

Double Pitch, Straight Sideplate and Factory Standard Chains



British Standard Double Pitch Chains

Double Pitch Chains use standard transmission chain pins, bushes, and rollers with link plates of double the pitch. These chains are used for both conveying and transmission on long centre distance drives, giving reduced weight and cost against the equivalent transmission chain.



Cat.* No.	Pitch P	Inside Width b min.	Roller dia d ₁	Pin length l	Pin dia d ₂	Plate Depth g	Plate Thickness t	Bearing Area cm ²	Tensile Strength N	Weight kg/m
208B	1 inch	7.75	8.51	16.7	4.45	11.8	1.60	0.50	18,000	0.45
210B	1 1/4 inch	9.65	10.16	19.5	5.08	14.7	1.70	0.67	22,400	0.65
212B	1 1/2 inch	11.68	12.07	22.5	5.72	16.1	1.85	0.89	29,000	0.76
216B	2 inch	17.02	15.88	36.1	8.28	21.1	4.15	2.10	60,000	1.75
220B	2 1/2 inch	19.56	19.05	41.3	10.19	26.3	4.50	2.95	95,000	2.62
224B	3 inch	25.40	25.40	53.4	14.63	33.3	6.00	5.54	160,000	4.70

*Cat. No. equates to ISO 1275 Ref.

Straight Sideplate Roller Chains to British Standard Dimensions

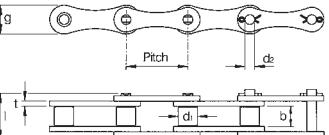
These provide increased bearing support for conveying applications.

Simplex Chains

Cat.* No.	Pitch P	Inside Width b min.	Roller dia d ₁	Pin dia d ₂	Plate Depth g	Pin length l max. mm	Conn Pin Ext. k	Plate Thickness t	Bearing Area cm ²	Tensile Strength N	Weight kg/m
C08B-1	1/2 inch	7.75	8.51	4.45	11.8	16.7	1.50	1.60	0.50	18,000	0.80
C10B-1	5/8 inch	9.65	10.16	5.08	14.7	19.5	1.40	1.70	0.67	22,400	1.60
C12B-1	3/4 inch	11.68	12.07	5.72	16.1	22.5	2.70	1.85	0.89	29,000	1.32
C16B-1	1 inch	17.02	15.88	8.28	21.1	36.1	3.00	4.15	2.10	60,000	3.08
CL16B-1	1 inch	17.02	15.88	8.28	24.0	36.1	3.00	3.10	2.10	60,000	3.49

Duplex Chains

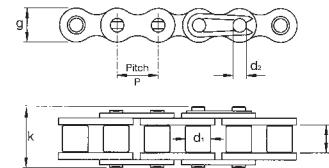
Cat.* No.	Pitch P	Inside Width b min.	Roller dia d ₁	Pin dia d ₂	Plate Depth g	Pin length l max. mm	Conn Pin Ext. k	Plate Thickness t	Bearing Area cm ²	Tensile Strength N	Weight kg/m
C08B-2	1/2 inch	7.75	8.51	4.45	11.8	31.2	1.50	1.60	1.00	32,000	1.45
C10B-2	5/8 inch	9.65	10.16	5.08	14.7	36.1	1.40	1.70	1.34	44,500	2.00
C12B-2	3/4 inch	11.68	12.07	5.72	16.1	42.0	2.70	1.85	1.78	57,800	2.62
C16B-2	1 inch	17.02	15.88	8.28	21.1	68.0	3.00	4.15	4.21	106,000	6.10
CL16B-2	1 inch	17.02	15.88	8.28	24.0	68.0	3.00	3.10	4.21	106,000	6.92



Special Metric Pitch Chains

Two sizes of chains produced to metric pitch employed on a number of continental machines. M20 is a custom design whilst M30 is 16B chain extended to 30mm pitch.

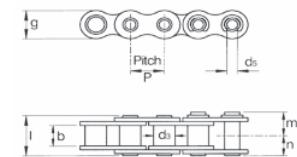
Cat. No.	Pitch P	Inside Width b min. mm	Roller dia d ₁ max. mm	Pin dia d ₂ max. mm	Plate Depth g mm	Pin Length k max. mm	Bearing Area cm ²	Tensile Strength N	Weight kg/m
M20	20mm	16.00	12.00	6.00	19.0	35.5	1.36	35500	2.00
M30	30mm	17.02	15.88	8.28	20.8	41.5	2.10	63000	2.33



Hollow Pin Chains to British Standard Dimensions

These hollow pin roller chains can be used in pairs to accommodate many types of crossrods for conveying purposes. Special pins or custom designed attachments can be fitted at any point in the chain, without removing the chain from the drive system. The chains operate on standard 08B sprockets. Chains available in carbon steel and 304 stainless steel (Cat Ref 08B-1HPSS).

