0.82
C 2060-SL	38.10	12.70	11.91	5.95	25.5	26.9	12.8	14.1	18.1	2.4	28.4	6.86	1.20
C 2080-SL	50.80	15.88	15.88	7.93	32.8	35.0	16.4	18.6	24.1	3.2	51.0	11.8	1.99

CONVEYOR SERIES (CARRIER ROLLER TYPE)

SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
					P	W	R	D					
C 2042-SL	25.40	7.95	15.88	3.96	16.5	17.9	8.3	9.6	12.0	1.5	12.7	2.94	0.82
C 2052-SL	31.75	9.53	19.05	5.08	20.4	22.0	10.2	11.8	15.0	2.0	19.6	4.90	1.26
C 2062-SL	38.10	12.70	22.23	5.95	25.5	26.9	12.8	14.1	18.1	2.4	28.4	6.86	1.78
C 2082-SL	50.80	15.88	28.58	7.93	32.8	35.0	16.4	18.6	24.1	3.2	51.0	11.8	3.03

Sintered Steel Bushing SLR BS Standard Roller Chains



SINGLE STRANDS

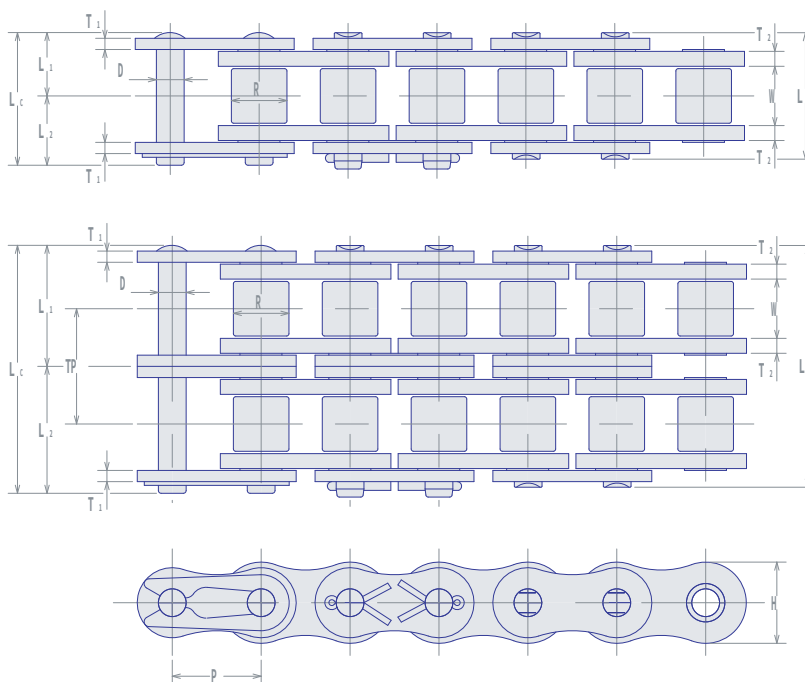
SY Chain No.	Dimensions - mm													Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				Trans. Pitch			
		Width	Dia.	Dia.	Length				Height	Thickness						
					P	W	R	D		LR	LC	L1				
08B-SLR	12.70	7.75	8.51	4.45	16.7	18.0	8.4	9.6	11.8	1.5	1.5	—	—	16.8	2.9	0.6
10B-SLR	15.875	9.65	10.16	5.08	19.0	20.7	9.5	11.2	14.5	1.65	1.65	—	—	24.6	4.4	0.9
12B-SLR	19.05	11.68	12.07	5.72	22.0	23.6	11.0	12.6	17.4	1.8	1.8	—	—	32.4	6.3	1.1
16B-SLR	25.40	17.02	15.87	8.26	35.1	38.2	17.6	20.5	21.0	3.1	3.9	—	—	74.6	12.2	2.6
20B-SLR	31.75	19.56	19.05	10.16	40.2	44.0	20.1	23.9	29.3	3.5	4.7	—	—	128.3	19.1	3.8
24B-SLR	38.10	25.40	25.40	14.63	53.4	58.1	26.7	31.4	35.1	4.7	5.9	—	—	195.6	25.5	7.3
28B-SLR	44.45	31.00	27.94	15.88	65.1	70.5	32.6	37.9	37.0	6.3	7.4	—	—	215.7	34.8	9.3
32B-SLR	50.80	31.00	29.21	17.81	64.2	69.6	32.1	37.5	42.2	6.3	6.9	—	—	274.6	44.1	9.9

MULTIPLE STRANDS

SY Chain No.	Dimensions - mm													Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate				Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness							
					P	W	R		D	LR	LC		L1			
08B-SLR-2	12.70	7.75	8.51	4.45	30.6	31.9	15.3	16.6	11.8	1.5	1.5	1.25	13.92	33.6	5.0	1.3
10B-SLR-2	15.875	9.65	10.16	5.08	35.6	37.3	17.8	19.5	14.5	1.65	1.65	1.65	16.59	49.2	7.5	1.8
12B-SLR-2	19.05	11.68	12.07	5.72	41.6	43.1	20.8	22.3	17.4	1.8	1.8	1.8	19.46	64.8	10.8	2.9
16B-SLR-2	25.40	17.02	15.87	8.26	67.2	70.1	33.6	36.5	21.0	3.1	3.9	3.1	31.88	149.2	20.7	5.1
20B-SLR-2	31.75	19.56	19.05	10.16	76.8	80.6	38.4	42.2	29.3	3.5	4.7	3.5	36.45	256.6	32.4	7.3
24B-SLR-2	38.10	25.40	25.40	14.63	101.8	106.5	50.9	55.6	35.1	4.7	5.9	4.7	48.36	391.2	43.3	14.5
28B-SLR-2	44.45	31.00	27.94	15.88	124.7	130.0	62.4	67.6	37.0	6.3	7.4	4.7	59.56	431.4	59.1	18.5
32B-SLR-2	50.80	31.00	29.21	17.81	123.6	129.2	61.8	67.4	42.2	6.3	6.9	4.7	58.55	549.2	74.7	19.8

Sintered Steel Bushing

SLR ANSI Standard Roller Chains (T.S)



SINGLE STRANDS

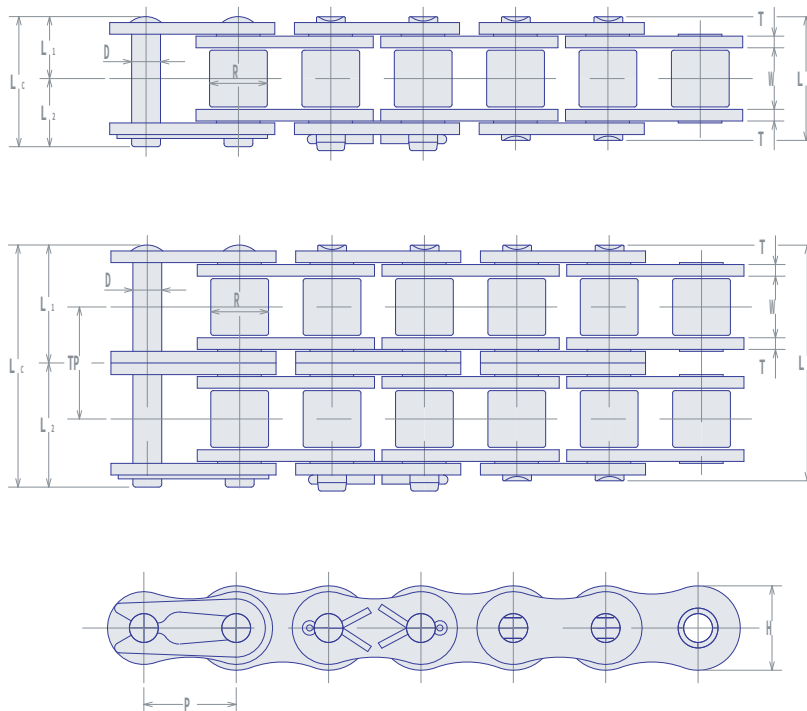
SY Chain No.	Dimensions - mm												Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
					L _R	L _C	L ₁		L ₂	T ₁		T ₂			
P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m	
SY40-SLR	12.70	7.95	7.92	3.96	17.5	19.0	8.8	10.2	11.7	1.5	2.0	—	19.1	3.63	0.7
SY50-SLR	15.875	9.53	10.16	5.08	21.3	23.0	10.7	12.3	14.6	2.0	2.4	—	31.9	6.28	1.1
SY60-SLR	19.05	12.70	11.91	5.95	27.4	29.0	13.7	15.3	17.5	2.4	3.2	—	43.1	8.63	1.7
SY80-SLR	25.40	15.88	15.88	7.93	34.1	37.4	17.1	20.3	23.4	3.2	4.0	—	78.5	14.7	2.7
SY100-SLR	31.75	19.05	19.08	9.53	41.0	44.8	20.5	24.3	29.3	4.0	4.8	—	118	22.6	4.3
SY120-SLR	38.10	25.40	22.23	11.10	51.1	55.2	25.6	29.6	35.1	4.8	5.6	—	167	30.4	6.0

MLTIPLE STRANDS

SY Chain No.	Dimensions - mm												Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
					L _R	L _C	L ₁		L ₂	T ₁		T ₂			
P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m	
SY40-SLR-2	12.70	7.95	7.92	3.96	33.1	34.6	16.6	18	11.7	1.5	2.0	15.6	3.82	6.17	1.3
SY50-SLR-2	15.875	9.53	10.16	5.08	40.5	42.2	20.3	21.9	14.6	2.0	2.4	19.2	63.8	10.7	2.0
SY60-SLR-2	19.05	12.70	11.91	5.95	52.3	53.9	26.2	27.7	17.5	2.4	3.2	24.9	86.2	14.7	3.3
SY80-SLR-2	25.40	15.88	15.88	7.93	65.2	68.5	32.6	35.9	23.4	3.2	4.0	31.1	157	25.0	5.1
SY100-SLR-2	31.75	19.05	19.08	9.53	78.6	82.4	39.3	43.1	29.3	4.0	4.8	37.6	236	38.4	8.2
SY120-SLR-2	38.10	25.40	22.23	11.10	99.1	103.2	49.6	53.6	35.1	4.8	5.6	48.0	334	51.7	11.7

Sintered Steel Bushing

SLR ANSI Standard Roller Chains (C.S)



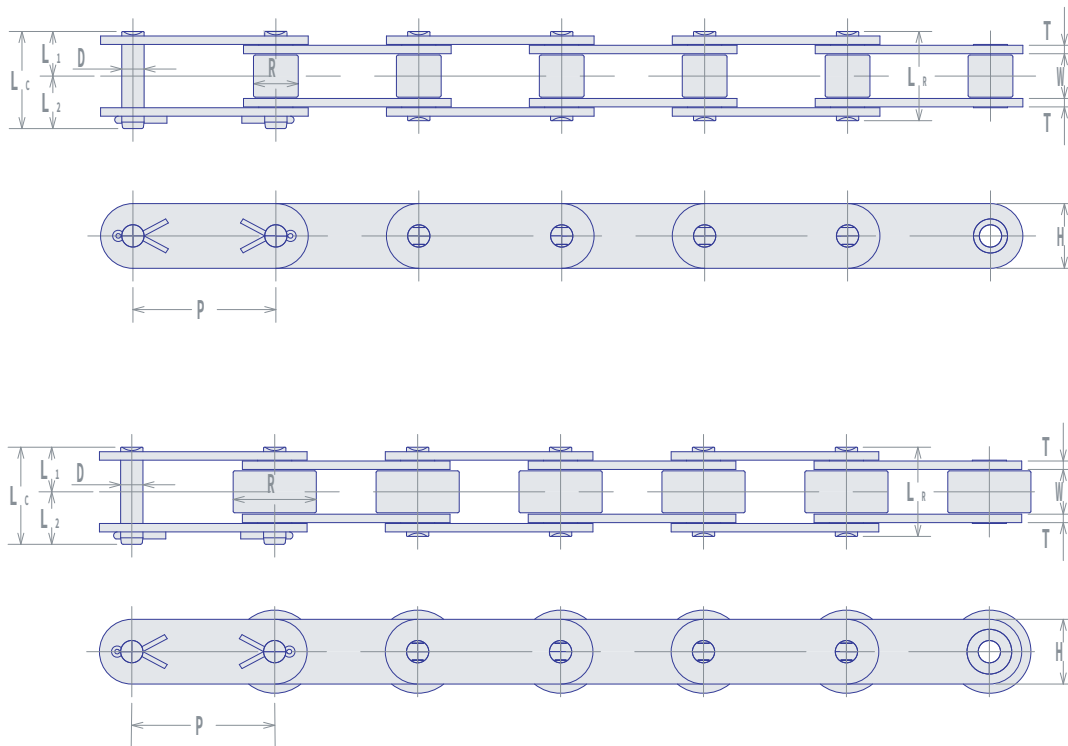
SINGLE STRANDS

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY40-SLR	12.70	7.95	7.92	3.96	16.5	18.1	8.3	9.8	11.7	1.5	—	15.7	3.62	0.6
SY50-SLR	15.875	9.53	10.16	5.08	20.5	22.3	10.3	12.0	14.6	2.0	—	25.5	6.27	1.0
SY60-SLR	19.05	12.70	11.91	5.95	25.9	27.5	13.0	14.5	17.5	2.4	—	37.3	8.63	1.5
SY80-SLR	25.40	15.88	15.88	7.93	33.0	35.9	16.5	19.4	23.4	3.2	—	63.7	14.7	2.5
SY100-SLR	31.75	19.05	19.08	9.53	39.8	43.1	19.9	23.2	29.3	4.0	—	100	22.5	3.9
SY120-SLR	38.10	25.40	22.23	11.10	49.8	53.2	24.9	28.3	35.1	4.8	—	157	30.4	5.8

MULTIPLE STRANDS

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate		Trans. Pitch				
		Width	Dia.	Dia.	Length				Height		Thick.			
					P	W	R	D						
SY40-SLR-2	12.70	7.95	7.92	3.96	31.1	32.7	15.6	17.1	11.7	1.5	14.4	31.4	6.3	1.1
SY50-SLR-2	15.875	9.53	10.16	5.08	39.1	40.7	19.6	21.1	14.6	2.0	18.1	51.0	10.6	1.9
SY60-SLR-2	19.05	12.70	11.91	5.95	49.3	50.9	24.7	26.2	17.5	2.4	22.8	54.6	15.1	2.8
SY80-SLR-2	25.40	15.88	15.88	7.93	62.2	65.5	31.1	34.4	23.4	3.2	29.3	127	25.7	4.9
SY100-SLR-2	31.75	19.05	19.08	9.53	75.4	79.1	37.7	41.4	29.3	4.0	35.8	200	39.3	7.6
SY120-SLR-2	38.10	25.40	22.23	11.10	95.4	99.6	47.7	51.9	35.1	4.8	45.4	314	53.2	11.1

Sintered Steel Bushing SLR Double Pitch Roller Chains



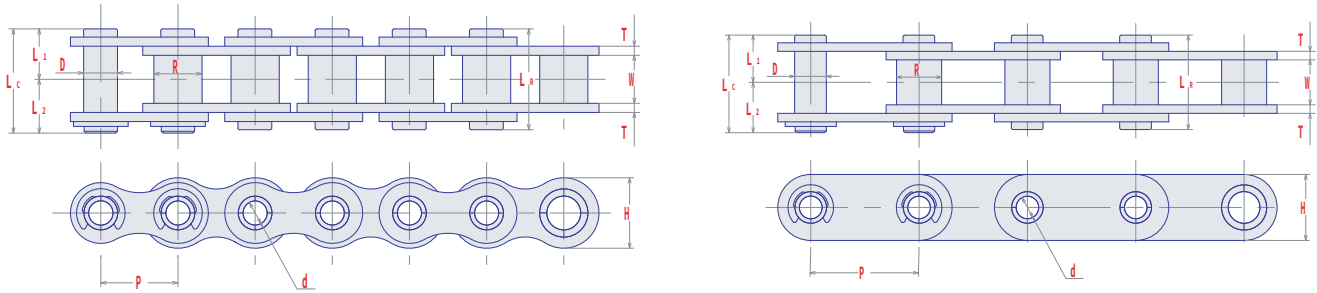
CONVEYOR SERIES (STANDARD ROLLER TYPE)

SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin				Plate					
		Width	Dia.	Dia.	Length				Height	Thick.			
	P	W	R	D	L _R	L _C	L ₁	L ₂	H	T	kN	kN	kg/m
C2040-SLR	25.40	7.95	7.92	3.96	16.5	18.5	8.3	10.2	11.5	1.5	15.7	2.65	0.5
C2050-SLR	31.75	9.53	10.16	5.08	20.5	22.5	10.3	12.2	15.1	2.0	25.5	4.31	0.8
C2060H-SLR	38.10	12.70	11.91	5.95	29.1	31.5	14.6	16.9	17.2	3.2	37.3	6.28	1.4
C2080H-SLR	50.80	15.88	15.88	7.93	35.8	39.0	17.9	21.1	22.8	4.0	63.7	10.7	2.4
C2100H-SLR	63.50	19.05	19.05	9.53	42.7	46.6	21.4	25.2	28.8	4.8	100	17.1	3.5

CONVEYOR SERIES (CARRIER ROLLER TYPE)

SY Chain No.	Dimensions - mm										Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin					Plate				
		Width	Dia.	Dia.	Length				Height	Thick.			
					P	W	R	D					
C2042-SLR	25.40	7.95	7.92	3.96	16.5	18.5	8.3	10.2	11.5	1.5	31.4	4.50	1.0
C2052-SLR	31.75	9.53	10.16	5.08	20.5	22.5	10.3	12.2	15.1	2.0	51.0	7.30	1.6
C2062H-SLR	38.10	12.70	11.91	5.95	29.1	31.5	14.6	16.9	17.2	3.2	74.6	10.6	2.8
C2082H-SLR	50.80	15.88	15.88	7.93	35.8	39.0	17.9	21.1	22.8	4.0	127	18.1	4.6
C2102H-SLR	63.50	19.05	19.05	9.53	42.7	46.6	21.4	25.2	28.8	4.8	200	29.0	6.9

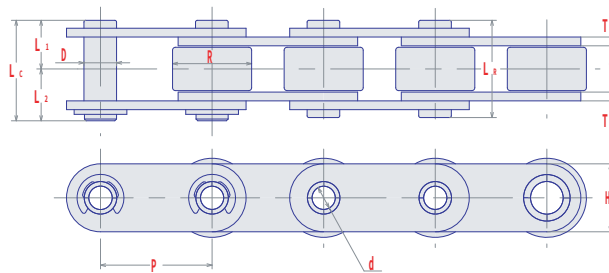
Sintered Steel Bushing HB-type Hollow Pin Chains



HP-SS DOUBLE PITCH

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin						Plate				
		Width	Dia.	Outside	Inside	Length				Height	Thick.			
						P	W	R	D					
HB40-SL	12.70	7.95	7.92	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	12.7	1.77	0.6
HB50-SL	15.875	9.53	10.16	7.09	5.13	20.1	21.5	10.1	11.2	15.0	2.0	19.6	3.14	1.0
HB60-SL	19.05	12.70	11.91	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	28.4	4.22	1.5
HB80-SL	25.40	15.88	15.88	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	51.0	7.65	2.5
HB2040-SL	25.40	7.95	7.92	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	12.7	1.77	0.5
HB2050-SL	31.75	9.53	10.16	7.09	5.13	20.1	21.5	10.1	11.2	15.0	2.0	19.6	3.14	0.8
HB2060-SL	38.10	12.70	11.91	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	28.4	4.22	1.1
HB2080-SL	50.80	15.88	15.88	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	51.0	7.65	2.0

Sintered Steel Bushing HR-type Hollow Pin Chains



HR-TYPE HOLLOW PIN CHAINS

SY Chain No.	Dimensions - mm											Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller		Pin						Plate				
		Width	Dia.	Outside	Inside	Length				Height	Thick.			
						P	W	R	D					
HR2042-SL	25.40	7.95	15.88	5.63	4.03	16.7	17.6	8.4	9.2	12.0	1.5	12.7	1.77	0.8
HR2052-SL	31.75	9.53	19.05	7.09	5.13	20.1	21.5	10.1	11.2	15.0	2.0	19.6	3.14	1.3
HR2062-SL	38.10	12.70	22.23	8.29	6.04	26.0	27.2	13.0	14.2	18.1	2.4	28.4	4.22	1.8
HR2082-SL	50.80	15.88	28.58	11.34	8.08	32.4	34.3	16.2	18.1	24.1	3.2	51.0	7.65	3.2

Maintenance Free Roller Chains

The chain is designed to hold high quality lubricant between the pin and bushing with seals. Expanded applications are now possible from low to high speed, light to heavy load, and where lubrication is not possible. This chain can drive for many hours without lubrication. Sales schedule will be in spring of 2004.

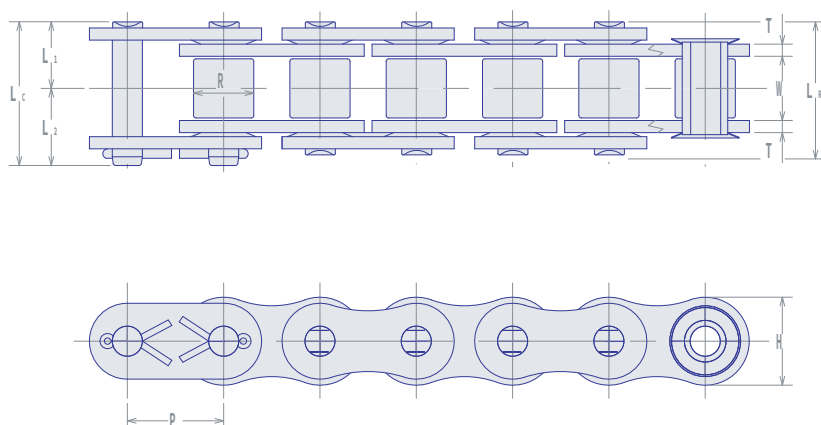
(Chain size)	#80 - #240 and 16B - 48B
(Sprocket)	Standard size
(Other applicable chains)	Attachment chains
(Operating temperature)	– 10°C to + 60°C (Special order up to max. 150°C)
(Range of speed)	From slow speed 25m/min to high speed 150m/min

(Selection and Caution)

- 1) Standard Sprocket is used. Note, however, the overall width of chain is slightly wider. Take this into consideration for designing.
- 2) When connecting the chain, make sure that all four (4) seals are installed.
- 3) Lubricate connecting link with ample lubrication before assembly.
- 4) When a lubrication leak is found (even at one location), replace that link immediately.
- 5) The maximum chain elongation limit is 1.5% of the chain length.
- 6) For use of chain in ambient temperature over 80°C, special lubrication for higher temperature is available upon request.
- 7) The covering plate of connecting link is a press-fit type with extra interferences.
- 8) An offset link is not available.



Maintenance Free Roller Chains



SY Chain No.	Dimensions - mm									Average Ultimate Strength	Maximum Allowable Load	Average Chain Weight
	Pitch	Roller						Plate				
		Width	Dia.	Length				Height	Thick			
	P	W	R	LR	LC	L1	L2	H	T	kN	kN	kg/m
MF 16A	25.40	15.9	15.88	34.8	37.5	17.4	20.1	23.4	3.2	78.5	18.4	2.6
MF 16B	25.40	17.1	15.88	35.8	38.5	17.9	20.6	23.4	3.2	78.5	18.4	2.7
MF 20AB	31.75	19.6	19.05	41.6	45.2	20.8	24.4	29.3	4.0	118	28.3	3.9
MF 24A	38.10	25.4	22.23	51.8	55.7	25.9	29.8	35.1	4.8	164	38.0	5.8
MF 24B	38.10	25.4	25.40	51.8	55.7	25.9	29.8	35.1	4.8	167	38.0	7.3
MF 28A	44.45	25.4	25.40	56.2	60.5	28.1	32.4	40.9	5.6	216	50.3	7.5
MF 28B	44.45	31.0	27.94	61.8	66.1	30.9	35.2	40.9	5.6	216	50.3	9.3
MF 32AB	50.80	31.6	28.58	66.6	71.0	33.3	37.7	46.7	6.4	275	66.3	9.8
MF 40AB	63.50	38.1	39.37	82.0	90.5	41.0	49.5	59.6	8.0	451	82.3	16.9
MF 48AB	76.20	47.5	47.63	100.0	107.7	50.0	57.7	70.3	9.5	677	112.8	23.6

Leaf Chains

SY Leaf chains are well suited for any application requiring flexible, high strength linkage for reciprocating motion or lift at relatively low speed. For their low cost and long life, widely used for lift trucks, masts and other lifting as construction and mining machines and excellent as balance and counterweights of machine tools and so forth.

CONSTRUCTION AND LACING COMBINATIONS

Built of interlaced plates held together by riveted pins. The chain nomenclature indicates the lacing combinations.

AL SERIES (LIGHT DUTY)

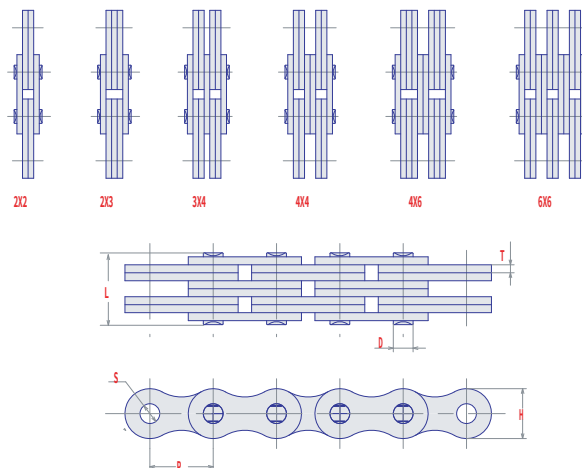
Consisting of link plates of the same contour and thickness as the pin link plates of ANSI roller chains in same pitch. Mainly used for relatively constant, low, medium load with less shock.

BL SERIES (HEAVY DUTY)

Consisting of link plates with next large size pitch chain of ANSI roller chains. Chiefly used for medium load with greater shock.

LL SERIES (ISO 606)

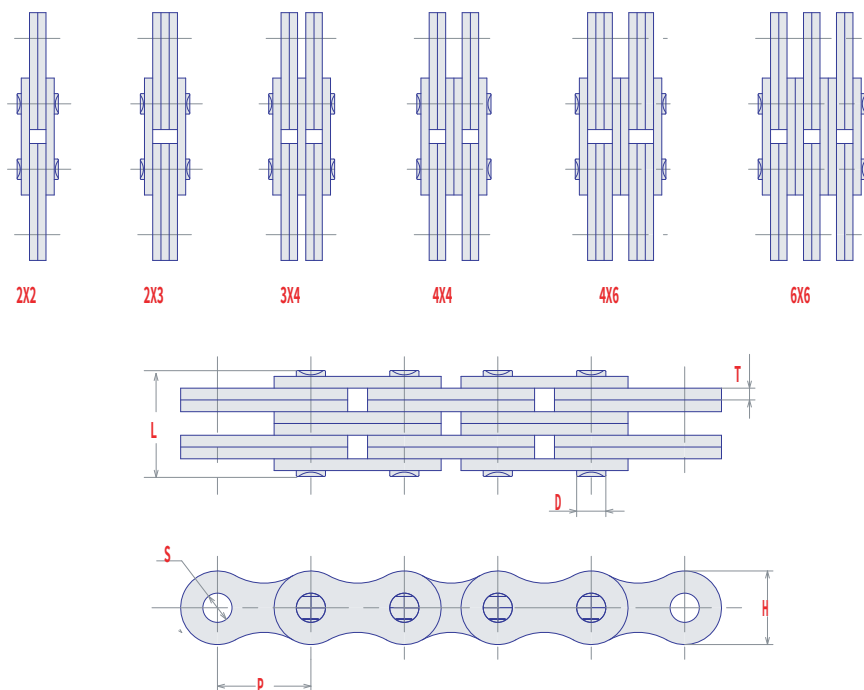
Consisting of link plates of the same contour and thickness as the pin link plates of BS roller chains



SY Chain No.	Lacing	Dimensions - mm						Average Ultimate Strength	Maximum Allowable Load	Average Weight
		Pitch	Pin		Plate		Hole Dia			
			Dia.	Length	Height	Thickness				
AL422	2×2	12.70	3.96	8.4	10.3	1.5	4.03	18.6	1.86	0.36
AL444	4×4			14.6				37.3	3.43	0.70
AL466	6×6			21.2				55.9	3.92	1.04
AL522	2×2	15.875	5.08	10.5	12.7	2.0	5.15	30.4	3.04	0.58
AL544	4×4			19.0				60.8	5.30	1.16
AL566	6×6			27.6				94.1	6.28	1.73
AL622	2×2	19.05	5.95	12.4	15.2	2.4	6.04	43.1	4.41	0.81
AL644	4×4			22.2				86.3	7.45	1.68
AL666	6×6			32.6				129	8.73	2.46
AL822	2×2	25.40	7.93	16.6	20.2	3.2	8.00	72.6	7.35	1.42
AL844	4×4			29.4				145	13.2	2.88
AL866	6×6			43.0				218	15.4	4.23
AL1022	2×2	31.75	9.53	19.6	24.5	4.0	9.59	108	11.6	2.46
AL1044	4×4			36.2				216	20.6	4.81
AL1066	6×6			53.5				324	24.0	7.24
AL1222	2×2	38.10	11.10	24.0	29.2	4.8	11.22	152	16.5	3.35
AL1244	4×4			43.7				304	29.1	6.58
AL1266	6×6			63.4				456	34.2	9.82
AL1422	2×2	44.45	12.70	27.8	34.2	5.6	12.82	205	22.1	4.99
AL1444	4×4			51.2				410	38.9	9.56
AL1466	6×6			73.6				615	46.1	14.13
AL1622	2×2	50.80	14.28	31.8	40.3	6.4	14.47	269	28.3	6.35
AL1644	4×4			58.4				539	49.9	12.62
AL1666	6×6			84.8				809	58.8	18.87

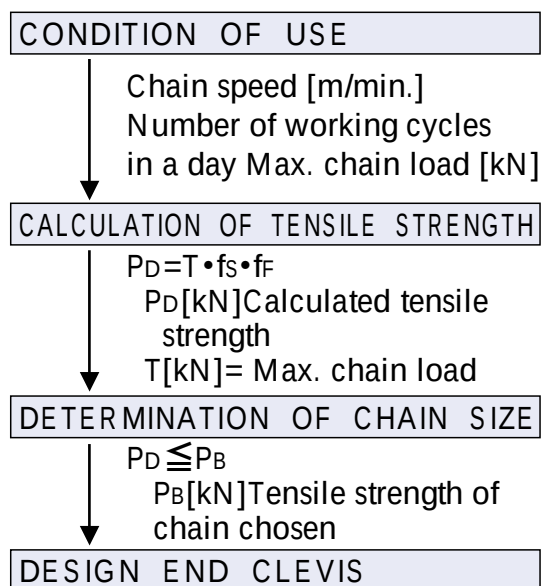
SY Chain No.	Lacing	Dimensions - mm						Average Ultimate Strength	Maximum Allowable Load	Average Weight
		Pitch	Pin		Plate		Hole Dia			
			Dia.	Length	Height	Thickness				
BL422	2×2	12.70	5.08	10.5	11.7	2.0	5.15	27.5	4.51	0.64
BL423	2×3			12.5				27.5	4.51	0.79
BL434	3×4			16.8				40.7	5.30	1.07
BL444	4×4			19.0				54.4	5.98	1.22
BL446	4×6			23.0				54.4	5.98	1.58
BL466	6×6			27.5				82.5	9.81	1.89
BL522	2×2	15.875	5.95	12.4	14.6	2.4	6.04	42.7	6.86	1.01
BL523	2×3			15.0				42.7	6.86	1.19
BL534	3×4			20.0				64.0	8.33	1.61
BL544	4×4			22.2				85.3	9.41	1.80
BL546	4×6			27.6				85.3	9.41	2.26
BL566	6×6			32.4				127	15.7	2.65
BL622	2×2	19.05	7.93	16.6	17.5	3.2	8.00	70.6	9.81	1.53
BL623	2×3			19.5				70.6	9.81	1.89
BL634	3×4			26.2				106	12.3	2.68
BL644	4×4			29.2				141	13.7	3.04
BL646	4×6			36.5				141	13.7	4.15
BL666	6×6			43.0				212	24.5	4.58
BL822	2×2	25.40	9.53	19.6	24.1	4.0	9.59	114	17.0	2.57
BL823	2×3			23.8				114	17.0	3.17
BL834	3×4			32.5				172	20.6	4.37
BL844	4×4			36.2				228	23.5	4.95
BL846	4×6			45.0				228	23.5	6.23
BL866	6×6			53.5				342	40.2	7.44
BL1022	2×2	31.75	11.10	24.0	29.3	4.8	11.20	157	26.0	3.73
BL1023	2×3			28.6				157	26.0	4.64
BL1034	3×4			38.7				245	31.4	6.50
BL1044	4×4			43.7				314	36.3	7.41
BL1046	4×6			53.4				314	36.3	9.21
BL1066	6×6			63.4				471	58.8	11.07
BL1222	2×2	38.10	12.70	27.8	35.1	5.6	12.82	207	36.8	4.77
BL1223	2×3			34.2				207	36.8	6.46
BL1234	3×4			45.5				332	44.1	9.05
BL1244	4×4			51.2				414	50.5	10.27
BL1246	4×6			62.6				414	50.5	11.86
BL1266	6×6			73.6				621	73.1	14.40
BL1422	2×2	44.45	14.28	31.8	40.9	6.4	14.39	270	49.0	7.87
BL1423	2×3			38.8				270	49.0	8.90
BL1434	3×4			51.7				405	58.8	11.61
BL1444	4×4			58.4				539	67.7	12.87
BL1446	4×6			71.2				539	67.7	17.86
BL1466	6×6			84.8				810	95.1	22.33
BL1622	2×2	50.80	17.45	35.8	46.7	7.2	17.62	392	58.8	9.77
BL1623	2×3			43.7				392	58.8	12.08
BL1634	3×4			58.9				618	70.6	16.85
BL1644	4×4			65.9				785	80.4	18.85
BL1646	4×6			80.2				785	80.4	23.94
BL1666	6×6			96.2				1176	137.3	28.54

Leaf Chains



SY Chain No.	Lacing	Dimensions - mm						Minimum Ultimate Strength	Average Chain Weight
		Pitch	Pin		Plate		Hole Dia		
			Dia.	Length	Height	Thickness			
LL0822	2×2	12.70	4.45	7.6	10.9	1.25	4.46	17.8	0.31
LL0844	4×4			13.0				31.1	0.60
LL0866	6×6			18.4				44.5	0.89
LL1022	2×2	15.875	5.08	9.3	13.7	1.65	5.09	22.2	0.48
LL1044	4×4			16.1				44.5	0.94
LL1066	6×6			22.9				66.7	1.40
LL1222	2×2	19.05	5.72	10.7	16.1	1.80	5.73	28.9	0.63
LL1244	4×4			18.5				57.8	1.22
LL1266	6×6			26.3				86.7	1.82
LL1622	2×2	25.40	8.28	50.1	21.0	3.20	8.30	58.0	1.48
LL1644	4×4			30.2				116	2.90
LL1666	6×6			43.2				174	4.31
LL2022	2×2	31.75	10.19	20.1	26.4	3.50	10.21	95.0	2.17
LL2044	4×4			35.1				190	4.24
LL2066	6×6			50.1				285	6.30
LL2422	2×2	38.10	14.63	28.4	33.4	4.90	14.65	170	4.02
LL2444	4×4			49.4				340	7.79
LL2466	6×6			70.4				510	11.55
LL2822	2×2	44.45	15.90	34.0	37.0	6.3	15.92	200	5.42
LL2844	4×4			60.0				400	10.56
LL2866	6×6			86.0				600	15.71
LL3222	2×2	50.80	17.81	35.0	42.2	6.3	17.83	260	5.92
LL3244	4×4			61.0				520	11.50
LL3266	6×6			87.0				780	17.06

SELECTION OF LEAF CHAIN

 f_s : SERVICE FACTOR

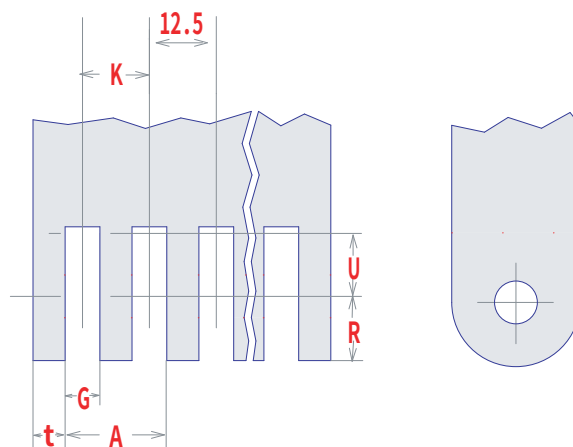
Type of load	Example of use	f_s	Suitable Chain size
Smooth load	Smooth starts & stops and slow and gentle load variations.	1.0	AL series LL series
Smooth shocks	Frequent starts & stops load variations and reverse motions.	1.3	AL series LL series BL series
Heavy shocks	Sudden starts & stops, load variations and reverse motions.	1.5	BL series

 f_F : SAFETY FACTOR

Type of load	No. of reciprocating max./day	f_F	Chain speed
AL LL	10 100	9 12	max. 30m/min
BL	1000	9	

DIMENSION OF ANCHOR CLEVIS

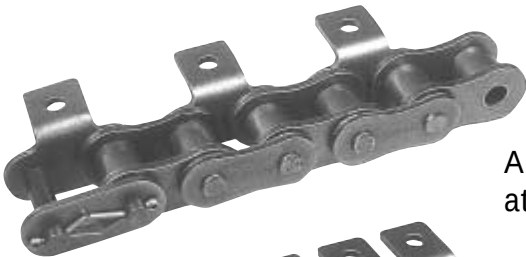
Lacing	$G = 2(T_{\max.} + 4CL + 0.008P)$
2×2	$G = 3(T_{\max.} + 5CL + 0.008P)$
2×3	$A = K + G$
3×4	$K = 3(T_{\max.} + CL)$ $G = K - (T_{\max.} + 0.004P)$
4×4	$A = K + G$
6×6	$K = 4(T_{\max.} + CL)$ $G = K - 2(T_{\max.} + 0.004P)$
4×6	$A = K + G$ $K = 5(T_{\max.} + CL)$ $G = K - 2(T_{\max.} + 0.004P)$
8×8	$A = K + G$ $K = 4(T_{\max.} + CL)$ $G = K - 2(T_{\max.} - 0.004P)$



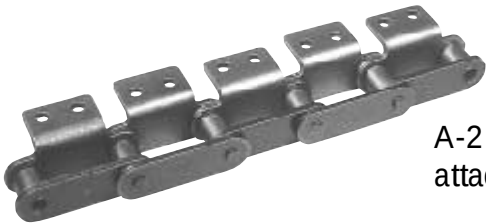
P = chain pitch
 $T_{\max.}$ = maximum link plate thickness
 R = end of radius = $0.5P$
 t = minimum thickness of outside flange = $T_{\max.}$
 U = minimum depth of slot for clearance = $0.5P$
 CL = clearance
 = 0.038 for 15.875 pitch and smaller
 0.051 for 19.05 pitch or larger