Cat.* No.	Pitch P Inches	Inside Width b min. mm	Bush Ø d ₃ max. mm	Bore Ø d ₄ min. mm	Plate Depth g mm	Rivet Length l max. mm	Length to Cotter Pin m mm	Length to Rivet Pin n mm	Tensile Strength N	Weight Approx kg/m
08B-1HP	1/2 inch	7.75	8.51	4.50	11.8	16.4	9.40	8.20	11,100	0.56
08B-1HPSS	1/2 inch	7.75	8.51	4.50	11.8	16.4	9.40	8.20	7,750	0.56



Special chains

Cross+Morse manufacture a number of special chains to meet customers specific requirements and specifications. Standard pitch chains, extended pitch chains, and chains with attachments have all been manufactured for the food, pharmaceutical, beverage, and aerosol can industries, in both carbon steels and stainless steel. Our special production techniques enable early manufacture and supply of new designs or replacements for obsolete products. Our engineering staff are always available to assist on any special requirements.



Connecting Link (Cottered Type)

For chains over 1" Pitch, for easy chain assembly

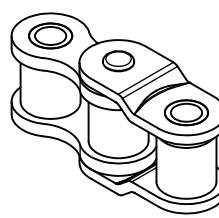
Part Ref. 75



Single Crank Link

Used to make chains of Odd Pitch Lengths - Standard on chains over 1" pitch and optional on chains up to 1".

Part Ref. 87



Double Crank Link

Preferred to Single Crank Link for small pitch chains. Available all chains to 1" pitch.

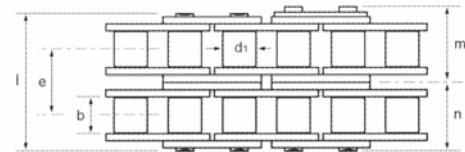
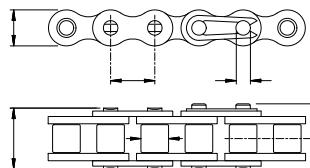
Part Ref. 86

British Standard Stainless Steel and Corrosion Resistant Roller Chains



Cross+Morse SS - Stainless Steel chain has been designed with a higher allowable load than other makes of stainless steel chain and is suitable for use in the most demanding applications. Where WATER, ACIDS, ALKALIS, CHEMICALS, HIGH HUMIDITY AND EXTREMES OF TEMPERATURE are encountered - conditions potentially destructive to ordinary transmission chain, SS chain provide the answer. SS chain completely overcomes corrosion and wear problems normally encountered with standard chain used in such harsh conditions.

Remaining impervious to even the most severe chemicals required for cleaning and hygiene maintenance within food and pharmaceutical processing, SS chain offers proven high-performance and maintenance-free life time performance.



Cat No.	Pitch P	Inside Width b mm	Roller Diameter d ₁ mm	Pin Diameter d ₂ mm	Plate Depth q mm	Pin Lengths			Transverse Pitch e mm	Bearing Area cm ²	Tensile Strength kN	Maximum Working Load N	Approx Weight kg/M
						l mm	m mm	n mm					
BS Series Simplex Chains													
04B-1SS	6 mm	2.80	4.00	1.85	5.0	6.8	4.4	3.4		0.07	2.0	80	0.12
05B-1SS	8 mm	3.00	5.00	2.31	7.1	8.2	5.8	4.1		0.11	3.5	110	0.18
06B-1SS+	5/8 inch	5.72	6.35	3.28	8.3	13.2	7.6	6.6		0.28	6.2	300	0.41
08B-1SS	1/2 inch	7.75	8.51	4.45	11.8	16.7	9.9	8.4		0.50	12.0	525	0.70
10B-1SS	5/8 inch	9.65	10.16	5.08	14.7	19.5	11.2	9.8		0.67	14.5	710	0.96
12B-1SS	3/4 inch	11.68	12.07	5.72	16.1	22.5	13.0	11.3		0.89	18.5	940	1.23
16B-1SS	1 inch	17.02	15.88	8.28	21.1	36.1	19.4	18.1		2.10	40.0	2220	2.60
20B-1SS	1 1/4 inch	19.56	19.05	10.19	26.3	41.3	24.4	20.7		2.95	59.0	3100	3.70
BS Series Duplex Chains													
06B-2SS+	5/8 inch	5.72	6.35	3.28	8.3	23.4	12.7	11.7	10.24	0.55	8.5	570	0.78
08B-2SS	1/2 inch	7.75	8.51	4.45	11.8	31.2	16.6	15.6	13.92	1.00	16.0	1050	1.40
10B-2SS	5/8 inch	9.65	10.16	5.08	14.7	36.1	19.5	18.1	16.59	1.34	22.3	1380	1.80
12B-2SS	3/4 inch	11.68	12.07	5.72	16.1	42.0	22.6	21.0	19.46	1.78	29.0	1820	2.44
16B-2SS	1 inch	17.02	15.88	8.28	21.1	68.0	35.3	34.0	31.88	4.21	53.0	4300	5.30
20B-2SS	1 1/4 inch	19.56	19.05	10.19	26.3	77.8	41.8	38.9	36.45	5.90	85.0	6000	7.45

The chains above are from stock. Other constructions, including triplex chains, can be supplied to special order. Standard chain components are all manufactured in 304 (18-8) nickel chrome stainless steel. The chains are suitable for temperatures up to 350°C, with intermittent peaks of 500°C and also for the sub-zero conditions involved in food packaging. + This is a straight-sided plate chain.