GENERAL CLEVIS PROPORTIONS

STANDARD ATTACHMENT



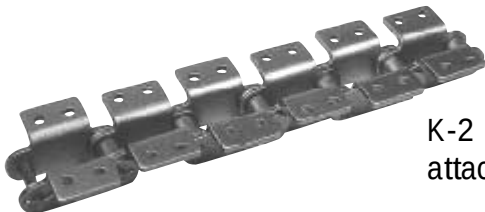
A-1
attachment



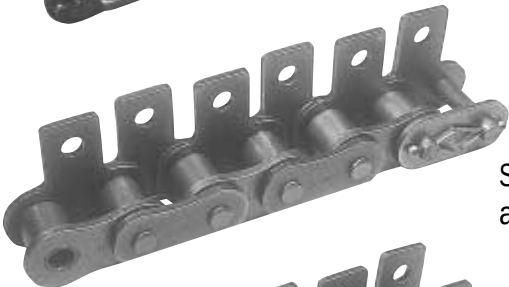
A-2
attachment



K-1
attachment



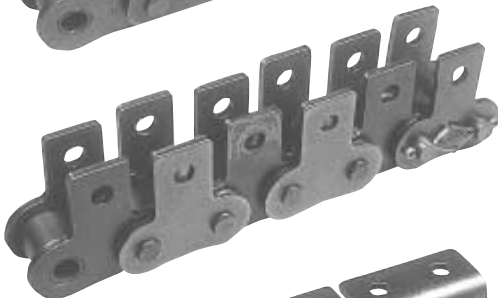
K-2
attachment



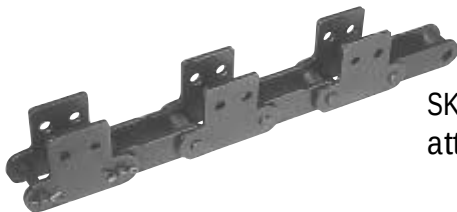
SA-1
attachment



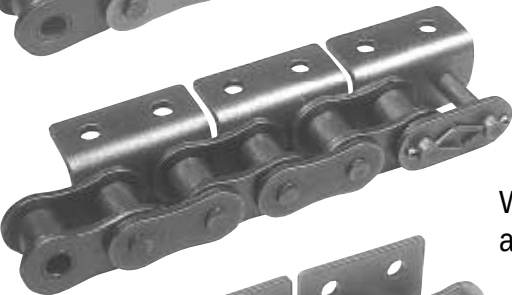
SA-2
attachment



SK-1
attachment



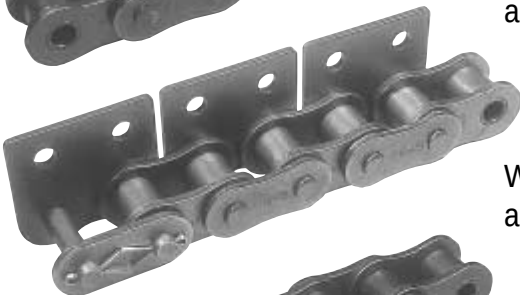
SK-2
attachment



WA-2
attachment



GK-1
attachment



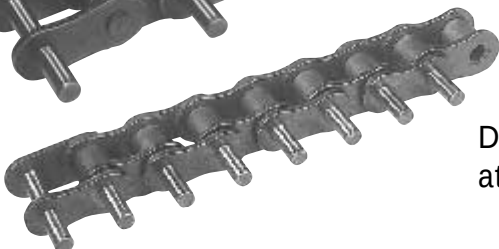
WSA-2
attachment



D-1
attachment



D-1
attachment

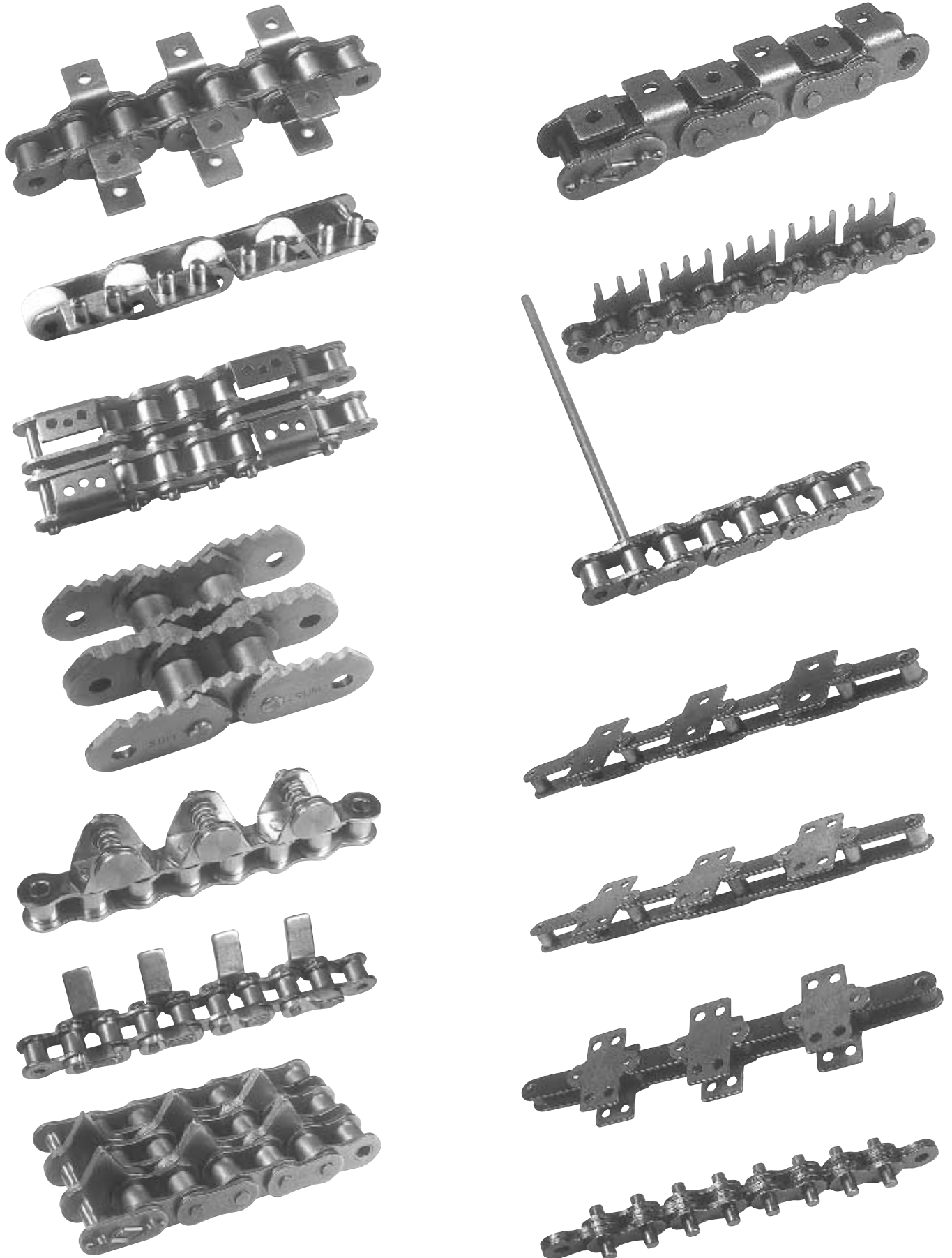


D-3
attachment

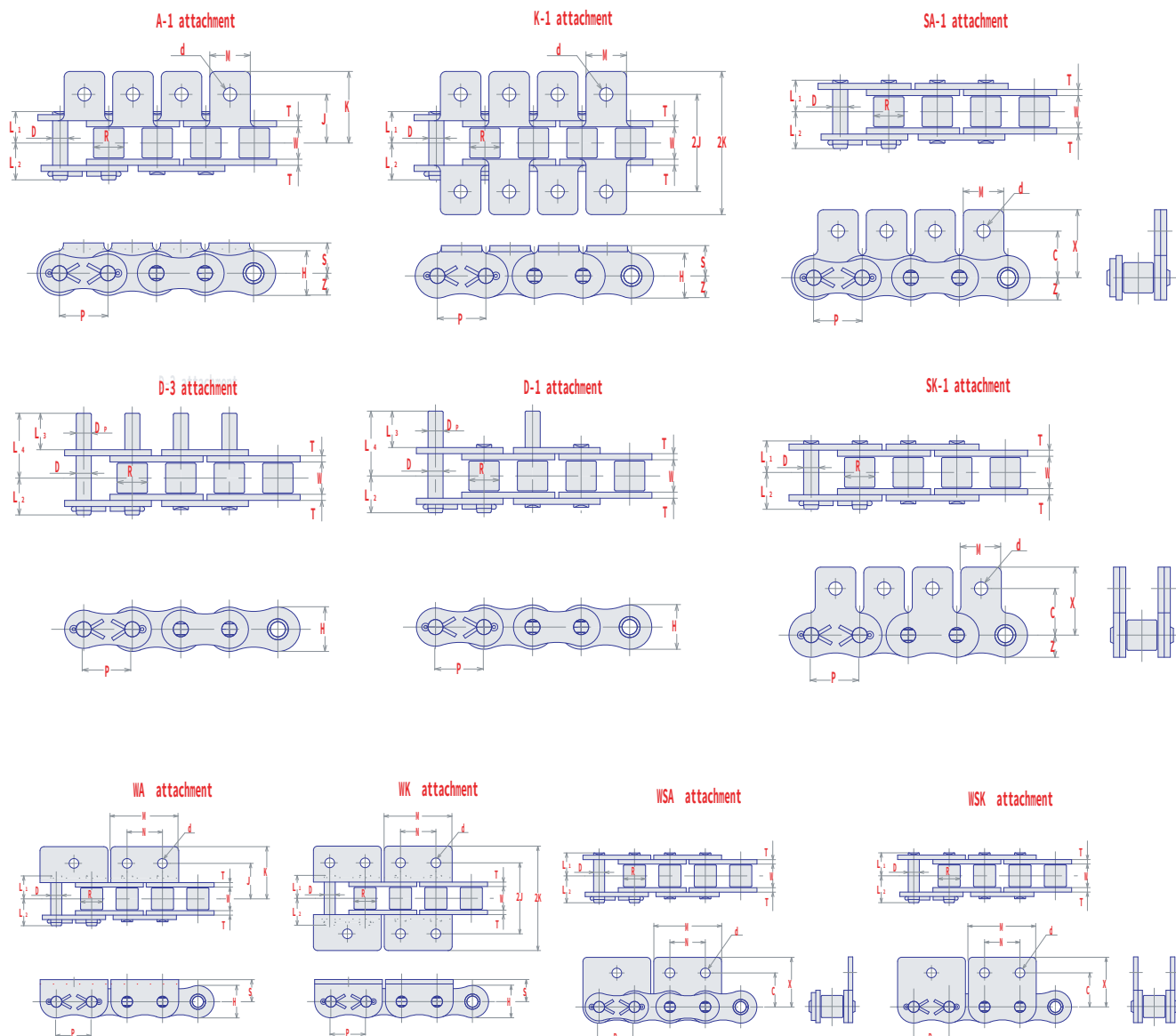


D-3
attachment

SPECIAL ATTACHMENT



BS Standard Attachment Chains



SY Chain No.	Pitch	Dimensions - mm											Minimum Ultimate Strength	Maximum Allowable Load	Average Chain Weight
		Roller		Pin				Plate			Trans. Pitch				
		Width	Dia.	Dia.	Length			Height	Thickness						
(BS)	P	W	R	D	L _R	L _C	L ₁	L ₂	H	T ₁	T ₂	TP	kN	kN	kg/m
08B	12.70	7.75	8.51	4.45	16.7	18.0	8.4	9.6	11.8	1.5	1.5	13.92	17.8	3.14	0.61
10B	15.88	9.65	10.16	5.08	19.0	20.7	9.5	11.2	14.7	1.65	1.65	16.59	22.3	4.90	0.89
12B	19.05	11.68	12.07	5.72	22.0	23.6	11.0	12.6	16.1	1.8	1.8	19.46	28.9	7.06	1.14
16B	25.40	17.02	15.88	8.26	35.1	38.2	17.6	20.6	21.0	3.2	4.0	31.88	60.8	12.6	2.59
20B	31.75	19.56	19.05	10.16	40.2	44.0	20.1	23.9	26.4	3.5	4.7	36.45	95.1	19.6	3.76

A-1, K-1 ATTACHMENT

SY Chain No.	Common Dimensions			Original Dimensions				Additional Weight	
	M	d	S	A-1		K-1		A-1	K-1
				J	K	2J	2K	g/pc	
08B	11.0	4.3	8.5	13.8	20.9	27.6	41.8	2.0	4.0
10B	14.0	5.3	10.5	15.8	24.2	31.6	48.4	3.2	6.4
12B	18.0	6.4	12.2	17.6	27.3	35.2	54.6	4.5	9.0
16B	24.0	8.4	17.0	29.0	41.9	58.0	83.8	20	40
20B	30.0	10.5	21.0	34.5	49.3	69.0	98.6	25	50

SA-1,SK-1 ATTACHMENT

SY Chain No.	Common Dimensions				Z	Additional Weight	
	M	d	C	X		SA-1	SK-1
						g/pc	
08B	11.0	4.3	13.7	20.8	5.9	2.0	4.0
10B	14.0	5.3	16.5	24.9	7.4	3.2	6.4
12B	18.0	6.4	18.5	28.1	8.1	4.5	9.0
16B	24.0	8.4	27.4	40.0	10.3	20	40
20B	30.0	10.5	33.0	47.5	13.2	25	50

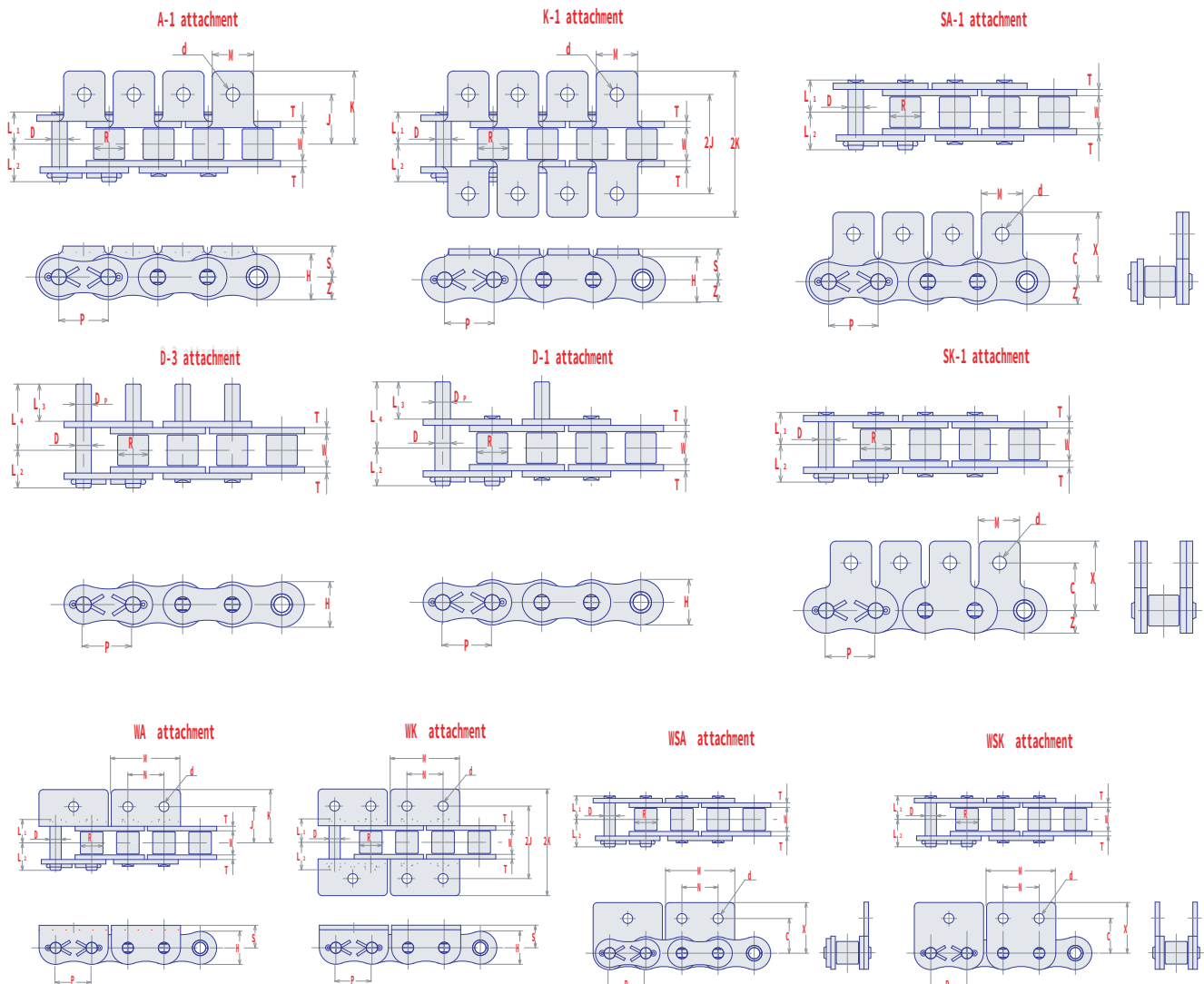
D-1,D-3 ATTACHMENT

SY Chain No.	Common Dimensions				Additional Weight	
	Dp	L3	L4	H	D-1	D-3
					g/pc	
08B	4.45	14.8	21.8	11.8	1.8	3.6
10B	5.08	17.6	25.9	14.7	2.8	5.6
12B	5.72	20.7	30.5	16.1	4.1	8.2
16B	8.28	33.3	49.3	20.6	14.0	28.0
20B	10.16	38.3	56.6	26.4	24.3	48.6

WA-2,WK-2,WSA-2,WSK-2 ATTACHMENT

SY Chain No.	Common Dimensions				Original Dimensions					
	M	d	N	S	WA		WK		WSA, WSK	
					J	K	2J	2K	C	X
08B	24.5	4.3	12.7	8.5	13.8	20.9	27.6	41.8	13.7	20.8
10B	30.6	5.3	15.9	10.5	15.8	24.2	31.6	48.4	16.5	24.9
12B	35.2	6.4	19.1	12.2	17.6	27.3	35.2	54.6	18.5	28.1
16B	46.4	8.4	25.4	17.0	29.0	41.9	58.0	83.8	27.4	40.0
20B	58.2	10.5	31.8	21.0	34.5	49.3	69.0	98.6	33.0	47.5

ANSI Standard Attachment Chains



BASIC SPECS FOR ASSEMBLING ATTACHMENT

SY Chain No. (ANSI)	Dimensions - mm								Average Ultimate Strength	Average Chain Weight
	Pitch	Roller		Pin			Plate			
		Width	Dia.	Dia.	Length		Height	Thick.		
		P	W	R	D	L1	L2	H		
SY 35	9.525	4.78	*5.08	3.58	5.9	6.8	9.0	1.25	10.8	0.34
SY 40	12.70	7.95	7.92	3.96	8.2	9.1	11.7	1.5	19.1	0.60
SY 50	15.875	9.53	10.16	5.08	10.3	11.6	14.6	2.0	31.9	0.98
SY 60	19.05	12.70	11.91	5.95	12.7	13.9	17.5	2.4	43.1	1.46
SY 80	25.40	15.88	15.88	7.93	16.2	18.8	23.4	3.2	78.5	2.52
SY 100	31.75	19.05	19.05	9.53	19.6	23.2	29.3	4.0	118	3.91
SY 120	38.10	25.40	22.23	11.10	24.7	28.5	35.1	4.8	167	5.76
SY 140	44.45	25.40	25.4	12.70	26.9	31.2	40.9	5.6	216	7.41
SY 160	50.80	31.75	28.58	14.28	32.1	36.4	46.7	6.4	275	9.79

A-1, K-1 ATTACHMENT

SY Chain No.	Common Dimensions				Original Dimensions				Additional Weight	
	M	d	S	Z	A-1		K-1		A-1	K-1
					J	K	2J	2K	g/pc	
SY 35	7.9	3.4	6.4	4.5	9.5	14.3	19.1	28.6	0.9	1.8
SY 40	9.5	3.6	7.9	5.8	12.7	17.3	25.4	34.6	1.2	2.4
SY 50	12.7	5.2	10.3	7.3	15.9	23.3	31.8	46.6	4	8
SY 60	15.9	5.2	11.9	8.7	19.1	28.1	38.1	56.2	6.5	13
SY 80	19.1	6.8	15.9	11.7	25.4	35.9	50.8	71.8	13	26
SY 100	25.4	8.8	19.8	14.6	31.8	44.3	63.6	88.6	27	54
SY 120	28.6	10.5	23.0	17.5	38.1	54.7	76.2	109.4	47	94
SY 140	34.7	12.0	28.6	20.4	44.5	63.2	89.0	126.4	65	130
SY 160	38.1	14.0	31.8	23.3	50.8	71.9	101.6	143.8	88	176

SA-1,SK-1 ATTACHMENT

SY Chain No.	Common Dimensions				Z	Additional Weight	
	M	d	C	X		SA-1	SK-1
						g/pc	
SY 35	7.9	3.4	9.5	14.5	4.5	0.9	1.8
SY 40	9.5	3.6	12.7	18.5	5.8	1.2	2.4
SY 50	12.7	5.2	15.9	23.0	7.3	4	8
SY 60	15.9	5.2	18.3	26.7	8.7	6.5	13
SY 80	19.1	6.8	24.6	34.5	11.7	13	26
SY 100	25.4	8.8	31.8	43.0	14.6	27	54
SY 120	28.6	10.5	36.6	51.4	17.5	47	94
SY 140	34.7	12.0	44.4	63.1	20.4	65	130
SY 160	38.1	14.0	50.8	69.5	23.3	88	176

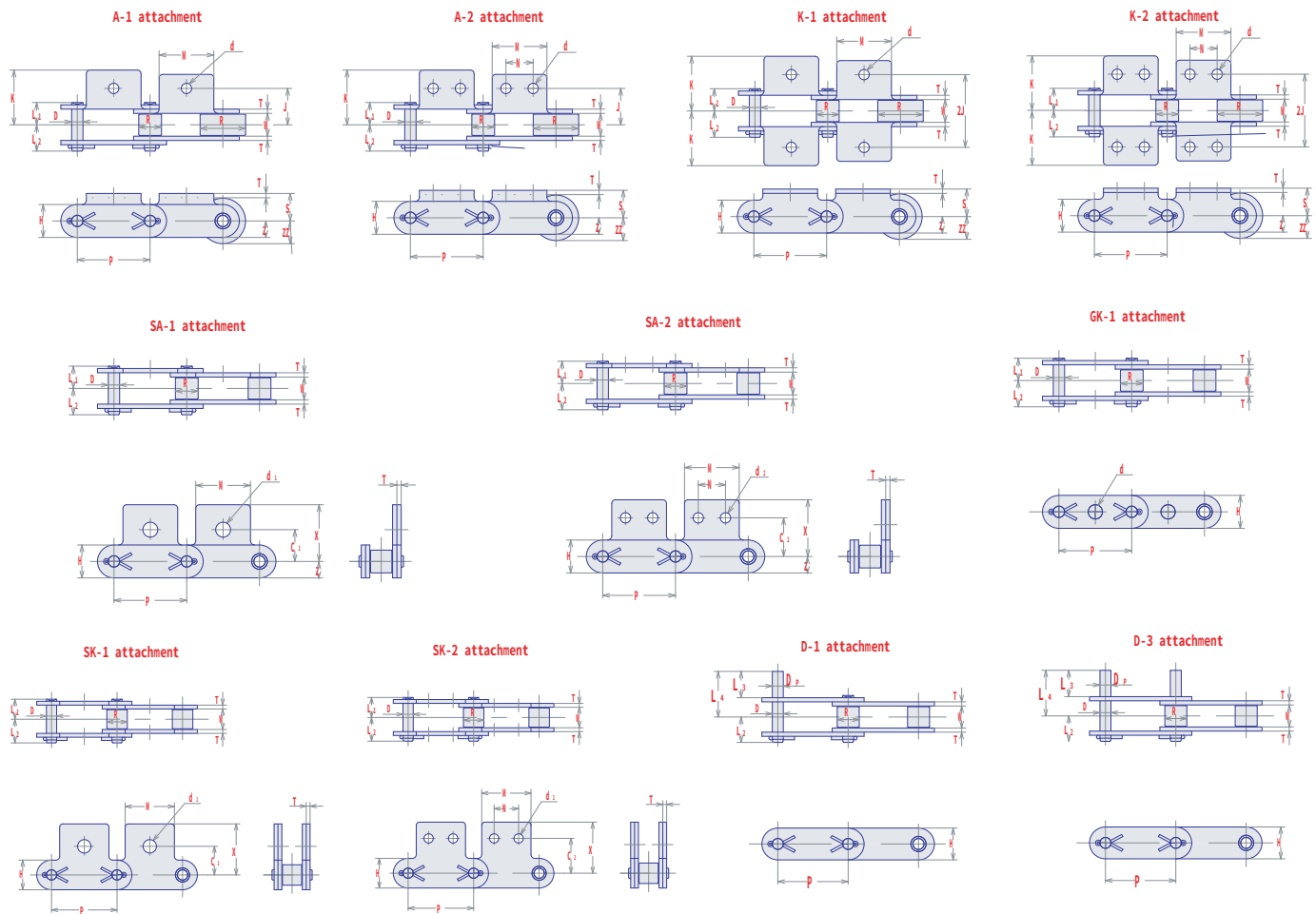
D-1,D-3 ATTACHMENT

SY Chain No.	Common Dimensions				Additional Weight	
	Dp	L3	L4	H	D-1	D-3
					g/pc	
SY 35	3.58	9.5	14.7	9	0.8	1.6
SY 40	3.96	9.5	16.8	11.7	1	2
SY 50	5.08	11.9	21.0	14.6	2	4
SY 60	5.95	14.3	25.9	17.5	3	6
SY 80	7.93	19.1	33.9	23.4	7	14
SY 100	9.53	23.8	41.9	29.3	12	24
SY 120	11.10	28.6	51.4	35.1	20	40
SY 140	12.70	33.3	57.5	40.9	30	60
SY 160	14.28	38.1	67.4	46.7	45	90