Stock BS Simplex Chains in 316 Stainless Steel

Chains can also be supplied in 316 grade stainless steel for applications involving strong acids, or where a totally non-magnetic chain is required. Temperatures of 500°C, with intermittent peaks of 650°C are possible with these chains. These chains should only be used where conditions demand as they do not have the same wear life properties as the standard chain, and for this reason it is recommended that working loads should not exceed half those recommended for standard stainless steel chain. + This is a straight-sided plate chain.

Cat No.	Pitch P	Inside Width b mm	Roller Diameter d ₁ mm	Pin Diameter d ₂ mm	Plate Depth g mm	Pin Lengths			Bearing Area cm ²	Tensile Strength kN	Maximum Working Load N	Approx. Weight kg/M
						l mm	m mm	n mm				
06B-1SS+	5/8 inch	5.72	6.35	3.28	8.3	13.2	7.6	6.6	0.28	6.2	200	0.41
08B-1SS	1/2 inch	7.75	8.51	4.45	11.8	16.7	9.9	8.4	0.50	12.0	400	0.70
10B-1SS	5/8 inch	9.65	10.16	5.08	14.7	19.5	11.2	9.8	0.67	14.5	510	0.96
12B-1SS	3/4 inch	11.68	12.07	5.72	16.1	22.5	13.0	11.3	0.89	18.5	660	1.23
16B-1SS	1 inch	17.02	15.88	8.28	21.1	36.1	19.4	18.1	2.10	40.0	1500	2.60

Corrosion Resistant Roller Chains

Nickel Plated BS Simplex Roller Chains

Electroless nickel plating is applied to all components of our standard carbon steel roller chains, providing protection to surfaces subject to mild corrosion. The plated chain retains all the properties of the base chain. + This is a straight-sided plate chain.

Cat No.	Pitch P	Inside Width b mm	Roller Diameter d ₁ mm	Pin Diameter d ₂ mm	Plate Depth g mm	Pin Length l mm	Conn Pin Ext. k mm	Bearing Area cm ²	Tensile Strength kN	Approx. Weight kg/M
06B-1N+	5/8 inch	5.72	6.35	3.28	8.3	13.1	1.0	0.28	9.0	0.41
08B-1N	1/2 inch	7.75	8.51	4.45	11.8	16.7	1.5	0.50	18.0	0.70
10B-1N	5/8 inch	9.65	10.16	5.08	14.7	19.5	1.4	0.67	22.4	0.93
12B-1N	3/4 inch	11.68	12.07	5.72	16.1	22.5	1.7	0.89	29.0	1.15
16B-1N	1 inch	17.02	15.88	8.28	21.1	36.1	1.3	2.10	60.0	2.71
20B-1N	1 1/4 inch	19.56	19.05	10.19	26.3	41.3	2.7	2.95	95.0	3.70

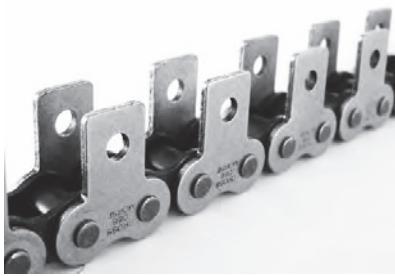
Aqua Proof BS Simplex Roller Chains

A special coating applied to chain components gives excellent corrosion resistance without the hydrogen embrittlement problems encountered with some plating processes. Chains are suitable for all outside environments and seawater applications. + This is a straight-sided plate chain.

Cat No.	Pitch P	Inside Width b mm	Roller Diameter d ₁ mm	Pin Diameter d ₂ mm	Plate Depth g mm	Pin Length l mm	Conn Pin Ext. k mm	Bearing Area cm ²	Tensile Strength kN	Approx. Weight kg/M
06B-1AP+	5/8 inch	5.72	6.35	3.28	8.3	12.6	0.8	0.28	8.9	0.41
08B-1AP	1/2 inch	7.75	8.51	4.45	11.8	16.7	1.3	0.50	17.8	0.70
10B-1AP	5/8 inch	9.65	10.16	5.08	14.7	19.0	1.7	0.67	22.2	0.93
12B-1AP	3/4 inch	11.68	12.07	5.72	16.1	22.0	1.6	0.89	29.0	1.15
16B-1AP	1 inch	17.02	15.88	8.28	21.1	35.1	3.1	2.10	60.0	2.71



Attachment Chain

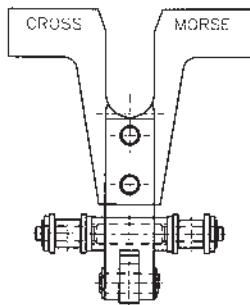
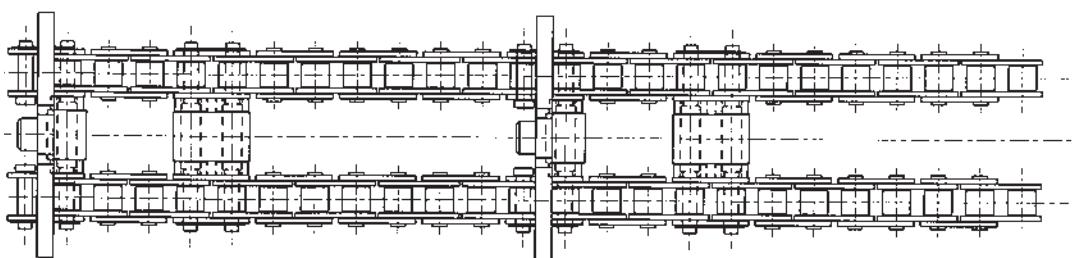


Cross+Morse can supply on short lead times a range of standard attachments either built into a complete length of chain, or as loose assemblies. The range, shown overleaf, consists of straight (M) and bent (K) attachments for $\frac{3}{8}$ inch to 1 inch pitch British Standard Chains, and extended pins (E) of various designs for $\frac{3}{8}$ inch to 2 inch pitch B.S. Chains. In addition to these, a number of special attachments are available, some of which are illustrated below, and other attachments can be supplied to customers own designs, assembled in chain, or as separate links.



In-Feed Chains

Working with leading manufacturers of food packaging and processing machinery, the Cross+Morse chain system is developed to provide unfailing operation throughout lengthy production cycles, 24 hours a day. Suitable for new or retrofit installation, the in-feed chain system is designed to incorporate attachments, custom-manufactured by Cross+Morse, to transport the product through continuous application processes without operator interaction.



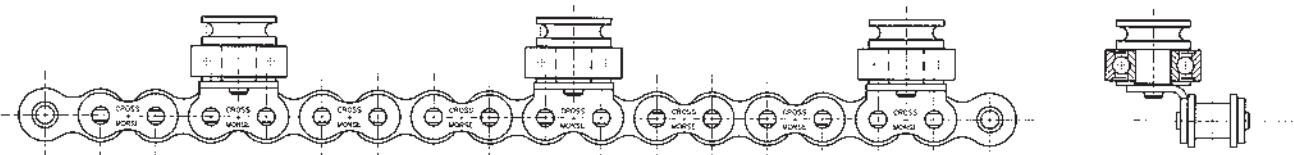
Cross Feed Chains

Cross+Morse invested in specialist turning machinery for the production of chain pins of differing designs, to enable the prompt delivery of special attachment chains. Typical are the Cross Feed chains employing stepped pins for fast movement of product pushers within the chains, to enable quick change over from one box size to another on packaging lines. The O8B-1 chain shown has 6mm diameter x 8mm long pins every pitch.

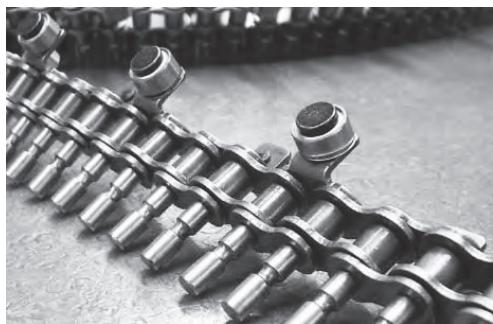


Powerbend Chains

Cross+Morse work with the leading food producers to solve their processing problems, one project resulted in our engineers creating a chain with a bearing and a specially designed pin attached to enable the conveying of product through 180°.



Side Guided Chains for Pusher Attachment



In order to maintain support of an offset pusher attachment rollers are fitted to standard 'K1' attachments, which run in tracks alongside the chain. The chain has special extended pins on every pitch to allow change in positions of the pushers to accommodate different sizes of packaging. Cross+Morse have produced many special pusher plates for packaging machines, which can be supplied assembled in the chain, or as individual links for customers to fit to their own chains.

Consult Cross+Morse regarding your special attachment chain requirements.



Chocolate Moulding Plant Chains

Attachments and chains for Chocolate Moulding plants are notoriously difficult to replace especially the pin conveying the trays but Cross+Morse have the experience and knowledge to overcome any such problems. We have retro-fitted our chains to a number of machines of different manufacture with outstanding reductions in downtime and extended chainlife.

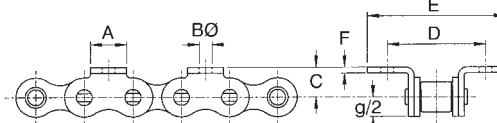
British Standard Roller Chain Attachments



The attachments below are available on 72 hour service built into the base roller chain at spacings to suit the application, K & M attachments can be fitted to only one side of the chain or both sides (as illustrated). Attachments of different types can be fitted in one chain assembly. In addition to these standard attachments, specials to suit customers' specific requirements can be supplied. Attachments can be assembled into Duplex and Triplex Chains, as well as standard Simplex. Nickel Plated chains can also be supplied to order. All Standard Attachments are made basically to ISO 606 Standard to ensure full interchangeability. Attachments are available in standard carbon steel or in 304 stainless steel (where indicated) to assemble with our standard simplex, duplex, and triplex chains.