WA-1,WA-2,WK-1,WK-2,WSA-1,WSA-2,WSK-1,WSK-2 ATTACHMENT

SY Chain No.	Common Dimensions				Original Dimensions					
	M	d	N	S	WA		WK		WSA, WSK	
					J	K	2J	2K	C	X
SY 40	24.3	3.6	12.7	7.9	12.7	17.3	25.4	34.6	12.7	17.3
SY 50	30.4	5.2	15.9	10.3	15.9	23.3	31.8	46.6	15.9	23.1
SY 60	37.0	5.2	19.1	11.9	19.1	28.1	38.1	56.2	18.3	27.1
SY 80	48.6	6.8	25.4	15.9	25.4	35.9	50.8	71.8	24.6	34.5
SY 100	61.0	8.8	31.8	19.8	31.8	44.3	63.6	88.6	31.8	43.0

DOUBLE PITCH ATTACHMENT CHAINS



BASIC SPECS FOR ASSEMBLING ATTACHMENT

SY Chain No. (ANSI)	Dimensions - mm								Average Ultimate Strength	Average Chain Weight
	Pitch	Roller		Pin			Plate			
		Width	Dia.	Dia.	Length		Height	Thick.		
		P	W	R	D	L1	L2	H		
C2040	25.40	7.95	7.92	3.96	8.2	9.1	11.4	1.5	19.1	0.48
C2042			15.88							
C2050	31.75	9.53	10.16	5.08	10.3	11.6	15.0	2.0	31.9	0.82
C2052			19.05							
C2060H	38.10	12.70	11.91	5.95	14.4	16.7	17.0	3.2	54.9	1.38
C2062H			22.23							
C2080H	50.80	15.88	15.88	7.93	17.8	21.1	22.6	4.0	90.2	2.32
C2082H			28.58							
C2100H	63.50	19.05	19.05	9.53	21.1	24.6	28.6	4.8	137	3.46
C2102H			39.67							
C2120H	76.20	25.40	22.23	11.10	26.3	30.7	34.9	5.6	186	4.92
C2122H			44.45							
C2160H	101.60	31.75	28.58	14.28	28.5	33.1	47.6	7.2	306	8.02
C2162H			57.15							

A-1,A-2,K-1,K-2, ATTACHMENT

SY Chain No.		Dimensions - mm								
Standard Roller	Carrier Roller	M	d	N	S	Z	ZZ	A-1, A-2		K-1, K-2
								J	K	2J
C2040	C2042	19.1	3.6	9.5	9.1	5.7	— 7.94	12.7	19.1	25.4
C2050	C2052	23.8	5.2	11.9	11.1	7.5	— 9.53	15.9	24.2	31.8
C2060H	C2062H	28.6	5.2	14.3	14.7	8.5	— 11.11	21.4	31.2	42.8
C2080H	C2082H	38.1	6.8	19.1	19.1	11.3	— 14.29	27.8	40.6	55.6
C2100H	C2102H	47.6	8.8	23.8	23.4	14.3	— 19.84	33.3	50.0	66.6
C2120H	C2122H	57.2	10.5	28.6	27.8	17.4	— 22.22	39.7	61.9	79.4
C2160H	C2162H	76.2	14.0	38.1	36.5	23.8	— 28.58	52.4	76.1	104.8

SA-1,SA-2,SK-1,SK-2 ATTACHMENT

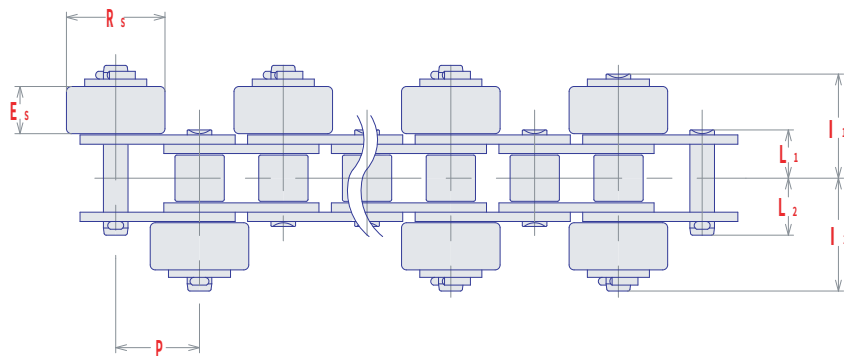
SY Chain No.		Dimensions - mm								
Standard Roller	Carrier Roller	M	X	Z	ZZ	SA-1, SK-1		SA-2, SK-2		
						C1	d1	C2	d2	N
C2040	C2042	19.1	19.8	5.7	— 7.94	11.1	5.2	13.5	3.6	9.5
C2050	C2052	23.8	24.6	7.5	— 9.53	14.3	6.8	15.9	5.2	11.9
C2060H	C2062H	28.6	30.6	8.5	— 11.11	17.5	8.8	19.1	5.2	14.3
C2080H	C2082H	38.1	40.2	11.3	— 14.29	22.2	10.5	25.4	6.8	19.1
C2100H	C2102H	47.6	50.3	14.3	— 19.84	28.6	14.0	31.8	8.8	23.8
C2120H	C2122H	57.2	61.1	17.4	— 22.22	33.3	16.0	37.3	10.5	28.6
C2160H	C2162H	76.2	76.2	23.8	— 28.58	44.5	21.0	50.8	14.0	38.1

D-1,D-3,GK-1 ATTACHMENT

SY Chain No.		Dimensions - mm								Additional Weight		
Standard Roller	Carrier Roller	D-1, D-3			GK-1					D-1	D-3	
		Dp	L3	L4	d					g/pc		
C2040	C2042	3.96	9.5	16.8	4.1					0.9	1.8	
C2050	C2052	5.08	11.9	21.1	5.1	5.2	6.2	6.4	8.0	8.2	1.8	3.6
C2060H	C2062H	5.95	14.3	27.5	6.05	6.4	7.2	8.1			3.0	6
C2080H	C2082H	7.93	19.1	35.6	8.0	8.1					7	14
C2100H	C2102H	9.53	23.8	43.2	10.1						12	24
C2120H	C2122H	11.10	28.6	53.0	12.1						20	40
C2160H	C2162H	14.28	38.1	69.0	—						44	88

To be added to chain weight for each attachment used.

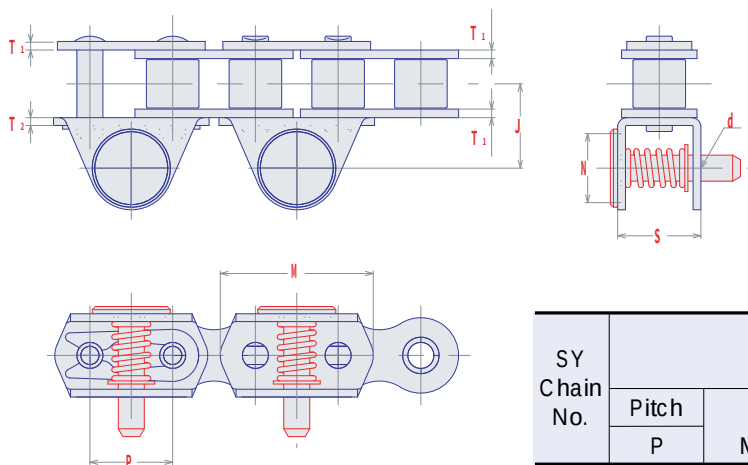
SIDE ROLLER CHAINS



SY Chain No.	Dimensions - mm							Average Chain Weight
	Pitch	Side roller			Chain Pin			
		Dia.	Width	Pin-Length		Riveted Side	Cotter Side	
	P	Rs	Es	l1	l2	L1	L2	
SY-40	12.70	15.88	7.6	17.3	19.1	8.2	10.3	0.86
SY-50	15.875	19.05	9.2	21.4	23.1	10.3	11.6	1.40
SY-60	19.05	22.23	12.5	27.9	30.0	12.7	14.9	1.93
SY-80	25.40	28.58	15.6	34.8	37.8	16.2	18.8	3.30
SY-100	31.75	39.67	18.5	41.9	45.5	19.6	23.2	3.57
C2040	25.40	15.88	7.6	17.3	19.1	8.2	10.3	0.61
C2050	31.75	19.05	9.2	21.4	23.1	10.3	11.6	1.01
C2060H	38.10	22.23	12.5	29.5	31.6	14.4	16.7	1.65
C2080H	50.80	28.58	15.6	36.5	39.5	17.8	21.1	2.74
C2100H	63.50	39.67	18.5	43.4	47.0	21.1	24.6	4.15
C2042	25.40	23.00	7.6	17.3	19.1	8.2	10.3	1.20
C2052	31.75	27.00	9.2	21.4	23.1	10.3	11.6	1.65
C2062H	38.10	30.00	12.5	29.5	31.6	14.4	16.7	2.60

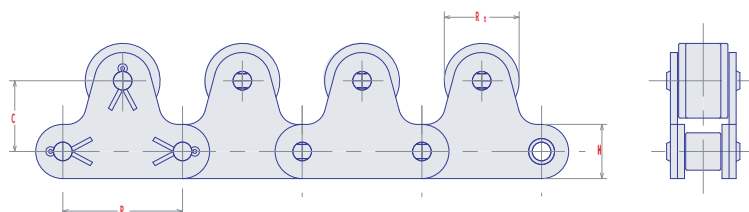
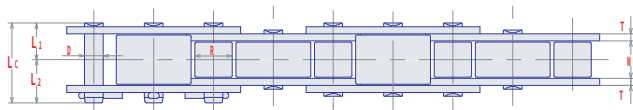
Average weight shows chains with plastic side rollers every second pitches on both sides.

SPECIAL AA-1 ATTACHMENT CHAINS



SY Chain No.	Dimensions - mm						Plate	
	Pitch	M	N	J	S	d	Thickness	
							T1	T2
08B	12.70	23.5	12.9	15.3	16.0	5.15	1.5	1.5
10B	15.875	29.4	12.9	16.2	16.0	5.15	1.65	1.5

TOP ROLLER CHAINS



Top Roller Dia. Only Every Link

SY-40	11.00
SY-50	15.00
SY-60	18.00
SY-80	24.00
SY-100	30.00

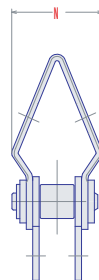
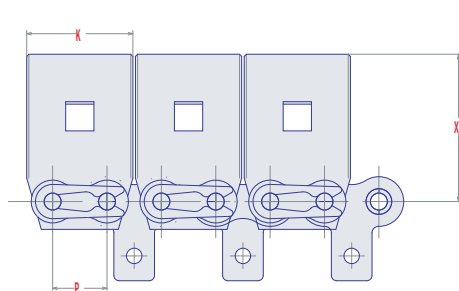
SY Chain No.	Dimensions - mm										Average Ultimate Strength	Average Chain Weight
	Pitch	Roller		Pin			Plate		Top-Roller			
		Width	Dia.	Dia.	Length		Height	Thickness	Position	Dia.		
		P	W	R	D	L1	L2	H	T	C		
SY-40	12.70	7.95	7.92	3.96	8.2	9.1	11.7	1.5	12.7	15.88	19.1	1.10
SY-50	15.875	9.53	10.16	5.08	10.3	11.6	14.6	2.0	15.9	19.05	31.9	1.61
SY-60	19.05	12.70	11.91	5.95	12.7	13.9	17.5	2.4	18.3	22.23	43.1	2.80
SY-80	25.40	15.88	15.88	7.93	16.2	18.8	23.4	3.2	24.6	28.58	78.5	4.60
SY-100	31.75	19.05	19.05	9.53	19.6	23.2	29.3	4.0	31.8	39.67	118	7.60
C2040	25.40	7.95	7.92	3.96	8.2	10.3	11.4	1.5	15.0	15.88	19.1	1.29
C2050	31.75	9.53	10.16	5.08	10.3	11.6	15.0	2.0	19.0	19.05	31.9	1.99
C2060H	38.10	12.70	11.91	5.95	14.4	16.7	17.0	3.2	23.0	22.23	54.9	3.50
C2080H	50.80	15.88	15.88	7.93	17.8	21.1	22.6	4.0	29.0	28.58	90.2	5.30
C2100H	63.50	19.05	19.05	9.53	21.1	24.6	28.6	4.8	35.4	39.67	137	8.60
C2042	25.40	7.95	15.88	3.96	8.2	10.3	11.4	1.5	15.0	15.88	19.1	1.61
C2052	31.75	9.53	19.05	5.08	10.3	11.6	15.0	2.0	19.0	19.05	31.9	2.50
C2062H	38.10	12.70	22.23	5.95	14.4	16.7	17.0	3.2	23.0	22.23	54.9	4.30
C2082H	50.80	15.88	28.58	7.93	17.8	21.1	22.6	4.0	29.0	28.58	90.2	6.50
C2102H	63.50	19.05	39.67	9.53	21.1	24.6	28.6	4.8	35.4	39.67	137	10.70

Average weight shows chains with top rollers spaced every second.

In case of large roller chain, the sprocket becomes special type of small out side diameter.

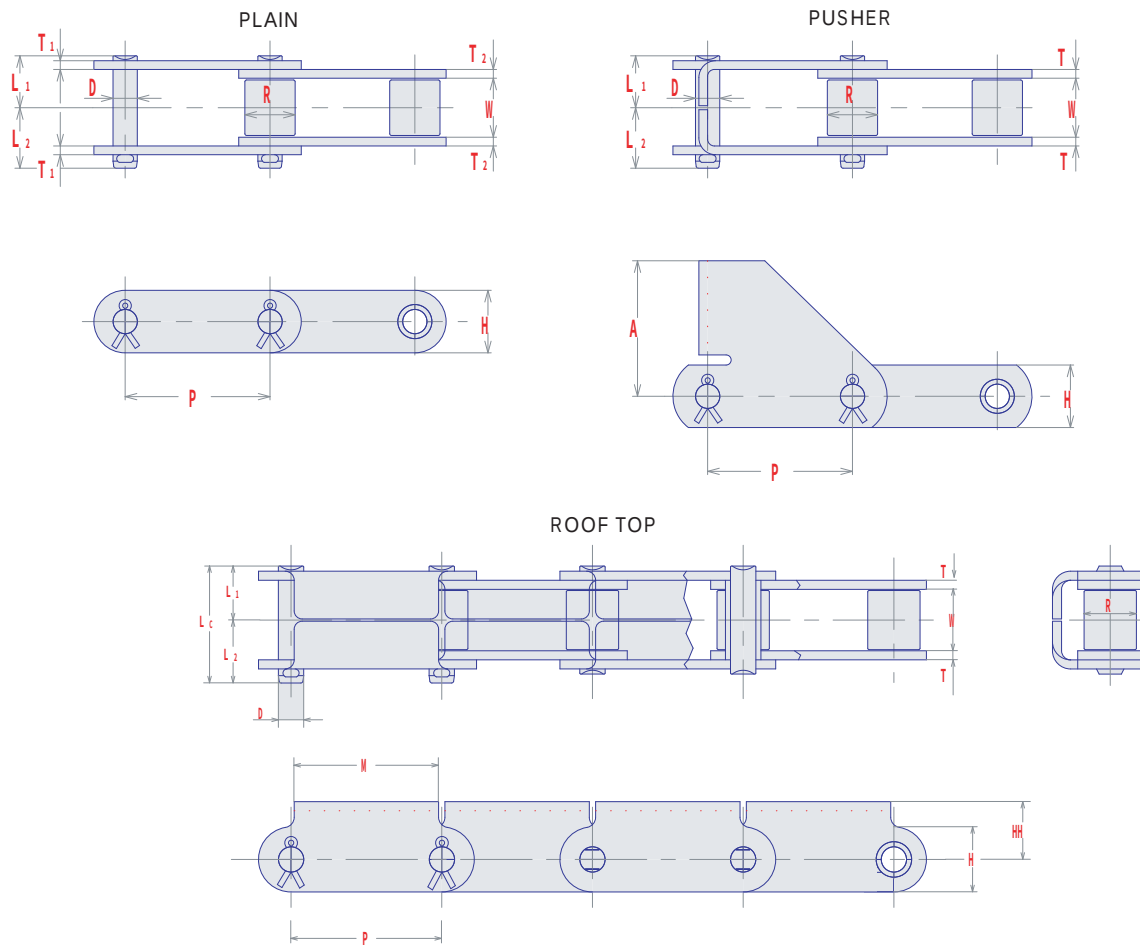
(If cannot be use the sprocket of double pitch chain.)

BOOK BINDING CHAIN



SY Chain No.	Dimensions - mm				Average Ultimate Strength kN	Average Chain Weight kg/m
	Pitch P	X	K	N		
	P	X	K	N	kN	kg/m
40 Binding Chain	12.70	34.4	24.8	21.8	19.1	1.8

81X SERIES



81X . 81XH. 81XH-S

SY Chain No.	Dimensions - mm									Average Ultimate Strength	Approx. Weight
	Pitch	Roller		Pin			Plate				
		Width	Dia.	Dia.	Length		Height	Thickness			
	P	W	R	D	L1	L2	H	T1	T2	kN	kg/m
81X	66.27	27.0	23.0	11.1	24.0	28.4	28.6	3.9	3.9	110	3.9
81XH	66.27	27.0	23.0	11.1	30.2	34.1	32.1	5.5	8.0	187	5.8
81XH-S	66.27	27.0	23.0	11.1	32.0	36.3	32.1	8.0	8.0	187	6.8

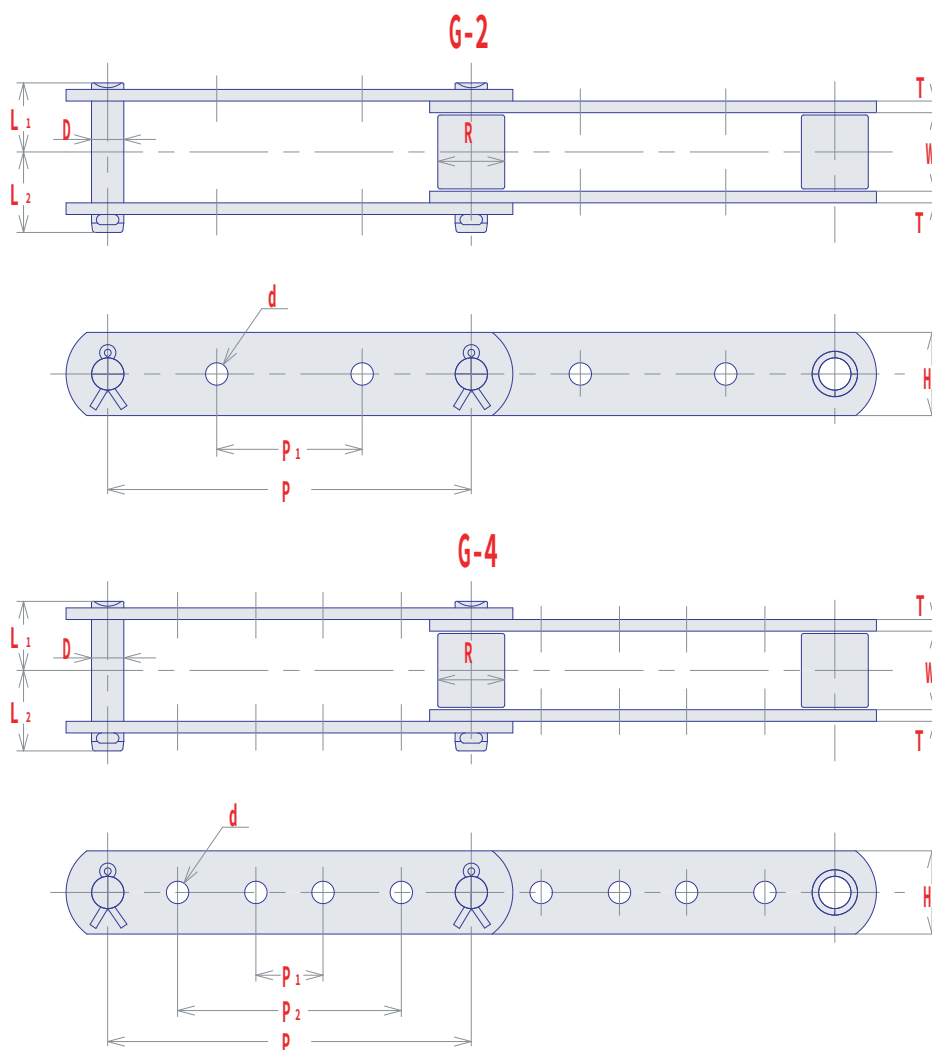
81X PUSHER

SY Chain No.	Dimensions - mm									Average Ultimate Strength
	Pitch	Roller		Pin			Plate			
		Width	Dia.	Dia.	Length		Height		Thickness	
		P	W	R	D	L1	L2	H	A	
81X Pusher	66.27	27.0	23.0	11.1	24.0	28.4	28.6	65.1	3.9	110

81X ROOF TOP CHAIN

SY Chain No.	Dimensions - mm										Average Ultimate Strength	Approx. Weight
	Pitch	Roller		Pin			Plate		Roof Width	Roof Height		
		Width	Dia.	Dia.	Length		Height	Thick				
	P	W	R	D	L1	L2	H	T	M	HH	kN	kg/m
81X Roof Top Chain	66.27	27.0	23.0	11.1	24.0	28.4	28.6	3.9	63.5	31.8	110	5.5

3939 ATTACHMENT CHAIN



3939 G-2 ATTACHMENT

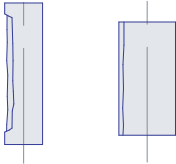
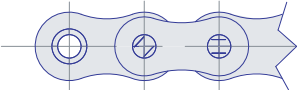
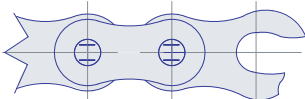
SY Chain No.	Dimensions - mm										Average Ultimate Strength
	Pitch	Roller		Pin			Plate		G-2		
		Width	Dia.	Dia.	Length		Height	Thick	Pitch	Hole	
	P	W	R	D	L1	L2	H	T	P1	d	
3939	203.20	27.0	23.0	11.1	24.0	28.4	28.6	3.9	38.1 76.2 92.1 101.6	7.2	110

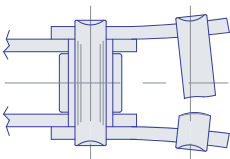
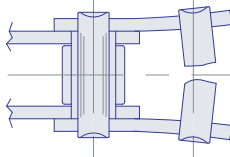
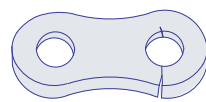
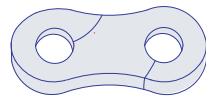
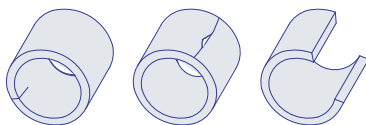
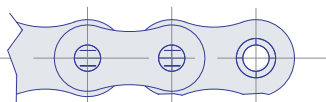
3939 G-4 ATTACHMENT

SY Chain No.	Dimensions - mm											Average Ultimate Strength
	Pitch	Roller		Pin			Plate		G-4			
		Width	Dia.	Dia.	Length		Height	Thick	Pitch		Hole	
	P	W	R	D	L1	L2	H	T	P1	P2	d	
3939	203.20	27.0	23.0	11.1	24.0	28.4	28.6	3.9	38.1 38.1 38.1	76.2 92.1 101.6	7.2	110

Trouble Shooting Hints

The below chart shows the most common chain failures and causes, but not necessarily the only ones.

Problem	Possible Causes of Problem	Suggested Remedy
 Pin or Bushing Galling	• Overload • Inadequate lubrication	• Properly lubrication • Replace chain when elongation exceeds functional limits
 Turned Pins	• Overload • Inadequate lubrication	• Replace chain as soon as possible
Excessive Noise	• Too little or too much slack • Chain obstruction • Loose chain guard or bearing	• Adjust centers or take-up • Inspect & remove obstruction • Tighten bolts and check bearings
Chain Vibration	• Excessive chain slack • Center distance too long • stiff links	• Adjust chain tensioner • Install idler • Lubricate or replace chain
Wear on inside of link plate and one side of sprocket teeth	• Misalignment	• Realign sprockets and shafts • Replace chain and sprockets if necessary
Chain stiffens	• Excessive load • Misalignment • Inadequate lubrication • Corrosion	• Replace chain with one of suitable strength • Inspect alignment • Clean and establish correct lubrication • Replace with corrosion resistant chain
Chain Climbs Sprockets	• Excessive chain wear • Excessive chain slack • Inadequate lubrication • Sprocket tooth wear	• Replace chain • Install tensioner if necessary • Replace sprocket
 Fractured Plate	• Extreme overload	• Inspect the drive to determine the cause of high load • Redesign drive using a higher capacity chain

Problem	Possible Causes of Problem	Suggested Remedy
 Broken Pins	• Extreme overload	• Inspect the drive to determine the cause of high load • Redesign drive using a higher capacity chain
 Broken Pins(center)	• Loading is greater than pins dynamic capacity	• Inspect the drive to determine the cause of high load • Redesign drive using a higher capacity chain
 Broken Offset Link Pins	• Overload	• One-pitch offsetlinks are not recommended • Redesign drive using a higher capacity chain
 Fatigue Failure	• Loading is greater than chain's dynamic capacity	• Inspect the drive to determine the cause of high load • Redesign drive using a higher capacity chain
 Cracking	• Stress corrosion cracking	• Protect the chain from corrosion • Install anti-corrosive chains
 Broken Rollers	• Foreign material between chain and sprocket tooth • Fatigue failure	• Redesign chain speed and load • Shield drive from foreign matter
 Worn Plates	• Bottom of plates worn due to rubbing on guides.	• Chain should be replaced when wear becomes over 5% of the plates height

SELECTION OF ROLLER CHAIN

It is important to select the most suitable roller chains and sprockets for the job by careful study of power transmission requirements.

The following basic factors should be considered when selecting roller chains for transmission needs through there may be other factors.

ATMOSPHERIC CONSIDERATION

The input power ratings appearing on the pages of 80 to 84, have been worked out under the following conditions.

- 1) To be driven in normal atmosphere of -10° F to 60° C free from ill effect of abrasive dust, corrosive gas, high humidity etc.
- 2) Sprockets should be aligned and mounted on parallel horizontal shafts.
- 3) Recommended method of lubrication and recommended kind of lubricant should be used.
- 4) Should be driven at even load or small load variations.

Power rating of multiple strand chain is not simply calculable by multiplying the power rating of one strand by the number of strand because of uneven load distribution onto each strand. So, multiple strand factor should be used for expected service life.

A service life of 15,000 hrs, can be expected when chain length is 100 pitches and the above conditions are met.

POINT IN SELECTION ROLLER CHAIN AND SPROCKET

The following factors must be taken into consideration in selecting proper chain drive, depending on chain speed-normal or low speed. Also correction factors should be used, fully grasping the conditions of use.

- | | |
|--|---|
| a) Driven machine | e) RPM and diameter of high speed shaft[n1:rpm] |
| b) Type of load: smooth light or heavy shock | f) RPM and diameter of low speed shaft[n2:rpm] |
| c) Source of power | g) Center distance of shaft [m] |
| d) kW to be transmitted [kW0:kW] | h) Chain-driving speed [S:m/min] |

SELECTION PROCEDURE ACCORDING TO CHAIN SPEED

IN CASE OF NORMAL SPEED

S=50~250m/min

To obtain corrected power kW₁ multiply kW₀ by corrected factor f₁ applied according to condition of use

$$kW_1 = kW_0 \cdot f_1 \\ = kW_0 \cdot f_1 \cdot f_2$$

To obtain chain and high-speed sprocket teeth N₁ use roller chain quick selection chart and power rating chart according to RPM of high speed shaft and corrected power kW₁

N₁

Determine low speed sprocket teeth N₂ from speed ratio R

$$R = n_1/n_2 \\ N_2 = R \cdot N_1$$

See if each sprocket shaft diameter and mounting space satisfy specifications of machinery

*Check

Make special sprocket

Obtain corrected power kW₁ of single strand by referring to multiple strand factor f₂

OK

Finally determined

Economical sprockets for general industrial use are recommended except when special sprockets are made due to unavoidable circumstances.

IN CASE OF LOW SPEED

S=Less than 50m/min.

Divided into two cases depending on chain driving conditions

- 1) For low speed drive with few stops and starts, make the chain selection in a way to satisfy the following formula:
 $T \times f_1 \times f_3 \leq \text{Max. allowable chain load.}$

- 2) For low speed drive with frequent stops and starts.
 $T \times f_1 \times f_3 \times f_4 \leq \text{Ave. ultimate strength.}$

Select the chain by substituting the values of chain speed and max working load into formulas (1)&(2), after chain selected tentatively in the general way.

N₁[—]=Number of teeth on small sprocket.

N₂[—]=Number of teeth on large sprocket.

P [mm]=Chain pitch

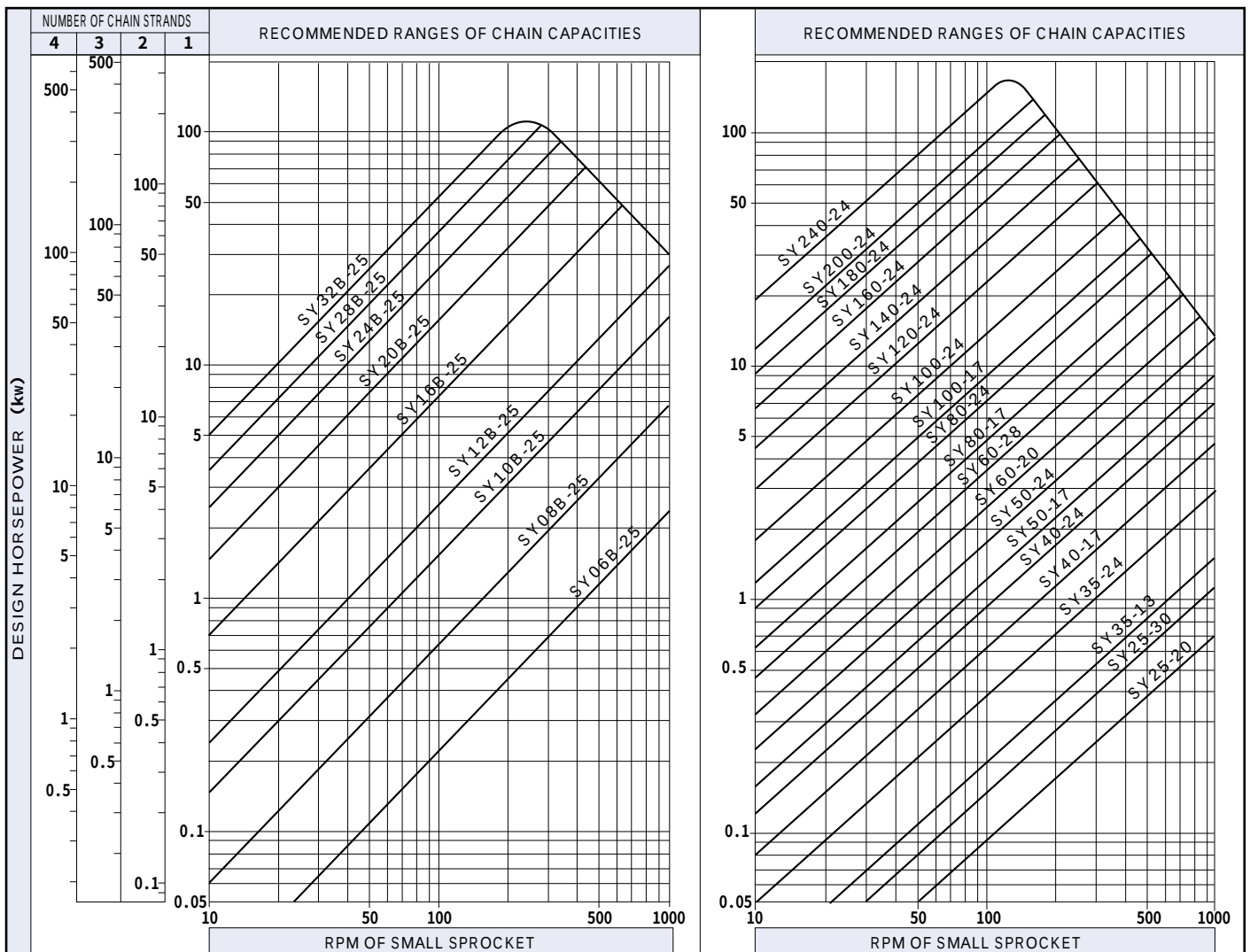
S [m/min]=Chain speed
 $= N_1 \cdot P \cdot n_1 / 1000$

T [kN]=Max. working load.
 $= 60 \times kW_0 / S$

f₂ : MULTI-STRAND FACTOR

Number of roller chain strands	f ₂
2	1.7
3	2.5
4	3.3
5	3.9
6	4.6
8	6.2
10	7.5

Roller Chain Quick Selection Chart



CONCISE SELECTION DATA

SY Chain No.	SY Standard(ANSI)		Each Series				
	Max. Allowable Load	Ave. Ultimate Strength	Ave. Ultimate Strength(kN)				
			E	U	H	HE	HU
35	2.16	10.8					
40	3.63	19.1					
50	6.28	31.9					
60	8.63	43.1	47.1		54.9	53.9	
80	14.7	78.5	79.4	84.3	60.2	93.2	98.1
100	22.6	118	119	127	137	142	145
120	30.4	167	174	186	186	191	196
140	40.2	216	227	245	241	252	255
160	53.0	275	294	314	306	319	324
180	57.9	353		412	373		
200	71.6	451		490	520		
240	98.1	677		726	726		

f1: SERVICE FACTOR

Driven Load Condition	Interval Combustion Engine		Motor or Turbine
	Hydraulic Drive	Mechanical Drive	
Uniform Smooth	1.0	1.2	1.0
Moderate Shock	1.2	1.4	1.3
Heavy Shock	1.4	1.7	1.5

f3: SPEED COEFFICIENT f4: SAFETY FACTOR

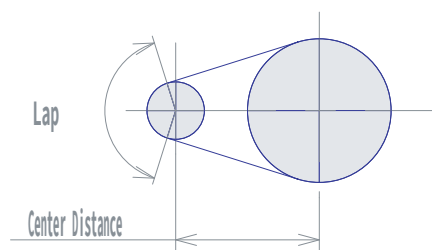
Chain Speed	f3	Chain Speed	f4
15m/min.	1.0	25m/min.	7 ≤
15~30	1.2	25~50	8 ≤
30~50	1.4		

INSTALLATION AND ARRANGEMENT

To design excellent chain drives, chains and sprockets should be properly arranged and installed.

CENTER DISTANCE AND CHAIN LAP

Chain lap on the small sprocket must be at least 120 degrees.



Sprockets can be spaced at any distance as long as their teeth do not touch. Optimum distance is 30 to 50 times of pitch of the chain used except when there is a pulsating load. In case of pulsating drive, distance of less than 20 chain pitches is adequate.

TENSION AND SLACK

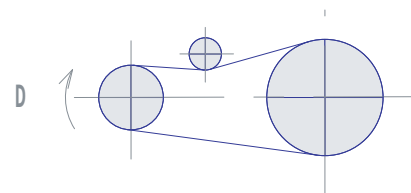
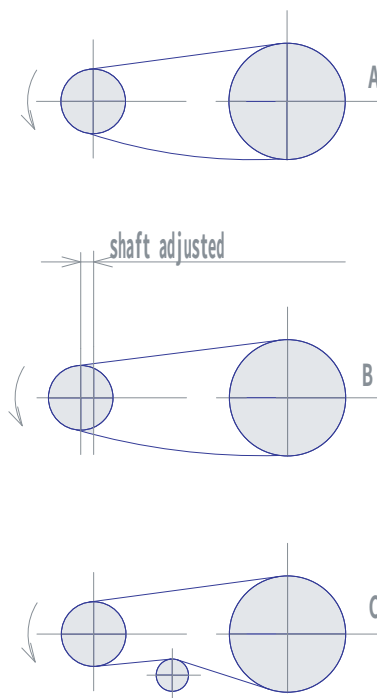
Proper amount of chain tension should be maintained. Inadequate tension will step up wear, while excessive sag will result in pulsating impact, stranding and breakage.

Adequate slack is 4 % of the span for normal drives. In the following cases, the slack should be about 2 % of the span.

- 1) Vertical position or near to vertical position.
- 2) Center distance exceeding 1 meter.
- 3) Heavy load application with frequent starts and stops.
- 4) Application with sudden reverse motions.

DRIVE POSITIONS

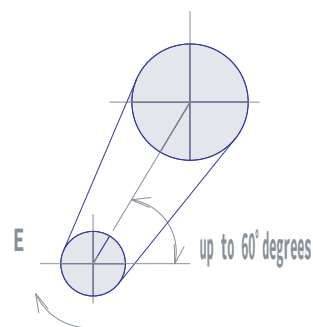
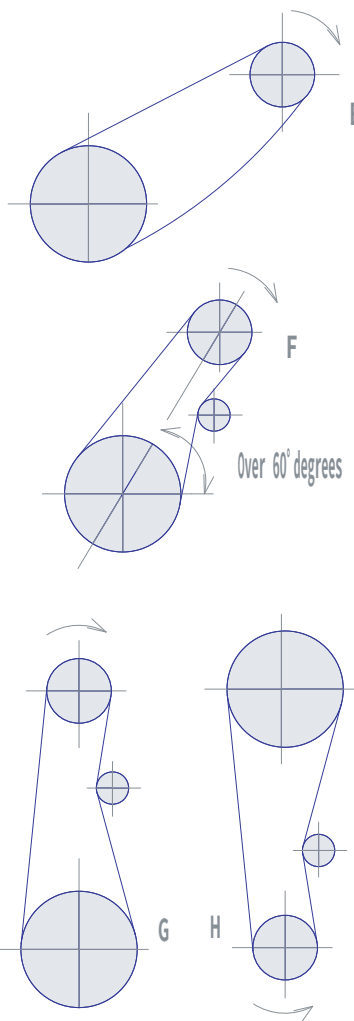
Horizontal



Horizontal arrangements

- A. Generally roller chain slack is on the lower side.
- B. When the center distance is short chain slack is adjusted by expanding it.
- C. When the center distance is long, chain slack is adjusted by installing a tightner.
- D. When chain slacks on the upper side, adjust it by a tightner.

Inclined and Vertical



Inclined arrangements:

- E. Inclined operation should be within 60°, possible.
- F. Too much slack will cause chain to ride up on the lower sprocket or come off. It should be adjusted by a tightner.

Vertical arrangements:

G, H

Excessive chain sag should be automatically adjusted by a tightner. It is mandatory when the driving shaft (small sprocket) is placed on the bottom side.

LUBRICATION

Proper lubrication of roller chains is a very important factor in getting their best possible performance and longer lifetime. No matter how well a transmission system is designed, if it is not properly lubricated, its service life will be shortened.

Abrasion between the pin and bushing causes roller chains to stretch. Therefore, these parts should be well lubricated.

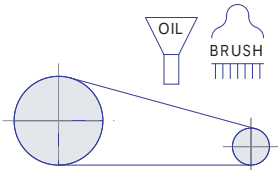
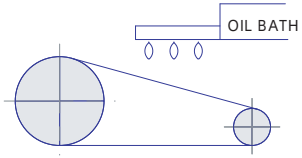
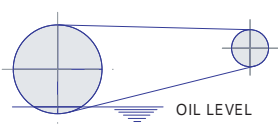
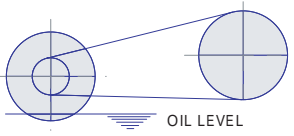
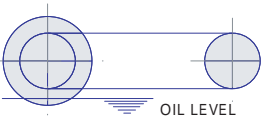
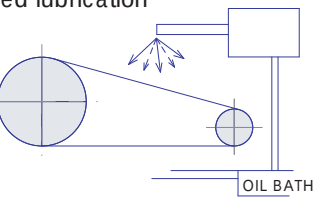
The gap between the pin-link plate and roller-link plate on the slack side of the chain should be filled with lubricant.

The oil forms a film which minimizes wear of the pin and bushing thus increasing the chain service life.

It also reduces noises and cools down the chain running at high speed.

POINTS OF LUBRICATION

- 1) Fill and change oil periodically.
- 2) Generally, heavy oil and grease are not suitable as a lubricant.
- 3) Avoid mix of oil with another kind or other maker's.
- 4) Adequate lubrication quantity is also essential for a chain's longer service life.

Type	Method	Amount
A	Manual lubrication 	●Periodically to keep chain joints from drying
	Dripping lubrication 	●Usually 4-20 drops of oil per minute. ●Excess oil should be reserved in a simple case.
B	Oil bath lubrication 	●Effective at medium and low speeds. ●To be dipped 6~12 mm.
	Lubrication by slinger disc For large speed ratio 	●Effective at rather high speeds. ●To be dipped 12~25mm at about 200m/min. circumferential speed of slinger disc.
	Lubrication by slinger disc For small speed ratio 	●Case should be cleaned to remove impurities.
C	Forced lubrication 	●Effective for heavy load, high power and high speed. ●Ab 4ltr/min. should be filled without oil shortage or heating up. ●Closed circulating lubrication system needs a clean tank or case.

SY Chain No.	Temperature[°C]							
	-10	0	40	50	-10	0	40	50
	0	40	50	60	0	40	50	60
Lubrication Type	TYPE A・B				TYPE C			
~SY50	SAE10	SAE20	SAE30	SAE50	SAE10	SAE20	SAE30	SAE40
SY60~SY80	20	30	40	50	10	20	30	40
SY100	20	30	40	50	20	30	40	50
SY120~	30	40	50	50	20	30	40	50



If misselected, misinstalled and missafe-guard Chain will break and serious injury or property damage can result.

Please read an instruction manual carefully before installation.

Roller Chain Application Information

Please select the chain (compare with Technical Data) when you use.

If the chain abused through improper installation, operating or maintenance procedures, failure can lead to personal injury or property damage.

Ultimate Tensile Strength

Ultimate tensile strength is the one time pull required to break the chain therefore these are not the allowable working load.

Safety factor must be considered when selecting roller chain.

A roller chain should never be loaded above 50% of Ultimate strength for even one cycle. When to use a multiple-strand roller chain, please consider the multiple-strand factor.

Guarding

The chain can break in normal service due to the effects of wear, fatigue or unexpected overloads. Therefore a roller chain drive should have adequate guarding to prevent personal injury or property damage.

Connecting Link

When a slip-fit connecting link coverside for ease of assembly is used, a chain's working capacity is reduced as much as 20% on some models. SUGIYAMA CHAIN offered New Connecting Links with slip-fit coverside as strong as the base chain. Recommend this New Connecting Link to use.

Offset Link

One-pitch offset links are very handy, pin and offset linkplates have to be slip-fitted.

It's allowable working load is approximately 30% less.

Therefore one-pitch offset links are not recommended especially frequent, impact load and high speed driving.

The two-pitch offset link is combination of a roller link and an offset link connected with a riveted pin.

So two-pitch offset link can be used in high speed or heavy duty applications.

Cotter Pin, Spring Clip

Keep angle 90° approx. to spread out prongs of cotter pin. Do not reuse the cotter and do not use the commercial cotters on the market.

Be sure to insert spring clip properly into and seat in the groove on the end of Pin after installation of Connecting Link cover plate onto pins, and do not spring one leg of the clip over the pin end to avoid breakdown of the leg.

Do not spread out clip's legs too much to prevent falling spring clip off and unexpected accident.

Install spring clips with solid end pointing in the direction of chain travel.

Rust Corrosion

If a chain is corroded, its capacity is reduced.

If corrosion is severe, the link plates may crack even though the chain is not under load.

In view this, carbon steel chain should not be exposed to corrosive conditions, acid fumes, salt spray sea water.

Chain corrosion from normal atmospheric conditions may be minimized by proper lubrication.

CAUTION

- 1) Always lock out machinery power switch before attempting removal , installation, or any servicing of chain
- 2) Wear eye and face protection when grinding, driving, or disassembling pins.
- 3) Always wear gloves ,protective clothing and safety shoes with steel toe when working with chains.
- 4) Make absolutely sure that chain is properly supported to prevent uncontrolled movement of chain and parts.
- 5) Chain pressers and breaking tools are recommended to be in good working order and to be used according to instructions.
- 6) Avoid plating or welding assembled chains or components.
- 7) Never repair damaged chains by replacing only the component parts.
- 8) Damaged chain may be yielded and therefore should not be reworked.