Bent Attachments

K1 - Single Hole Bent Attachment

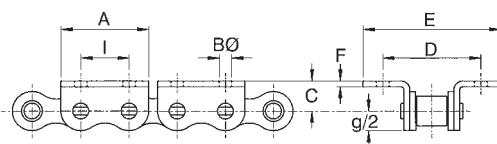


Base Chain Ref.	Pitch P	Attach Width A	Hole Dia B	Plate Height C	Transverse Pitch D	Overall Width E	Plate Thick F
06B-1+	5/16 inch	8.0	3.5	6.5	19.1	29	1.3
08B-1*	1/2 inch	11.5	4.2	8.9	23.8	36	1.5
10B-1*	5/8 inch	12.8	5.3	10.3	31.8	45	1.5
12B-1*	3/4 inch	16.6	7.1	13.5	38.1	60	1.8
16B-1	1 inch	19.1	6.4	15.9	50.8	73	3.1

*Attachments also available in 304 Stainless Steel

+ This is a straight-sided plate chain.

K2 - Two Hole Bent Attachment



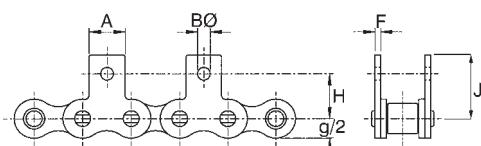
Base Chain Ref.	Pitch P	Attach Width A ₁	Hole Dia B	Plate Height C	Transverse Pitch D	Overall Width E	Plate Thick F	Hole Pitch I
08B-1*	1/2 inch	23.4	4.9	8.9	25.4	40	1.5	12.7
10B-1	5/8 inch	29.5	5.3	10.3	31.8	45	1.5	15.9
12B-1*	3/4 inch	34.0	6.5	13.5	38.1	52	1.8	19.1
16B-1	1 inch	45.9	6.8	15.9	50.8	78	3.1	25.4

*Attachments also available in 304 Stainless Steel

Note:- If required plates can be supplied without holes, or with position/diameter of holes of non-standard sizes on short delivery.

Straight Attachments

M1 - Single Hole Straight Attachment

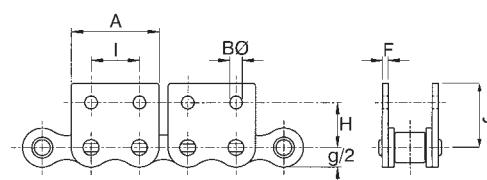


Base Chain Ref.	Pitch P	Attach Width A	Hole Dia B	Hole Height H	Plate Height J	Plate Thick F
06B-1+	5/16 inch	8.0	3.5	9.5	13.5	1.3
08B-1*	1/2 inch	11.5	4.2	12.7	19.0	1.5
10B-1*	5/8 inch	12.8	5.3	15.9	22.9	1.5
12B-1*	3/4 inch	16.6	7.1	22.2	32.2	1.8
16B-1	1 inch	19.1	6.4	23.2	34.0	3.1

*Attachments also available in 304 Stainless Steel

+ This is a straight-sided plate chain.

M2 - Two Hole Straight Attachment



Base Chain Ref.	Pitch P	Attach Width A ₁	Hole Dia B	Hole Height H	Hole Pitch I	Plate Height J	Plate Thick F
08B-1*	1/2 inch	23.4	4.3	13.0	12.7	20.8	1.5
10B-1	5/8 inch	29.3	5.3	16.5	15.8	24.9	1.5
12B-1*	3/4 inch	34.0	6.5	21.0	19.1	28.2	1.8
16B-1	1 inch	45.9	6.8	23.0	25.4	34.0	3.1

*Attachments also available in 304 Stainless Steel

All K & M attachments can be supplied without holes, or with the holes of different diameters and positions to standard. Also special shape attachments can be provided to customers drawings.

All dimensions in mm except where stated.

British Standard Roller Chain Attachments



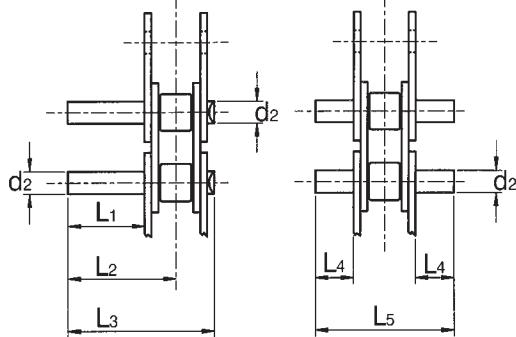
Extended Pin Attachments

The extended pins can be assembled into the chain at positions to suit customers applications, or supplied loose as rivetting outers or connecting links. Normally used in pairs to support transverse tubes (when chain should be ordered as matched pairs) or sometimes in single strands to support or attach other attachments. In addition to the standard steel attachments, many are also available in grade 304 Stainless Steel, as indicated in the tables.