Maintenance Check List

Inspect on regularly scheduled basis for worn ,damaged or broken parts ,possible interference by other systems components, and proper lubrication.

Normal maintenance procedures can prevent most of the conditions described below.

Carefully inspect roller chain drives on the same schedule as associated equipment.

Sprocket Misalignment

Wear on the sides of sprocket teeth generally indicates improper installation of sprockets and/or shafts. If shafts are out of parallel or not in the same plane, non-symmetrical wear will appear on sprockets or chain rollers.

After proper alignment is made retighten set screws in sprocket hubs.

Chain wear and Elongation

Normal wear will cause some increase in chain length. However, if a sudden increase in elongation occurs , look for severe wear on the tips of sprocket teeth. This may be caused by any of the following : excessive loading or shock loading , displacement and/or wear in bearings, displacement of take-up ,or under-designed drives.

Excessive elongation may be an indication that chain and/or sprockets should be replaced.

Before replacing chain or sprockets ,recalculate initial drive design. Check chain tension if there is too much accumulated slack in the drive.

Broken Chain Parts

Generally caused by an overloaded drive ; extreme misalignment ; excessive elongation causing chain to jump sprocket teeth; heavy shock; improper drive design geometry; foreign objects.

Recalculate initial drive design and make necessary correction .Inspect sprockets and shafts for proper alignment or looseness.

Link Plate Wear

Wear on inside of the link plates and on one side of sprocket teeth may be caused by a misalignment misalignment of sprockets.

Realign sprockets and shafts. Inspect chain carefully ,readjust chain properly or replace.

Removing Chain

Turn the drive until a connecting link is fully engaged with one of the sprockets so as to relieve the tension on the connecting pin.

The connecting link may then be removed.

Excessive Noise

Can be caused by broken links and chain rollers, extreme misalignment, elongation, chain jumping sprocket teeth , loose sprockets, broken teeth ,accumulation of dirt packed into the chain or sprockets teeth, interference by foreign objects, contacting a fixed object

Check for worn broken or missing parts. Check alignment of shafts and/or sprockets.

Lubrication

On slow speed drives, where manual lubrication is used, if drip lubrication is used check for adequate oil flow and proper application to the chain.

With bath or pump lubrication, check oil level and add oil if needed. Check oil for contamination and change oil if needed. If pump lubrication is used, check each orifice to be sure it is clear and is directing oil onto the chain properly.

Recommended Replacement

Measure the chain wear elongation and if elongation exceeds functional limits or is greater than 3% (0.36 inch in one foot) replace the entire chain.

Do not connect a new section of chain to a worn chain because it may run roughly and damage the drive. Do not continue to run a chain worn beyond

3% elongation because the chain will not engage the sprockets properly and it may damage the sprockets.

Cutting Riveted Chain

The two pins of a pin link must be driven out of the link plate. Strike the pins alternately to avoid distortion of the roller link plates as well as the plates of the adjacent links.

Chain cutting tools can also be used. Follow their instruction carefully.

Inserting New Links

Insert only on new roller chain. Pitch variance between a new link and an old link, especially one which is elongated due to wear, will cause shock when the new link engages the sprockets.

Installing New Chain

Chain and/or related parts should be visually inspected for damage, which could have occurred during shipping prior to installation.

Never install new chain on worn sprockets as this will permanently damage chain. With new chain and sprockets installed , check for proper and sprockets installed, check for proper tension and alignment.

MAXIMUM KILLOWATT RATING OF 35

No. of Teeth Small Spkt	Maximum R.P.M.-Small Sprocket																			
	50	100	300	500	700	900	1200	1500	1800	2100	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
	A										B									
9	008	016	042	067	091	114	147	180	212	243	213	162	129	105	088	075	065	057	051	046
10	009	018	047	075	101	127	165	201	237	273	250	190	151	123	103	088	077	067	060	053
11	010	020	052	083	112	141	183	223	263	302	288	219	174	142	119	102	088	077	069	061
12	011	021	058	091	124	155	201	245	289	332	328	250	198	162	136	116	101	088	078	070
13	013	023	063	099	135	169	219	267	315	362	370	282	223	183	153	131	113	100	088	079
14	014	025	068	108	146	183	237	290	341	392	414	315	250	204	171	146	127	111	099	088
15	015	027	073	116	157	197	255	312	368	423	459	349	277	227	190	162	141	123	109	098
16	016	029	079	125	169	211	274	335	394	453	505	384	305	250	209	179	155	136	121	108
17	017	031	084	133	180	226	292	357	421	484	554	421	334	273	229	196	170	149	132	118
18	018	033	089	141	191	240	311	380	448	514	602	459	364	298	250	213	185	162	144	129
19	019	035	095	150	203	254	330	403	475	545	638	498	395	323	271	231	200	176	156	140
20	020	037	100	158	214	269	348	426	502	576	674	537	426	349	292	250	216	190	168	151
21	021	039	105	167	226	283	367	449	529	608	711	578	459	375	315	269	233	204	181	162
22	022	041	111	176	238	298	386	472	556	639	748	620	492	403	337	288	250	219	194	174
23	023	043	116	184	249	313	405	495	584	670	784	663	526	430	361	308	267	234	208	186
24	024	045	122	193	261	327	424	519	611	702	821	706	561	459	384	328	285	250	221	198
25	025	047	127	202	273	342	443	542	639	734	858	751	596	488	409	349	303	265	235	211
26	026	049	133	210	285	357	463	565	666	765	895	796	632	517	434	370	321	282	250	223
28	029	054	144	228	308	387	501	612	722	829	970	890	706	578	484	414	359	315	279	250
30	031	058	155	245	332	417	540	660	778	893	1045	987	783	641	537	459	398	349	310	277
32	033	062	166	263	356	447	579	707	834	958	1120	1087	863	706	592	505	438	384	341	305
35	037	068	183	290	393	492	638	779	918	1055	1234	1244	987	808	677	578	501	440	390	349
40	042	079	212	335	453	568	736	900	1061	1219	1426	1520	1206	987	827	706	612	537	477	426
45	048	089	240	380	515	646	836	1022	1205	1384	1619	1813	1439	1178	987	843	731	641	569	509

MAXIMUM KILLOWATT RATING OF 40

No. of Teeth Small Spkt	Maximum R.P.M.-Small Sprocket																			
	10	25	50	100	200	300	400	500	700	900	1000	1200	1400	1600	1800	2100	2400	2700	3000	3500
	A										B									
9	005	011	020	037	069	100	130	158	214	269	295	348	375	307	258	204	167	140	120	095
10	005	012	022	042	078	112	145	177	240	301	331	390	440	360	302	239	196	164	140	111
11	006	013	025	046	086	124	161	197	266	334	367	432	497	415	348	276	226	189	162	128
12	006	015	027	051	095	136	177	216	292	367	403	475	546	473	396	315	258	216	184	146
13	007	016	030	055	103	149	193	235	319	400	439	518	595	533	447	355	290	243	208	165
14	008	017	032	060	112	161	209	255	345	433	476	561	644	596	500	396	325	272	232	184
15	008	019	035	065	120	174	225	275	372	466	513	604	694	661	554	440	360	302	258	204
16	009	020	037	069	129	186	241	295	399	500	550	648	744	728	610	484	396	332	284	225
17	009	021	040	074	138	199	257	315	426	534	587	692	795	798	669	531	434	364	311	247
18	010	023	042	079	147	211	274	335	453	568	625	736	845	869	728	578	473	396	339	269
19	010	024	045	083	156	224	290	355	480	602	662	780	896	943	790	627	513	430	367	291
20	011	025	047	088	164	237	307	375	508	636	700	825	947	1018	853	677	554	464	396	315
21	012	027	050	093	173	250	323	395	535	671	738	869	999	1095	918	728	596	500	427	339
22	012	028	052	098	182	262	340	416	563	705	776	914	1050	1174	984	781	639	536	457	363
23	013	029	055	102	191	275	357	436	590	740	814	959	1102	1242	1052	835	683	573	489	388
24	014	031	057	107	200	288	374	457	618	775	852	1004	1153	1301	1121	890	728	610	521	414
25	014	032	060	112	209	301	390	477	646	810	890	1049	1205	1359	1192	946	774	649	554	440
26	015	034	063	117	218	314	407	498	674	845	929	1095	1258	1418	1264	1003	821	688	588	466
28	016	036	068	127	236	341	441	539	730	915	1006	1186	1362	1536	1413	1121	918	769	657	521
30	017	039	073	137	255	367	475	581	787	986	1084	1278	1468	1655	1567	1244	1018	853	728	578
32	018	042	078	146	273	393	510	623	843	1057	1163	1370	1574	1775	1727	1370	1121	940	802	637
35	020	046	086	161	301	433	561	686	929	1165	1281	1509	1734	1955	1975	1567	1283	1075	918	728
40	023	053	100	186	348	501	649	793	1073	1346	1479	1743	2003	2258	2413	1915	1567	1313	1121	890
45	027	061	113	212	395	569	737	900	1219	1528	1680	1980	2274	2565	2851	2285	1870	1567	1338	1062

MAXIMUM KILLOWATT RATING OF 50

No. of Teeth Small Spkt.	Maximum R.P.M.-Small Sprocket																			
	10	25	50	100	200	300	400	500	700	900	1000	1200	1400	1600	1800	2100	2400	2700	3000	3500
	A								B											
9	009	021	039	072	135	195	252	308	417	523	575	566	449	367	308	244	200	168	143	114
10	010	023	043	081	151	218	282	345	467	586	644	662	526	430	361	286	234	196	168	133
11	011	026	048	090	168	242	313	383	518	649	714	764	606	496	416	330	270	226	193	153
12	012	028	053	099	184	265	344	420	569	713	784	871	691	566	474	376	308	258	220	175
13	014	031	058	108	201	289	375	458	620	778	855	982	779	638	534	424	347	291	248	197
14	015	033	062	117	218	313	406	496	672	843	926	1092	871	713	597	474	388	325	278	220
15	016	036	067	126	234	338	438	535	724	908	998	1176	966	790	662	526	430	361	308	244
16	017	039	072	135	251	362	469	573	776	973	1070	1261	1064	871	730	579	474	397	339	269
17	018	041	077	144	268	387	501	612	829	1039	1143	1346	1165	954	799	634	519	435	371	295
18	019	044	082	153	285	411	533	651	882	1105	1215	1432	1269	1039	871	691	566	474	405	321
19	020	047	087	162	303	436	565	690	935	1172	1288	1518	1377	1127	944	749	613	514	439	348
20	022	049	092	171	320	461	597	730	988	1239	1362	1605	1487	1217	1020	809	662	555	474	376
21	023	052	097	181	337	486	629	769	1041	1306	1435	1691	1600	1309	1097	871	713	597	510	405
22	024	055	102	190	355	511	662	809	1095	1373	1509	1779	1715	1404	1177	934	764	640	547	434
23	025	057	107	199	372	536	694	849	1149	1440	1584	1866	1834	1501	1258	998	817	685	585	464
24	026	060	112	209	390	561	727	889	1203	1508	1658	1954	1954	1600	1341	1064	871	730	623	494
25	027	063	117	218	407	586	760	929	1257	1576	1733	2042	2078	1701	1425	1131	926	776	662	526
26	029	065	122	228	425	612	793	969	1311	1644	1808	2130	2204	1804	1512	1200	982	823	703	558
28	031	071	132	247	460	663	859	1049	1421	1781	1958	2308	2463	2016	1689	1341	1097	920	785	623
30	033	076	142	266	496	714	925	1131	1531	1919	2110	2486	2731	2236	1874	1487	1217	1020	871	691
32	036	082	153	285	531	766	992	1212	1641	2058	2262	2666	3009	2463	2064	1638	1341	1123	959	761
35	039	090	168	314	585	843	1093	1335	1808	2267	2492	2937	3374	2817	2361	1874	1533	1285	1097	871
40	046	104	194	362	676	974	1262	1543	2088	2618	2879	3392	3897	3442	2885	2289	1874	1570	1341	1064
45	052	118	221	412	768	1106	1433	1752	2372	2973	3269	3852	4425	4107	3442	2731	2236	1874	1600	1269

MAXIMUM KILLOWATT RATING OF 60

No. of Teeth Small Spkt.	Maximum R.P.M.-Small Sprocket																			
	10	25	50	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000
	Lubrication System																			
	A							B												
9	017	039	072	135	195	252	363	471	575	678	779	878	977	860	746	654	519	425	356	304
10	019	044	081	151	218	283	407	527	645	760	873	984	1094	1007	873	766	608	498	417	356
11	021	048	090	168	242	313	451	585	715	842	968	1091	1213	1162	1007	884	702	574	481	411
12	023	053	099	184	266	344	496	642	785	925	1063	1199	1333	1324	1148	1007	799	654	548	468
13	025	058	108	201	290	375	541	700	856	1009	1159	1307	1453	1493	1294	1136	901	738	618	528
14	027	063	117	218	314	407	586	759	927	1093	1255	1416	1574	1669	1447	1270	1007	825	691	590
15	030	067	126	235	338	438	631	817	999	1177	1352	1525	1696	1851	1604	1408	1117	915	766	654
16	032	072	135	252	362	470	676	876	1071	1262	1450	1635	1818	1999	1767	1551	1231	1007	844	721
17	034	077	144	269	387	501	722	936	1144	1348	1548	1746	1941	2134	1936	1699	1348	1103	925	790
18	036	082	153	286	412	533	768	995	1217	1433	1647	1857	2065	2270	2109	1851	1469	1202	1007	860
19	038	087	162	303	436	565	814	1055	1290	1520	1746	1969	2189	2407	2287	2007	1593	1304	1093	933
20	040	092	172	320	461	598	861	1115	1363	1606	1845	2081	2314	2544	2470	2168	1720	1408	1180	1007
21	042	097	181	338	486	630	907	1175	1437	1693	1945	2194	2439	2681	2658	2332	1851	1515	1270	1084
22	045	102	190	355	511	662	954	1236	1511	1780	2045	2307	2564	2820	2850	2501	1985	1624	1361	1162
23	047	107	200	372	536	695	1001	1297	1585	1868	2146	2420	2691	2958	3046	2673	2121	1736	1455	1242
24	049	112	209	390	562	728	1048	1358	1660	1956	2247	2534	2817	3097	3247	2850	2261	1851	1551	1324
25	051	117	218	408	587	760	1095	1419	1735	2044	2348	2648	2944	3237	3452	3030	2404	1968	1649	1408
26	054	122	228	425	612	793	1143	1480	1810	2132	2450	2763	3072	3377	3661	3213	2550	2087	1749	1493
28	058	132	247	461	663	859	1238	1604	1960	2310	2654	2993	3327	3658	3986	3591	2850	2332	1955	1669
30	062	142	266	496	715	926	1334	1728	2112	2489	2859	3224	3585	3941	4294	3982	3160	2587	2168	1851
32	067	153	285	532	766	993	1430	1853	2265	2668	3066	3457	3844	4226	4604	4387	3482	2850	2388	2039
35	074	168	314	586	844	1094	1575	2041	2495	2940	3377	3808	4234	4655	5072	5018	3982	3260	2732	2332
40	085	194	363	677	975	1263	1820	2357	2882	3396	3901	4399	4891	5378	5859	6131	4866	3982	3337	2850
45	097	221	412	769	1107	1435	2067	2677	3273	3856	4430	4996	5555	6107	6654	7196	5806	4752	3982	3400

MAXIMUM KILLOWATT RATING OF 80

No. of Teeth Small Splt.	Maximum R.P.M.-Small Sprocket																			
	10	25	50	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000
	Lubrication System																			
	A							B												
9	040	091	169	316	455	589	848	1099	1344	1583	1819	1513	1268	1083	939	824	654	535	448	383
10	045	102	190	354	509	660	951	1232	1506	1774	2038	1772	1485	1268	1099	965	766	627	525	448
11	049	113	210	392	565	732	1054	1365	1669	1966	2259	2045	1714	1463	1268	1113	883	723	606	517
12	054	124	231	431	620	804	1158	1500	1833	2160	2482	2330	1953	1667	1445	1268	1006	824	690	589
13	059	135	252	470	676	876	1262	1635	1999	2355	2706	2627	2202	1880	1629	1430	1135	929	778	665
14	064	146	273	509	733	949	1367	1771	2165	2551	2931	2936	2460	2101	1821	1598	1268	1038	870	743
15	069	157	294	548	789	1023	1473	1908	2333	2749	3158	3256	2729	2330	2019	1772	1406	1151	965	824
16	074	169	315	588	846	1096	1579	2046	2501	2947	3386	3587	3006	2567	2225	1953	1549	1268	1063	907
17	079	180	336	627	904	1171	1686	2185	2670	3147	3615	3928	3292	2811	2437	2138	1697	1389	1164	994
18	084	192	358	667	961	1245	1794	2324	2840	3347	3845	4280	3587	3063	2655	2330	1849	1513	1268	1083
19	089	203	379	707	1019	1320	1901	2463	3011	3548	4076	4597	3890	3321	2879	2527	2005	1641	1375	1174
20	094	215	401	748	1077	1395	2010	2604	3183	3750	4308	4859	4201	3587	3109	2729	2165	1772	1485	1268
21	099	226	422	788	1135	1471	2118	2745	3355	3953	4542	5121	4520	3859	3345	2936	2330	1907	1598	1364
22	104	238	444	829	1194	1547	2228	2886	3528	4157	4776	5350	4847	4138	3587	3148	2498	2045	1714	1463
23	109	250	466	870	1252	1623	2337	3028	3701	4361	5010	5650	5181	4424	3834	3365	2670	2186	1832	1564
24	115	261	488	910	1311	1699	2447	3170	3875	4566	5246	5916	5523	4715	4087	3587	2847	2330	1953	1667
25	120	273	510	951	1370	1776	2557	3313	4050	4772	5481	6183	5871	5013	4345	3814	3026	2477	2076	1772
26	125	285	532	993	1430	1852	2668	3457	4225	4979	5720	6450	6227	5317	4608	4045	3210	2627	2202	1880
28	135	309	576	1075	1549	2007	2890	3745	4577	5394	6196	6988	6959	5942	5150	4520	3587	2936	2460	2101
30	146	333	621	1159	1669	2162	3114	4034	4932	5811	6676	7528	7718	6590	5712	5013	3978	3256	2729	2330
32	156	357	666	1242	1789	2318	3339	4325	5288	6230	7158	8072	8503	7260	6293	5523	4382	3587	3006	2567
35	172	393	733	1368	1971	2554	3678	4765	5825	6864	7885	8892	9726	8304	7198	6317	5013	4103	3439	2936
40	199	454	847	1581	2277	2950	4249	5504	6728	7928	9108	10271	11420	1015	8794	7718	6125	5013	4201	3587
45	226	516	962	1795	2586	3350	4825	6251	7641	9004	10344	11665	1297	1211	1049	9209	7308	5982	5013	4280

MAXIMUM KILLOWATT RATING OF 100

No. of Teeth Small Splt.	Maximum R.P.M.-Small Sprocket																							
	10	25	50	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1600	1800				
	Lubrication System																							
	A					B															C			
9	076	174	324	605	871	1128	1625	2105	2573	2785	2210	1809	1516	1294	1122	985	873	781	640	536				
10	085	195	363	677	976	1264	1821	2359	2884	3262	2589	2119	1776	1516	1314	1153	1023	915	749	628				
11	095	216	402	751	1082	1401	2018	2615	3196	3763	2986	2444	2049	1749	1516	1331	1180	1056	864	724				
12	104	237	442	825	1188	1539	2217	2872	3511	4137	3403	2785	2334	1993	1727	1516	1345	1203	985	825				
13	113	258	482	899	1295	1678	2417	3132	3828	4511	3837	3140	2632	2247	1948	1709	1516	1357	1110	931				
14	123	280	522	974	1403	1818	2619	3393	4147	4887	4288	3510	2941	2511	2177	1910	1694	1516	1241	1040				
15	132	301	562	1050	1512	1959	2821	3655	4486	5265	4756	3892	3262	2785	2414	2119	1879	1681	1376	1153				
16	142	323	603	1125	1621	2100	3025	3919	4791	5645	5239	4288	3594	3068	2660	2334	2070	1852	1516	1271				
17	151	345	644	1202	1731	2242	3230	4184	5115	6027	5738	4696	3936	3360	2913	2556	2267	2029	1660	1391				
18	161	367	685	1278	1841	2385	3435	4451	5440	6411	6251	5117	4288	3661	3173	2785	2470	2210	1809	1516				
19	171	389	726	1355	1952	2528	3642	4718	5768	6796	6780	5549	4650	3971	3442	3020	2679	2397	1962	1644				
20	180	411	767	1432	2063	2672	3849	4987	6096	7183	7322	5993	5022	4288	3717	3262	2893	2589	2119	1776				
21	190	434	809	1510	2174	2817	4058	5257	6426	7572	7878	6448	5404	4614	3999	3510	3113	2785	2280	1910				
22	200	456	851	1587	2286	2962	4267	5528	6757	7962	8447	6914	5794	4947	4288	3763	3338	2986	2444	2049				
23	210	478	893	1665	2399	3108	4477	5799	7089	8354	9029	7390	6194	5288	4584	4023	3568	3192	2613	2190				
24	220	501	934	1744	2512	3254	4687	6072	7423	8746	9625	7878	6602	5637	4886	4288	3803	3403	2785	2334				
25	229	523	977	1822	2625	3401	4898	6346	7757	9141	10232	8375	7019	5993	5194	4559	4043	3618	2961	2482				
26	239	546	1019	1901	2739	3548	5110	6621	8093	9536	10852	8883	7444	6356	5509	4835	4288	3837	3140	2632				
28	259	591	1104	2060	2967	3844	5536	7172	8767	10331	11868	9927	8319	7103	6157	5404	4792	4288	3510	2941				
30	279	637	1189	2219	3196	4141	5964	7727	9446	11130	1279	1101	9226	7878	6828	5993	5315	4756	3892	3262				
32	300	683	1275	2379	3427	4440	6395	8285	10128	11933	1371	1213	1016	8678	7522	6602	5855	5239	4288	3594				
35	330	753	1405	2621	3775	4891	7045	9127	11157	1315	1510	1387	1163	9927	8605	7552	6697	5993	4905	4111				
40	381	869	1622	3028	4361	5650	8138	10543	1289	1519	1745	1695	1421	1213	1051	9226	8183	7322	5993	5022				
45	433	987	1843	3438	4952	6416	9242	11973	1464	1725	1981	2023	1695	1447	1254	1101	9764	8737	7151	5993				

MAXIMUM KILLOWATT RATING OF 120

No. of Teeth Small Splt.	Maximum R.P.M.-Small Sprocket																			
	10	25	50	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
	Lubrication System																			
	A			B									C							
9	129	293	547	1021	1471	1905	2744	3555	4236	3223	2557	2093	1754	1498	1298	1139	1010	904	815	740
10	144	329	613	1144	1648	2135	3075	3983	4869	3774	2995	2451	2054	1754	1520	1334	1183	1059	955	867
11	160	364	679	1268	1826	2366	3408	4415	5397	4354	3455	2828	2370	2024	1754	1539	1365	1222	1102	1000
12	175	400	746	1393	2006	2599	3744	4850	5929	4961	3937	3223	2701	2306	1999	1754	1556	1392	1255	1139
13	191	436	814	1519	2187	2834	4082	5288	6464	5594	4439	3634	3045	2600	2254	1978	1754	1570	1415	1285
14	207	472	882	1645	2370	3070	4422	5729	7003	6252	4961	4061	3403	2906	2519	2210	1960	1754	1582	1436
15	223	509	950	1772	2553	3308	4764	6172	7545	6934	5502	4504	3774	3223	2793	2451	2174	1945	1754	1592
16	239	546	1018	1900	2737	3546	5108	6618	8090	7639	6062	4961	4158	3550	3077	2701	2395	2143	1932	1754
17	255	583	1087	2029	2923	3786	5454	7065	8637	8366	6639	5434	4554	3888	3370	2958	2623	2347	2116	1921
18	272	620	1157	2158	3109	4027	5801	7515	9187	9115	7233	5920	4961	4236	3672	3223	2858	2557	2306	2093
19	288	657	1226	2288	3296	4270	6150	7967	9739	9885	7844	6420	5381	4594	3982	3495	3099	2773	2501	2270
20	304	694	1296	2418	3483	4513	6500	8421	10294	10675	8471	6934	5811	4961	4300	3774	3347	2995	2701	2451
21	321	732	1366	2549	3672	4757	6852	8877	10851	11486	9115	7460	6252	5338	4627	4061	3601	3223	2906	2638
22	337	770	1436	2681	3861	5002	7205	9334	11410	12316	9773	7999	6704	5724	4961	4354	3862	3455	3116	2828
23	354	808	1507	2812	4051	5248	7559	9793	11971	13165	10447	8551	7166	6119	5304	4655	4128	3694	3331	3023
24	371	846	1578	2945	4241	5495	7915	10254	12534	14033	11136	9115	7639	6522	5653	4961	4400	3937	3550	3223
25	387	884	1649	3077	4433	5743	8272	10716	13099	14919	11839	9690	8121	6934	6010	5275	4678	4186	3774	3426
26	404	922	1720	3211	4624	5991	8629	11180	13666	15823	12557	10277	8613	7354	6374	5594	4961	4439	4003	3634
28	438	999	1864	3478	5010	6490	9349	12111	14805	17445	14033	11486	9626	8219	7124	6252	5545	4961	4474	4061
30	472	1076	2008	3747	5397	6992	10072	13048	15950	18794	15563	12738	10675	9115	7900	6934	6149	5502	4961	4504
32	506	1154	2153	4018	5787	7497	10799	13990	17102	20151	17145	14033	11760	10041	8704	7639	6774	6062	5466	4961
35	557	1271	2372	4426	6375	8259	11896	15412	18840	22199	19612	16052	13452	11486	9956	8738	7749	6934	6252	5675
40	644	1468	2740	5112	7364	9540	13742	17803	21762	25643	23961	19612	16436	14033	12164	10675	9468	8471	7639	6934
45	731	1667	3111	5806	8363	10834	15606	20217	24714	29121	28591	23402	19612	16745	14514	12738	11297	10109	9115	8274

MAXIMUM KILLOWATT RATING OF 140

No. of Teeth Small Splt.	Maximum R.P.M.-Small Sprocket																			
	10	25	50	100	150	200	250	300	350	400	450	500	550	600	700	800	900	1000	1100	1200
	Lubrication System																			
	A			B												C				
9	199	454	846	1580	2275	2948	3603	4246	4878	5500	5613	4792	4154	3645	2893	2368	1984	1694	1469	1289
10	223	508	948	1770	2549	3303	4037	4757	5465	6163	6574	5613	4865	4270	3388	2773	2324	1984	1720	1510
11	247	563	1051	1962	2826	3661	4475	5273	6058	6832	7584	6475	5613	4926	3909	3199	2681	2289	1984	1742
12	271	619	1155	2155	3104	4022	4916	5793	6655	7505	8344	7378	6395	5613	4454	3645	3055	2608	2261	1984
13	296	675	1259	2350	3385	4385	5360	6316	7256	8182	9097	8319	7211	6329	5022	4111	3445	2941	2549	2237
14	320	731	1364	2546	3667	4750	5807	6842	7860	8864	9855	9297	8059	7073	5613	4594	3850	3287	2849	2501
15	345	788	1470	2742	3950	5118	6256	7371	8468	9550	10618	10311	8937	7844	6225	5095	4270	3645	3160	2773
16	370	844	1576	2940	4235	5487	6707	7904	9080	10239	11384	11359	9846	8641	6857	5613	4704	4016	3481	3055
17	395	902	1682	3139	4522	5858	7161	8438	9694	10932	12154	12440	10783	9464	7510	6147	5151	4398	3812	3346
18	420	959	1789	3339	4810	6231	7617	8976	10311	11628	12928	13554	11749	10311	8182	6697	5613	4792	4154	3645
19	446	1017	1897	3540	5099	6606	8075	9515	10931	12327	13706	14699	12741	11182	8874	7263	6087	5197	4505	3953
20	471	1075	2005	3742	5390	6982	8535	10057	11554	13029	14487	15875	13760	12076	9583	7844	6574	5613	4865	4270
21	497	1133	2114	3944	5681	7360	8997	10601	12179	13734	15270	16789	14805	12993	10311	8439	7073	6039	5234	4594
22	522	1191	2223	4147	5974	7739	9461	11148	12807	14442	16057	17654	15875	13932	11056	9049	7584	6475	5613	4926
23	548	1250	2332	4351	6268	8120	9926	11696	13437	15152	16847	18523	16969	14893	11819	9673	8107	6922	6000	5265
24	574	1308	2442	4556	6563	8502	10393	12246	14069	15865	17639	19394	18088	15875	12598	10311	8641	7378	6395	5613
25	599	1367	2552	4761	6858	8885	10861	12798	14703	16580	18434	20268	19230	16877	13393	10962	9187	7844	6799	5967
26	625	1427	2662	4967	7155	9270	11331	13352	15339	17298	19232	21145	20395	17900	14205	11626	9743	8319	7211	6329
28	677	1545	2884	5381	7751	10042	12275	14464	16617	18739	20834	22907	22794	20005	15875	12993	10889	9297	8059	7073
30	730	1665	3107	5798	8351	10819	13225	15583	17902	20189	22446	24679	25279	22186	17606	14410	12076	10311	8937	7844
32	783	1785	3331	6216	8954	11600	14180	16708	19195	21646	24067	26460	27848	24441	19395	15875	13304	11359	9846	8641
35	862	1967	3670	6848	9864	12779	15621	18406	21145	23846	26512	29149	31760	27957	22186	18159	15218	12993	11262	9884
40	996	2272	4239	7910	11394	14761	18044	21262	24426	27545	30625	33671	36687	34157	27106	22186	18593	15875	13760	12076
45	1131	2580	4814	8983	12939	16763	20492	24146	27739	31281	34779	38239	41664	40758	32344	26473	22186	18942	16419	14410

MAXIMUM KILLOWATT RATING OF 160

No. of Teeth Small Splt.	Maximum R.P.M.-Small Sprocket																			
	10	25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
	Lubrication System																			
	A			B												C				
9	289	658	1228	2292	3301	4276	5227	6160	7076	7452	6245	5332	4622	4056	3598	3219	2903	2635	2406	2208
10	323	737	1376	2568	3699	4792	5857	6902	7929	8728	7315	6245	5413	4751	4213	3770	3400	3086	2818	2586
11	358	817	1525	2846	4100	5311	6493	7650	8789	9911	8439	7205	6245	5481	4861	4350	3922	3560	3251	2984
12	394	898	1676	3127	4504	5835	7132	8404	9655	10888	9615	8210	7116	6245	5539	4956	4469	4056	3704	3400
13	429	979	1827	3409	4910	6361	7776	9163	10527	11871	1084	9257	8024	7042	6245	5588	5039	4574	4176	3833
14	465	1061	1979	3693	5319	6891	8424	9926	11404	1286	1212	1035	8967	7870	6980	6245	5631	5112	4667	4284
15	501	1143	2132	3979	5731	7425	9076	10694	12286	1385	1344	1147	9945	8728	7741	6926	6245	5669	5176	4751
16	537	1225	2286	4266	6145	7961	9731	11466	1317	1485	1480	1264	1096	9615	8527	7630	6880	6245	5702	5234
17	573	1308	2441	4555	6560	8499	10390	12242	1406	1586	1621	1384	1200	1053	9339	8357	7535	6840	6245	5732
18	610	1391	2596	4845	6978	9040	11051	1302	1496	1687	1766	1508	1307	1147	1018	9105	8210	7452	6804	6245
19	647	1475	2752	5136	7398	9584	11716	1380	1586	1788	1916	1636	1418	1244	1103	9874	8903	8082	7379	6773
20	683	1559	2909	5428	7819	10130	12383	1459	1676	1890	2069	1766	1531	1344	1192	1066	9615	8728	7969	7315
21	720	1643	3066	5722	8242	10678	1305	1538	1767	1993	2215	1901	1647	1446	1282	1147	1035	9391	8575	7870
22	757	1728	3224	6017	8667	11228	1373	1617	1858	2095	2330	2038	1766	1550	1375	1230	1109	1007	9194	8439
23	795	1813	3383	6313	9093	11780	1440	1697	1949	2198	2444	2178	1888	1657	1470	1315	1186	1076	9828	9021
24	832	1898	3542	6610	9521	12334	1508	1777	2041	2302	2559	2322	2013	1766	1567	1402	1264	1147	1048	9615
25	870	1984	3702	6908	9950	1289	1576	1857	2133	2405	2674	2469	2140	1878	1666	1490	1344	1220	1114	1022
26	907	2070	3862	7207	10380	1345	1644	1937	2225	2510	2790	2618	2269	1992	1766	1581	1425	1294	1181	1084
28	983	2242	4184	7807	11245	1457	1781	2098	2411	2719	3023	2926	2536	2226	1974	1766	1593	1446	1320	1212
30	1059	2415	4507	8411	12115	1570	1919	2261	2597	2929	3256	3245	2813	2469	2189	1959	1766	1603	1464	1344
32	1135	2590	4833	9018	1299	1683	2057	2424	2785	3140	3492	3575	3099	2720	2412	2158	1946	1766	1613	1480
35	1251	2853	5324	9935	1431	1854	2266	2670	3068	3459	3846	4089	3545	3111	2759	2469	2226	2021	1845	1693
40	1445	3296	6150	11476	1653	2141	2618	3085	3544	3996	4443	4885	4331	3801	3371	3016	2720	2469	2254	2069
45	1641	3743	6984	1303	1877	2432	2973	3503	4024	4538	5046	5548	5168	4535	4022	3599	3245	2946	2690	2469

MAXIMUM KILLOWATT RATING OF 180

No. of Teeth Small Spkt.	Maximum R.P.M.-Small Sprocket																			
	10	25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
	Lubrication System																			
	A			B										C						
9	389	887	1655	3088	4448	5763	7045	8301	9537	8189	6862	5859	5079	4457	3953	3537	3189	2895	2643	2426
10	436	994	1854	3461	4985	6458	7894	9302	10686	9591	8037	6862	5948	5220	4630	4143	3735	3391	3096	2842
11	483	1102	2056	3836	5525	7158	8750	10310	11844	1106	9273	7917	6862	6023	5341	4779	4310	3912	3572	3278
12	530	1210	2258	4214	6069	7863	9612	11326	1301	1261	1057	9021	7819	6862	6086	5446	4910	4457	4070	3735
13	578	1319	2462	4594	6617	8573	10480	1235	1419	1422	1191	1017	8817	7738	6862	6140	5537	5026	4589	4212
14	627	1429	2667	4977	7169	9287	11353	1338	1537	1589	1331	1137	9853	8648	7669	6862	6188	5617	5129	4707
15	675	1540	2873	5362	7723	10006	1223	1441	1656	1762	1477	1261	1093	9591	8506	7611	6862	6229	5688	5220
16	724	1651	3081	5749	8281	10728	1311	1545	1775	1941	1627	1389	1204	1057	9370	8384	7560	6862	6266	5751
17	773	1763	3289	6138	8841	11454	1400	1650	1895	2126	1782	1521	1318	1157	1026	9182	8280	7516	6862	6299
18	822	1875	3499	6529	9404	12183	1489	1755	2016	2274	1941	1657	1436	1261	1118	1000	9021	8189	7477	6862
19	871	1988	3709	6922	9970	1292	1579	1860	2137	2410	2105	1797	1558	1367	1213	1085	9783	8880	8108	7442
20	921	2101	3920	7316	10538	1365	1669	1966	2259	2547	2273	1941	1682	1477	1310	1172	1057	9591	8757	8037
21	971	2215	4133	7712	11108	1439	1759	2073	2381	2685	2446	2088	1810	1589	1409	1261	1137	1032	9422	8648
22	1021	2329	4345	8109	11680	1513	1850	2180	2504	2824	2623	2239	1941	1703	1511	1352	1219	1106	1010	9273
23	1071	2443	4559	8508	1225	1588	1941	2287	2627	2963	2804	2394	2075	1821	1615	1445	1303	1183	1080	9912
24	1121	2558	4774	8908	1283	1662	2032	2394	2751	3102	2988	2552	2212	1941	1721	1540	1389	1261	1151	1057
25	1172	2673	4989	9309	1341	1737	2124	2502	2875	3242	3177	2713	2351	2064	1830	1638	1477	1340	1224	1123
26	1223	2789	5205	9712	1399	1812	2215	2611	2999	3382	3370	2877	2494	2189	1941	1737	1566	1422	1298	1191
28	1325	3022	5638	10522	1516	1963	2400	2828	3249	3664	3766	3215	2787	2446	2169	1941	1750	1589	1451	1331
30	1427	3255	6075	11335	1633	2115	2586	3047	3500	3947	4176	3566	3091	2713	2406	2153	1941	1762	1609	1477
32	1530	3490	6513	12154	1751	2268	2772	3267	3753	4232	4601	3928	3405	2988	2650	2371	2138	1941	1772	1627
35	1686	3845	7175	1339	1929	2498	3054	3599	4134	4662	5184	4493	3895	3418	3032	2713	2446	2220	2027	1861
40	1947	4441	8288	1547	2228	2886	3528	4157	4776	5386	5988	5490	4759	4176	3704	3314	2988	2713	2477	2273
45	2211	5044	9412	1756	2530	3278	4006	4721	5423	6116	6800	6551	5678	4983	4420	3955	3566	3237	2955	2713

MAXIMUM KILLOWATT RATING OF 200

No. of Teeth Small Spkt	Maximum R.P.M.-Small Sprocket																		
	10	15	20	30	40	50	70	100	150	200	250	300	350	400	450	500	550	600	650
	Lubrication System																		
	A					B										C			
9	487	701	908	1308	1694	2071	2804	3865	5567	7213	8817	10389	1088	8909	7466	6375	5525	4849	4301
10	545	785	1017	1466	1899	2321	3142	4331	6238	8082	9879	1164	1275	1043	8744	7466	6471	5680	5037
11	604	871	1128	1624	2104	2573	3482	4801	6915	8958	10951	1290	1471	1204	1009	8613	7466	6552	5811
12	664	956	1239	1784	2312	2826	3826	5274	7596	9841	1203	1417	1628	1372	1149	9814	8507	7466	
13	724	1043	1351	1946	2521	3081	4171	5750	8282	10729	1312	1545	1775	1547	1296	1107	9592	8418	
14	784	1130	1463	2108	2731	3338	4518	6229	8972	1162	1421	1674	1923	1728	1448	1237	1072	9408	
15	845	1217	1576	2271	2942	3596	4868	6711	9666	1252	1531	1804	2072	1917	1606	1372	1189	1043	
16	906	1305	1690	2435	3154	3856	5219	7195	10364	1343	1641	1934	2222	2112	1770	1511	1310	1149	
17	967	1393	1805	2599	3368	4117	5573	7682	11065	1434	1752	2065	2372	2313	1938	1655	1434	1259	
18	1029	1482	1920	2765	3582	4379	5927	8171	1177	1525	1864	2196	2523	2520	2112	1803	1563	1372	
19	1091	1571	2035	2931	3797	4642	6284	8662	1248	1616	1976	2328	2675	2733	2290	1955	1695	1487	
20	1153	1660	2151	3098	4014	4907	6642	9156	1319	1709	2089	2461	2827	2951	2473	2112	1830		
21	1215	1750	2267	3266	4231	5172	7001	9651	1390	1801	2202	2594	2980	3175	2661	2272	1969		
22	1278	1840	2384	3434	4449	5438	7362	10149	1462	1894	2315	2728	3134	3405	2853	2436	2112		
23	1340	1931	2501	3603	4668	5706	7724	10648	1534	1987	2429	2862	3288	3639	3050	2604	2257		
24	1404	2022	2619	3772	4887	5974	8087	11148	1606	2080	2543	2997	3443	3879	3251	2776	2406		
25	1467	2113	2737	3942	5108	6244	8452	1165	1678	2174	2658	3132	3598	4057	3456	2951	2558		
26	1530	2204	2856	4113	5329	6514	8818	1216	1751	2268	2773	3267	3753	4233	3666	3130	2713		

MAXIMUM KILLOWATT RATING OF 240

No. of Teeth Small Spkt.	Maximum R.P.M.-Small Sprocket																							
	5	10	15	20	25	30	40	50	60	80	100	125	150	175	200	250	300	350	400	450				
	Lubrication System																							
	A						B																	
9	420	784	1129	1462	1788	2107	2729	3336	3931	5093	6225	7610	8967	10301	1162	1420	1587	1259	1031	8638				
10	471	878	1265	1639	2003	2360	3058	3738	4405	5706	6975	8527	10047	1154	1302	1591	1859	1475	1207	1012				
11	522	973	1402	1816	2220	2616	3389	4143	4882	632	7732	9451	11137	1279	1443	1764	2078	1702	1393	1167				
12	573	1069	1540	1995	2439	2874	3723	4552	5363	6948	8494	10383	1223	1405	1585	1937	2283	1939	1587					
13	625	1166	1679	2176	2659	3134	4060	4963	5847	7576	9260	11320	1334	1532	1728	2112	2489	2186	1789					
14	677	1263	1819	2357	2881	3395	4398	5376	6335	8207	10032	1226	1445	1660	1872	2288	2697	2443	2000					
15	729	1361	1960	2539	3104	3657	4738	5792	6825	8842	10808	1321	1557	1788	2017	2465	2905	2710	2218					
16	782	1459	2101	2722	3328	3921	5080	6210	7317	9480	1159	1417	1669	1918	2162	2643	3115	2985	2443					
17	835	1558	2244	2907	3553	4187	5424	6630	7813	10121	1237	1512	1782	2047	2309	2822	3326	3269	2676					
18	888	1657	2386	3092	3779	4453	5769	7052	8310	10766	1316	1609	1896	2178	2456	3002	3537	3562	2915					
19	941	1756	2530	3278	4007	4721	6116	7477	8810	11413	1395	1705	2010	2309	2603	3183	3750	3863	3162					
20	995	1856	2674	3464	4235	4990	6465	7902	9312	1206	1475	1803	2124	2440	2752	3364	3964	4172	3415					
21	1049	1957	2819	3652	4464	5260	6814	8330	9815	1272	1554	1900	2239	2572	2901	3546	4178	4489	3674					
22	1103	2058	2964	3840	4694	5531	7165	8759	10321	1337	1635	1998	2354	2705	3050	3729	4393	4813	3939					
23	1157	2159	3110	4029	4925	5803	7518	9190	10829	1403	1715	2096	2470	2838	3200	3912	4609	5145	4211					
24	1211	2260	3256	4218	5156	6076	7871	9622	11338	1469	1796	2195	2586	2971	3351	4096								
25	1266	2362	3403	4408	5389	6350	8226	10056	1185	1535	1877	2294	2703	3105	3502	4281								
26	1321	2465	3550	4599	5622	6625	8582	10491	1236	1602	1958	2393	2820	3240	3653	4466								