Straight Parallel Pins

extended one side only E1, or equally extended both sides of chain E2.

Attachments available with short or long pins.



Chain Ref	Pitch	Pin to Ø	E1 Short			E1 Long			E2 Short			E2 Long		
			P	d ₂	L ₁	L ₂	L ₃	L ₁	L ₃	L ₄	L ₅	L ₄	L ₅	
06B-1+	1/8 inch	3.28	11.2	16.8	23.4	21.3	33.2	5.9	22.9	11.0	33.2			
08B-1*	1/4 inch	4.45	14.8	22.1	31.2	28.4	43.9	7.7	30.0	14.7	43.9			
10B-1*	5/16 inch	5.08	17.8	26.1	35.3	34.4	51.9	9.4	35.3	17.7	51.9			
12B-1*	3/8 inch	5.72	20.7	30.5	41.3	40.2	60.8	10.9	41.3	20.6	60.8			
16B-1†	1 inch	8.28	33.8	49.9	67.4	65.7	99.3	17.6	67.4	33.6	99.3			
20B-1	1 1/4 inch	10.19	38.3	57.1	77.8	74.7	114.2	20.1	77.8	38.3	114.2			
24B-1	1 1/2 inch	14.63	50.3	74.7	101.5	-	-	26.3	101.5	-	-			
32B-1	2 inch	17.78	61.0	90.5	122.9	-	-	31.9	122.9	-	-			

* All Pin configurations also available from stock in 304 Stainless Steel

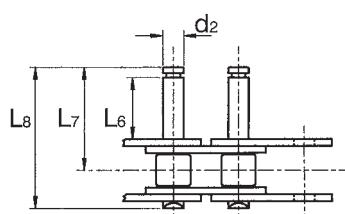
† Only E1 Short and E2 Short available in 304 Stainless Steel

Single pin extensions can be assembled projecting on alternate sides of chain.

Special length pins available on short delivery time.

+ This is a straight-sided plate chain.

Parallel Pins

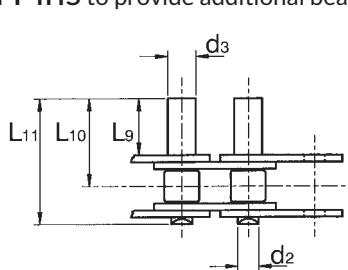


Chain Ref	Pitch	Pin to Ø	E3 Short Groove Pin			E4 Long Groove Pin		
			P	d ₂	L ₆	L ₇	L ₈	L ₆
06B-1+	1/8 inch	3.28	-	-	-	-	-	10.5
08B-1	1/4 inch	4.45	7.2	16.5	24.7	13.9	23.1	31.3
10B-1	5/16 inch	5.08	9.5	20.2	29.5	16.8	27.5	36.7
12B-1	3/8 inch	5.72	11.8	24.3	35.1	19.6	32.1	42.9
16B-1	1 inch	8.28	15.8	35.8	53.4	32.3	51.5	69.0

* All E4 Pin sizes also available from stock in 304 Stainless Steel

+ This is a straight-sided plate chain.

Stepped Pins



Chain Reference	Pitch	Attachment Reference	Pin Diameter	Step Pin Diameter	Step Pin Length	Pin to Ø	Overall Length	
			P	d ₂	L ₉	L ₁₀	L ₉	L
08B-1	1/4 inch	E8	4.45	6.0	8.0	15.3		23.8
08B-1	1/4 inch	E6	4.45	6.0	15.0	22.3		30.8
08B-1	1/4 inch	E5	4.45	6.0	34.0	41.3		49.4
10B-1	5/16 inch	E5	5.08	6.0	26.0	34.3		43.5
12B-1	3/8 inch	E5	5.72	8.0	25.0	34.8		45.5
16B-1	1 inch	E5	8.28	10.0	25.0	41.1		58.6

Loose Link Assemblies for Standard Chain 06B to 16B Chains. Use chain size and extended pin ref. to identify.

Rivetting Outer Link

No. 81
Link

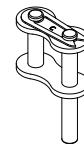


No. 82
Link

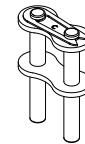


Spring Clip Connecting Link

No. 83
Link



No. 84
Link

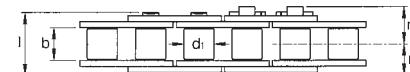
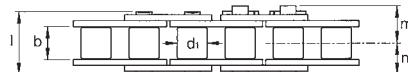
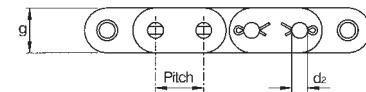
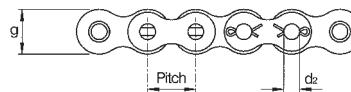


Many designs of special extended pins are manufactured for customer specific applications.
Please consult Cross+Morse Engineering with your requirements.

American Standard Precision Roller Chains

Simplex (Single Strand) Construction

Conforming to ANSI B29.1 and ISO 606*



Standard Roller Chains

Straight Sideplate Roller Chains

*ISO 606 covers Standard Series Chains only

Standard Series Chains (complying to ANSI b29.1)

• ANSI 25 and 35 are Bush Chains to ISO 1395

1) Bush Diameter

ANSI No.	Pitch P inches	Inside Width b min mm	Roller Ø d ₁ max. mm	Pin Ø d ₂ max. mm	Plate Depth g mm	Rivet Pin Length l max. mm	Length to Cotter Pin m mm	Length to Rivet Pin n mm	Bearing Area cm ²	Tensile Strength N	Approx Weight kg/m
25	1/4 inch	3.18	3.30 1)	2.29	6.0	7.9	4.5	4.0	0.11	3,500	0.15
35	5/8 inch	4.77	5.08 1)	3.58	9.0	12.4	7.0	6.2	0.27	7,900	0.33
41	1/2 inch	6.35	7.77	3.58	9.9	13.8	8.1	6.9	0.32	6,670	0.41
40	1/2 inch	7.85	7.95	3.96	12.0	16.6	9.5	8.3	0.44	14,100	0.62
50	5/8 inch	9.40	10.16	5.08	15.1	20.7	11.9	10.4	0.70	22,200	1.02
60	5/8 inch	12.60	11.91	5.94	18.0	25.9	14.8	13.0	1.06	31,800	1.50
80	1 inch	15.80	15.88	7.92	24.0	32.7	19.1	16.4	1.79	56,700	2.60
100	1 1/4 inch	19.00	19.05	9.53	30.0	40.4	24.5	20.2	2.62	88,500	3.91
120	1 1/2 inch	25.25	22.23	11.10	35.7	50.3	29.2	25.2	3.94	127,000	5.62
140	1 1/4 inch	25.25	25.40	12.70	41.0	54.4	31.8	27.2	4.72	172,400	7.50
160	2 inch	31.55	28.58	14.27	47.8	64.8	37.2	32.4	6.50	226,800	10.10
200	2 1/2 inch	37.85	39.68	19.85	60.0	80.3	47.1	40.2	10.90	353,800	16.15

Heavy Series Chains

Have link plates of increased thickness to resist fatigue failure from shock or pulsating loads, as are often encountered in rugged construction equipment & mining machinery.

60H	5/8 inch	12.60	11.91	5.94	18.0	29.2	16.4	14.6	1.15	31,800	1.87
80H	1 inch	15.80	15.88	7.92	24.0	36.2	19.6	18.1	1.92	56,700	3.10
100H	1 1/4 inch	19.00	19.05	9.53	30.0	43.6	25.1	21.8	2.77	88,500	4.52
120H	1 1/2 inch	25.25	22.23	11.1	35.7	53.5	30.8	26.8	4.12	127,000	6.60
140H	1 1/4 inch	25.25	25.40	12.7	41.0	57.6	33.4	28.8	4.93	172,400	8.30
160H	2 inch	31.55	28.58	14.27	47.8	68.2	38.9	34.1	6.69	226,800	10.30

Straight Side Plate Chains

Provide increased bearing area for conveying applications, when sliding on guides. Operate on std. ANSI sprockets.

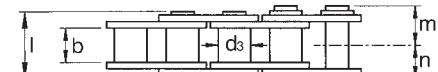
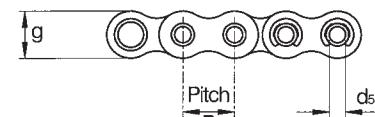
C40	1/2 inch	7.85	7.95	3.96	12.0	16.6	9.5	8.3	0.44	14,100	0.73
C60	5/8 inch	12.60	11.91	5.94	18.0	25.9	14.8	13.0	1.06	31,800	1.81
C80	1 inch	15.80	15.88	7.92	24.0	32.7	19.1	16.4	1.79	56,700	3.09
C100	1 1/4 inch	19.00	19.05	9.53	30.0	40.4	24.5	20.2	2.62	88,500	4.56
C120	1 1/2 inch	25.25	22.23	11.1	35.7	50.3	29.2	25.2	3.94	127,000	6.86

Detachable Chains

Detachable chain can be supplied for chains of 3/4 inch pitch and above in standard and heavy series; when ordering add suffix 'C' to chain number, e.g. 2 inch pitch simplex detachable chain is 160C.

Rollerless Hollow Pin Chains to ANSI Dimensions

Hollow pin chains allow unusual flexibility for conveyor applications. Because of the hollow pin design, many types of crossrods, pin and custom attachments may be inserted at any point without removing the chain from the drive system. Bushing diameters are the same as comparable chain rollers. These chains operate on standard sprockets. Standard packages contain two matched 10' lengths. When used on parallel strand conveyors, these strands should be installed directly opposite each other. A two-pitch offset is available where chains with an odd number of links are required.