SUPER ROLLER CHAIN

MAXIMUM KILLOWATT RATING OF SUPER 80

No. of Teeth Small Spkt.	Maximum R.P.M.-Small Sprocket												
	10	25	50	100	150	200	250	300	350	400	500	600	700
	Lubrication System												
	A			B							C		
13	0.9	2.1	3.9	7.2	10.4	13.4	16.4	19.3	22.2	25.1	30.6	36.1	32.1
14	1.0	2.2	4.2	7.8	11.2	14.5	17.8	21.0	24.1	27.1	33.2	39.1	35.9
15	1.1	2.4	4.5	8.4	12.1	15.7	19.2	22.6	25.9	29.2	35.7	42.1	39.8
16	1.1	2.6	4.8	9.0	13.0	16.8	20.5	24.2	27.8	31.4	38.3	45.2	51.9
17	1.2	2.8	5.2	9.6	13.8	17.9	21.9	25.8	29.7	33.5	40.9	48.2	55.4
18	1.3	2.9	5.5	10.2	14.7	19.1	23.3	27.5	31.6	35.6	43.5	51.3	58.9
19	1.4	3.1	5.8	10.8	15.6	20.2	24.7	29.1	33.5	37.7	46.1	54.4	62.5
20	1.4	3.3	6.1	11.5	16.5	21.4	26.1	30.8	35.4	39.9	48.8	57.5	66.0
21	1.5	3.5	6.5	12.1	17.4	22.5	27.5	32.5	37.3	42.1	51.4	60.6	69.6
22	1.6	3.6	6.8	12.7	18.3	23.7	29.0	34.1	39.2	44.2	54.1	63.7	73.2
24	1.8	4.0	7.5	14.0	20.1	26.0	31.8	37.5	43.1	48.6	59.4	70.0	80.4
26	1.9	4.4	8.2	15.2	21.9	28.4	34.7	40.9	47.0	53.0	64.7	76.3	87.6
30	2.2	5.1	9.5	17.8	25.6	33.1	40.5	47.7	54.8	61.8	75.6	89.0	102.3
32	2.4	5.5	10.2	19.0	27.4	35.5	43.4	51.2	58.8	66.3	81.0	95.5	109.7
35	2.6	6.0	11.2	21.0	30.2	39.1	47.8	56.4	64.7	73.0	89.3	105.2	120.8
40	3.0	7.0	13.0	24.2	34.9	45.2	55.2	65.1	74.8	84.3	103.1	121.5	139.6

MAXIMUM KILLOWATT RATING OF SUPER 100

No. of Teeth Small Sptk	Maximum R.P.M.-Small Sprocket													
	10	25	50	100	150	200	250	300	350	400	450	500	600	
	Lubrication System													
	A			B					C					
13	1.5	3.5	6.5	12.1	17.5	22.7	27.7	32.7	37.5	42.3	47.0	51.7	48.4	
14	1.7	3.8	7.1	13.2	19.0	24.6	30.0	35.4	40.6	45.8	51.0	56.0	54.0	
15	1.8	4.1	7.6	14.2	20.4	26.5	32.3	38.1	43.8	49.4	54.9	60.4	59.9	
16	1.9	4.4	8.1	15.2	21.9	28.4	34.7	40.9	46.9	52.9	58.9	64.7	76.3	
17	2.0	4.7	8.7	16.2	23.4	30.3	37.0	43.6	50.1	56.5	62.8	69.1	81.4	
18	2.2	5.0	9.3	17.3	24.9	32.2	39.4	46.4	53.3	60.1	66.8	73.5	86.6	
19	2.3	5.3	9.8	18.3	26.4	34.2	41.8	49.2	56.5	63.7	70.9	77.9	91.8	
20	2.4	5.6	10.4	19.3	27.9	36.1	44.1	52.0	59.7	67.4	74.9	82.4	97.0	
21	2.6	5.9	10.9	20.4	29.4	38.1	46.5	54.8	63.0	71.0	79.0	86.8	102.3	
22	2.7	6.2	11.5	21.4	30.9	40.0	48.9	57.6	66.2	74.7	83.0	91.3	107.6	
24	3.0	6.8	12.6	23.6	33.9	44.0	53.7	63.3	72.7	82.0	91.2	100.3	118.2	
26	3.2	7.4	13.8	25.7	37.0	47.9	58.6	69.0	79.3	89.4	99.4	109.3	128.8	
30	3.8	8.6	16.1	30.0	43.2	55.9	68.4	80.6	92.6	104.4	116.1	127.6	150.4	
32	4.0	9.2	17.2	32.1	46.3	60.0	73.3	86.4	99.2	111.9	124.4	136.8	161.2	
35	4.5	10.2	19.0	35.4	51.0	66.1	80.8	95.2	109.3	123.3	137.1	150.7	177.6	
40	5.1	11.7	21.9	40.9	58.9	76.3	93.3	109.9	126.3	142.4	158.3	174.1	205.1	

MAXIMUM KILLOWATT RATING OF SUPER 120

No. of Teeth Small Spkt.	Maximum R.P.M.-Small Sprocket													
	10	25	50	75	100	150	200	250	300	350	400	450	500	
	Lubrication System													
	A		B					C						
13	2.4	5.4	10.1	14.5	18.8	27.1	35.1	42.9	50.5	58.0	65.5	72.8	80.0	
14	2.6	5.8	10.9	15.7	20.4	29.3	38.0	46.5	54.7	62.9	70.9	78.8	86.7	
15	2.8	6.3	11.8	16.9	21.9	31.6	40.9	50.0	59.0	67.7	76.4	84.9	93.4	
16	3.0	6.8	12.6	18.2	23.5	33.9	43.9	53.7	63.2	72.6	81.9	91.1	100.1	
17	3.2	7.2	13.5	19.4	25.1	36.2	46.9	57.3	67.5	77.6	87.5	97.2	106.9	
18	3.4	7.7	14.3	20.6	26.7	38.5	49.9	60.9	71.8	82.5	93.0	103.4	113.7	
19	3.6	8.1	15.2	21.9	28.3	40.8	52.8	64.6	76.1	87.5	98.6	109.6	120.6	
20	3.8	8.6	16.0	23.1	29.9	43.1	55.9	68.3	80.5	92.4	104.2	115.9	127.4	
21	4.0	9.1	16.9	24.4	31.6	45.4	58.9	72.0	84.8	97.4	109.9	122.2	134.3	
22	4.2	9.5	17.8	25.6	33.2	47.8	61.9	75.7	89.2	102.5	115.5	128.5	141.2	
24	4.6	10.5	19.5	28.1	36.4	52.5	68.0	83.1	98.0	112.5	126.9	141.1	155.2	
26	5.0	11.4	21.3	30.7	39.7	57.2	74.2	90.7	106.8	122.7	138.4	153.9	169.2	
30	5.8	13.3	24.9	35.8	46.4	66.8	86.6	105.8	124.7	143.2	161.5	179.6	197.4	
32	6.3	14.3	26.6	38.4	49.7	71.6	92.8	113.4	133.7	153.6	173.2	192.5	211.7	
35	6.9	15.7	29.4	42.3	54.8	78.9	102.2	125.0	147.2	169.2	190.8	212.1	233.2	
40	8.0	18.2	33.9	48.8	63.3	91.2	118.1	144.4	170.1	195.4	220.4	245.0	269.4	

MAXIMUM KILLOWATT RATING OF SUPER 140

No. of Teeth Small Spkt.	Maximum R.P.M.-Small Sprocket													
	10	25	50	100	150	200	250	300	350	400	450	500	550	
	Lubrication System													
	A		B			C								
13	3.4	7.8	14.6	27.3	39.3	50.9	62.2	73.3	84.2	95.0	97.4	83.2	72.1	
14	3.7	8.5	15.8	29.5	42.6	55.1	67.4	79.4	91.2	102.9	108.9	93.0	80.6	
15	4.0	9.1	17.1	31.8	45.8	59.4	72.6	85.6	98.3	110.8	120.8	103.1	89.4	
16	4.3	9.8	18.3	34.1	49.2	63.7	77.8	91.7	105.4	118.8	132.1	113.6	98.5	
17	4.6	10.5	19.5	36.4	52.5	68.0	83.1	97.9	112.5	126.9	141.1	124.4	107.8	
18	4.9	11.1	20.8	38.8	55.8	72.3	88.4	104.2	119.7	135.0	150.1	135.5	117.5	
19	5.2	11.8	22.0	41.1	59.2	76.7	93.7	110.4	126.9	143.1	159.1	147.0	127.4	
20	5.5	12.5	23.3	43.4	62.6	81.0	99.1	116.7	134.1	151.2	168.1	158.7	137.6	
21	5.8	13.1	24.5	45.8	65.9	85.4	104.4	123.0	141.4	159.4	177.2	170.8	148.0	
22	6.1	13.8	25.8	48.1	69.3	89.8	109.8	129.4	148.6	167.6	186.4	183.1	158.7	
24	6.7	15.2	28.3	52.9	76.2	98.7	120.6	142.1	163.3	184.1	204.7	208.7	180.9	
26	7.3	16.6	30.9	57.7	83.0	107.6	131.5	155.0	178.0	200.8	223.2	235.3	204.0	
30	8.5	19.3	36.1	67.3	96.9	125.6	153.5	180.9	207.8	234.3	260.5	286.4	252.8	
32	9.1	20.7	38.7	72.1	103.9	134.6	164.6	193.9	222.8	251.2	279.3	307.1	278.5	
35	10.0	22.8	42.6	79.5	114.5	148.3	181.3	213.6	245.4	276.8	307.7	338.3	318.5	
40	11.6	26.4	49.2	91.8	132.2	171.3	209.4	246.8	283.5	319.7	355.4	390.8	425.8	

MAXIMUM KILLOWATT RATING OF SUPER 160

No. of Teeth Small Spkt.	Maximum R.P.M.-Small Sprocket													
	10	15	25	40	50	80	100	150	200	250	300	350	400	
	Lubrication System													
	A		B					C						
13	4.7	6.8	10.8	16.5	20.2	30.8	37.7	54.2	70.3	85.9	101.2	116.3	131.1	
14	5.1	7.4	11.7	17.9	21.9	33.4	40.8	58.8	76.1	93.1	109.7	126.0	142.1	
15	5.5	8.0	12.6	19.3	23.6	36.0	44.0	63.3	82.0	100.3	118.1	135.7	153.0	
16	5.9	8.5	13.5	20.7	25.3	38.5	47.1	67.9	87.9	107.5	126.7	145.5	164.1	
17	6.3	9.1	14.4	22.1	27.0	41.2	50.3	72.5	93.9	114.8	135.2	155.4	175.2	
18	6.7	9.7	15.4	23.5	28.7	43.8	53.5	77.1	99.9	122.1	143.8	165.3	186.4	
19	7.1	10.3	16.3	24.9	30.4	46.4	56.7	81.7	105.9	129.4	152.5	175.2	197.6	
20	7.5	10.9	17.2	26.3	32.1	49.1	60.0	86.4	111.9	136.8	161.2	185.2	208.8	
21	8.0	11.5	18.2	27.7	33.9	51.7	63.2	91.0	118.0	144.2	169.9	195.2	220.1	
22	8.4	12.1	19.1	29.1	35.6	54.4	66.5	95.7	124.0	151.6	178.7	205.2	231.5	
24	9.2	13.2	21.0	32.0	39.1	59.7	73.0	105.2	136.3	166.6	196.3	225.5	254.3	
26	10.0	14.4	22.9	34.9	42.7	65.1	79.6	114.7	148.6	181.6	214.0	245.8	277.2	
30	11.7	16.8	26.7	40.7	49.8	76.0	92.9	133.8	173.4	211.9	249.7	286.9	323.5	
32	12.5	18.1	28.6	43.7	53.4	81.5	99.6	143.5	185.9	227.2	267.8	307.6	346.9	
35	13.8	19.9	31.5	48.1	58.8	89.8	109.7	158.1	204.8	250.3	295.0	338.9	382.2	
40	16.0	23.0	36.4	55.6	67.9	103.7	126.8	182.6	236.6	289.2	340.7	391.4	441.4	

Chain No.	Page	Type of Chain	Chain No.	Page	Type of Chain	Chain No.	Page	Type of Chain
06B	10	BS	40 -NP	43	Nickel Plated	120	19	Roller Chain
-F	22	Straight	-SB	45	Side Bow	-E	26	Heavy Duty
-SS	36	Stainless	-SL	49	Self-Lube	-F	23	Straight
-NP	42	Nickel Plated	-SLR	52	"	-H	24	Heavy Duty
08B	11	BS	-SS	36	Stainless	120 -HE	28	"
-F	22	Straight	HB 40 -SL	49	Oilless Hollow	-SL	49	Self-Lube
-SS	36	Stainless	40AB -MF	57	Maintenance Free	-SS	36	Stainless
-NP	42	Nickel Plated	40B -ECO	15	Economical Style	-DC	32	Double cap.
-SLR	51	Self-Lube	48B -ECO	15	Economical Style	-SUPER	30	Heavy Duty
10B	11	BS	50	17	Roller Chain	-SUPER-H	30	"
-F	22	Straight	-F	23	Straight	140	19	Roller Chain
-SS	36	Stainless	-HP	46	Hollow-Pin	-E	27	Heavy Duty
-NP	42	Nickel Plated	-HPSS	47	Hollow-Pin	-F	23	Straight
-SLR	51	Self-Lube	-NP	43	Nickel Plated	-H	24	Heavy Duty
12B	12	BS	-SB	45	Side Bow	-HE	29	"
-F	22	Straight	-SL	49	Self-Lube	-SL	49	"
-SS	36	Stainless	-SLR	52	"	-SS	36	Stainless
-NP	42	Nickel Plated	-SS	36	Stainless	-DC	32	Double cap.
-SLR	51	Self-Lube	48AB -MF	57	Maintenance Free	-SUPER	30	Heavy Duty
16A -MF	57	Maintenance Free	HB 50 -SL	49	Oilless Hollow	-SUPER-H	30	"
16B	12	BS	60	17	Roller Chain	160	20	Roller Chain
-MF	57	Maintenance Free	-E	26	Heavy Duty	-E	27	Heavy Duty
-F	22	Straight	-F	23	Straight	-F	23	Straight
-SS	36	Stainless	-H	24	Heavy Duty	-H	24	Heavy Duty
-DC	32	Double cap.	-HP	46	Hollow-Pin	-HE	29	"
-NP	42	Nickel Plated	-HPSS	47	Hollow-Pin	-SL	49	"
-SLR	51	Self-Lube	-NP	43	Nickel Plated	-SS	36	Stainless
-ECO	15	Economical Style	-SB	45	Side Bow	-DC	32	Double cap.
20AB -MF	57	Maintenance Free	-SL	49	Self-Lube	-SUPER	30	Heavy Duty
20B	13	BS	-SLR	52	"	-SUPER-H	30	"
-F	22	Straight	-SS	36	Stainless	180	20	Roller Chain
-DC	32	Double cap.	HB 60 -SL	49	Oilless Hollow	-E	27	Heavy Duty
-NP	42	Nickel Plated	80	18	Roller Chain	-H	24	"
-SLR	51	Self-Lube	-E	26	Heavy Duty	-DC	32	Double cap.
-ECO	15	Economical Style	-F	23	Straight	200	21	Roller Chain
24A -MF	57	Maintenance Free	-H	24	Heavy Duty	-E	27	Heavy Duty
24B	13	BS	-HE	28	"	-F	23	Straight
-MF	57	Maintenance Free	-HP	46	Hollow-Pin	-H	24	Heavy Duty
-F	22	Straight	-HPSS	47	Hollow-Pin	-HE	29	"
-DC	32	Double cap.	-NP	43	Nickel Plated	-DC	32	Double cap.
-SLR	51	Self-Lube	-SB	45	Side Bow	-SUPER	30	Heavy Duty
-ECO	15	Economical Style	-SL	49	Self-Lube	240	21	Roller Chain
28A -MF	57	Maintenance Free	-SLR	52	"	-E	27	Heavy Duty
28B	14	BS	-SS	36	Stainless	-F	23	Straight
-MF	57	Maintenance Free	-DC	32	Double cap.	-H	24	Heavy Duty
-F	22	Straight	-SUPER	30	Heavy Duty	-HE	29	"
-DC	32	Double cap.	-SUPER-H	30	"	-DC	32	Double cap.
-SLR	51	Self-Lube	HB 80 -SL	49	Oilless Hollow	-SUPER	30	Heavy Duty
-ECO	15	Economical Style	81X	72	Engineering	251S	33	"
32AB -MF	57	Maintenance Free	-H	72	"	264S	33	"
32B	14	BS	-HS	72	"	AL422	58	Leaf Chain
-F	22	Straight	100	18	Roller Chain	BL422	59	"
-DC	32	Double cap.	-E	26	Heavy Duty	BL423	59	"
-SLR	51	Self-Lube	-F	23	Straight	BL434	59	"
-ECO	15	Economical Style	-H	24	Heavy Duty	AL444	58	"
35	16	Rollerless	-HE	28	"	BL444	59	"
-F	23	Straight	-NP	43	Nickel Plated	BL446	59	"
-NP	43	Nickel Plated	-SL	49	Self-Lube	AL466	58	"
-SS	36	Stainless	-SLR	52	"	BL466	59	"
40	16	Roller Chain	-SS	36	Stainless	AL522	58	"
-F	23	Straight	-DC	32	Double cap.	BL522	59	"
-HP	46	Hollow-Pin	-SUPER	30	Heavy Duty	BL523	59	"
-HPSS	47	Hollow-Pin	-SUPER-H	30	Heavy Duty	BL534	59	"

Chain No.	Page	Type of Chain	Chain No.	Page	Type of Chain	Chain No.	Page	Type of Chain
AL544	58	Leaf Chain	AL1644	58	Leaf Chain	HB2060 -SL	55	Oilless Hollow
BL544	59	"	BL1644	59	"	C2060H	35	Double Pitch
BL546	59	"	LL1644	60	"	-NP	44	Nickel Plated
AL566	58	"	BL1646	59	"	-SLR	54	Self-Lube
BL566	59	"	AL1666	58	"	-SS	37	Stainless
AL622	58	"	BL1666	59	"	-DC	33	Double Cap.
BL622	59	"	LL1666	60	"	C2062 -HP	46	Hollow-Pin
BL623	59	"	BL2022	59	"	-HPSS	47	Hollow-Pin
BL634	59	"	LL2022	60	"	-SB	45	Side Bow
AL644	58	"	BL2023	59	"	-SL	50	Self-Lube
BL644	59	"	BL2034	59	"	HR2062 -SL	55	Oilless Hollow
BL646	59	"	A2040	34	Double Pitch	C2062H	35	Double Pitch
AL666	58	"	-NP	44	Nickel Plated	-NP	44	Nickel Plated
BL666	59	"	-SL	50	Self-Lube	-SS	37	Stainless
AL822	58	"	-SS	37	Stainless	LL2066	60	"
BL822	59	"	C2040	35	Double Pitch	A2080	34	Double Pitch
LL0822	60	"	-HP	46	Hollow-Pin	-NP	44	Nickel Plated
BL823	59	"	-HPSS	47	Hollow-Pin	-SS	37	Stainless
BL834	59	"	-NP	44	Nickel Plated	C2080 -HP	46	Hollow Pin
AL844	58	"	-SB	45	Side Bow	-HPSS	47	Hollow-Pin
BL844	59	"	-SL	50	Self-Lube	-SL	50	Self-Lube
LL0844	60	"	-SLR	54	"	HB2080 -SL	55	Oilless Hollow
BL846	59	"	-SS	37	Stainless	C2080H	35	Double Pitch
AL866	58	"	-DC	33	Double Cap.	-NP	44	Nickel Plated
BL866	59	"	HB2040 -SL	55	Oilless Hollow	-SLR	54	Self-Lube
LL0866	60	"	C2042	35	Double Pitch	-SS	37	Stainless
AL1022	58	"	-HP	46	Hollow-Pin	-DC	33	Double Cap.
BL1022	59	"	-HPSS	47	Hollow-Pin	C2082 -HP	46	Hollow Pin
LL1022	60	"	-NP	44	Nickel Plated	-HPSS	47	Hollow-Pin
BL1023	59	"	-SB	45	Side Bow	-SL	50	Self-Lube
BL1034	59	"	-SL	50	Self-Lube	HR2082 -SL	55	Oilless Hollow
AL1044	58	"	-SS	37	Stainless	C2082H	35	Double Pitch
BL1044	59	"	HR2042 -SL	55	Oilless Hollow	-NP	44	Nickel Plated
LL1044	60	"	LL2044	60	Leaf Chain	-SS	37	Stainless
BL1046	59	"	A2050	34	Double Pitch	C2100H	35	Double Pitch
AL1066	58	"	-NP	44	Nickel Plated	C2100H -NP	44	Nickel Plated
BL1066	59	"	-SL	50	Self-Lube	-SLR	54	Self-Lube
LL1066	60	"	-SS	37	Stainless	-SS	37	Stainless
AL1222	58	"	C2050	35	Double Pitch	-DC	33	Double Cap.
BL1222	59	"	-HP	46	Hollow-Pin	C2102H	35	Double Pitch
LL1222	60	"	-HPSS	47	Hollow-Pin	-NP	44	Nickel Plated
BL1223	59	"	-NP	44	Nickel Plated	-SS	37	Stainless
BL1234	59	"	-SB	45	Side Bow	C2120H	35	Double Pitch
AL1244	58	"	-SL	50	Self-Lube	-SS	37	Stainless
BL1244	59	"	-SLR	54	"	-DC	33	Double Cap.
LL1244	60	"	-SS	37	Stainless	C2122H	35	Double Pitch
BL1246	59	"	-DC	33	Double Cap.	-SS	37	Stainless
AL1266	58	"	HB2050 -SL	55	Oilless Hollow	C2160H	35	Double Pitch
BL1266	59	"	C2052	35	Double Pitch	-SS	37	Stainless
LL1266	60	"	-HP	46	Hollow-Pin	-DC	33	Double Cap.
AL1422	58	"	-HPSS	47	Hollow-Pin	C2162H	35	Double Pitch
BL1422	59	"	-NP	44	Nickel Plated	-SS	37	Stainless
BL1423	59	"	-SB	45	Side Bow	LL2422	60	Leaf Chain
BL1434	59	"	-SL	50	Self-Lube	LL2444	60	"
AL1444	58	"	-SS	37	Stainless	LL2466	60	"
BL1444	59	"	A2060	34	Double Pitch	LL2822	60	"
BL1446	59	"	-NP	44	Nickel Plated	LL2844	60	"
AL1466	58	"	-SL	50	Self-Lube	LL2866	60	"
AL1622	58	"	-SS	37	Stainless	LL3222	60	"
BL1622	59	"	C2060 -HP	46	Hollow-Pin	LL3244	60	"
LL1622	60	"	-HPSS	47	Hollow-Pin	LL3266	60	"
BL1623	59	"	C2060 -SB	45	Side Bow			
BL1634	59	"	-SL	50	Self-Lube			