ANSI No.	Pitch P	Inside Width b mm	Roller Diameter d ₃ mm	Bore Diameter d ₅ mm	Plate Depth g mm	Pin Lengths			Bearing Area cm ²	Tensile Strength N	Approx. Weight kg/m
						l mm	m mm	n mm			
40HP	1/2 inch	7.85	7.95	4.00	12.0	16.5	9.4	8.3	0.61	11000	0.54
50HP	5/8 inch	9.40	10.16	5.13	15.1	20.7	11.6	10.4	0.94	20000	0.91
60HP	5/8 inch	12.60	11.91	6.00	18.0	25.8	13.9	12.9	1.46	24000	1.29
80HP	1 inch	15.80	15.88	8.05	24.0	32.5	17.6	16.3	2.54	50000	2.26

Spares for Std. Chains



Pin Unit (Riveting Outer Links)

Available all sizes of chain. Press fit unit to connect chains for maximum performance

Part Ref. 79



Roller Unit (Inner Link)

Available all sizes of chain to extend chain length or manufacture of special build chains.

Part Ref. 77



Connecting Link (Spring Clip Type)

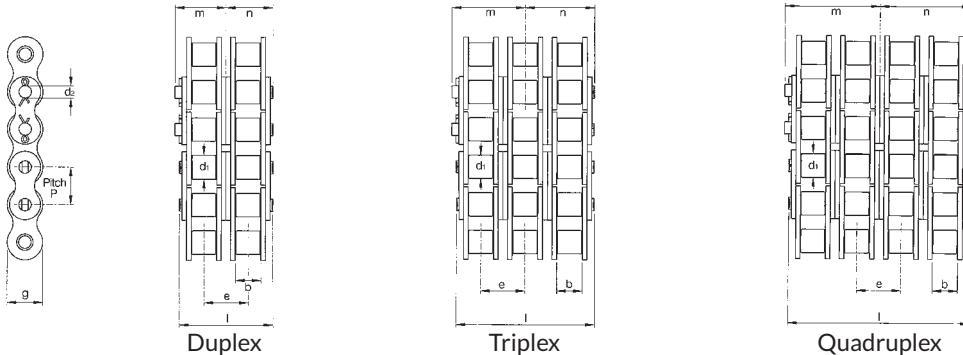
Standard all chains to 1 inch pitch. Should be assembled with open end away from running direction of chain.

Part Ref. 76

American Standard Precision Roller Chains

Multi-Strand Constructions

Conforming to ANSI B29.1 and ISO 606*



*ISO 606 covers Duplex and Triplex construction only.

Duplex Chains

• 25-2 & 35-2 Bush Chains to ISO 1395

1) Bush diameter.

ANSI No.	Pitch P	Inside Width b mm	Roller Diameter d1 mm	Pin Diameter d2 mm	Plate Depth g mm	Transverse Pitch e mm	Pin Lengths			Bearing Area cm ²	Tensile Strength kN	Approx. Weight kg/m
							I mm	m mm	n mm			
•25-2	1/4 inch	3.18	3.30 1)	2.29	6.0	6.40	14.5	7.8	7.3	0.22	7,000	0.28
•35-2	5/16 inch	4.77	5.08 1)	3.58	9.0	10.13	22.5	12.1	11.3	0.54	15,800	0.63
40-2	1/2 inch	7.85	7.95	3.96	12.0	14.38	31.0	16.7	15.5	0.88	28,200	1.26
50-2	5/8 inch	9.40	10.16	5.08	15.1	18.11	38.9	21.0	19.5	1.40	44,400	2.00
60-2	3/4 inch	12.60	11.91	5.94	18.0	22.78	48.8	26.1	24.4	2.12	63,600	2.92
80-2	1 inch	15.80	15.88	7.92	24.0	29.29	62.7	32.9	31.4	3.58	113,400	5.15
100-2	1 1/4 inch	19.00	19.05	9.53	30.0	35.76	76.4	42.3	38.2	5.24	177,000	7.80
120-2	1 1/2 inch	25.25	22.23	11.10	35.7	45.44	95.8	51.8	47.9	7.88	254,000	11.70
140-2	1 3/4 inch	25.25	25.40	12.70	41.0	48.87	103.3	56.3	51.7	9.44	344,800	15.14
160-2	2 inch	31.55	28.58	14.27	47.8	58.55	123.3	66.5	61.7	13.00	453,600	20.14
200-2	2 1/2 inch	37.85	39.68	19.85	60.0	71.55	151.9	82.9	76.0	21.80	707,600	32.24

Triplex Chains

• 25-3 & 35-3 Bush Chains to ISO 1395

1) Bush diameter.

•25-3	1/4 inch	3.18	3.30 1)	2.29	6.0	6.40	21.0	11.0	10.5	0.33	10,500	0.44
•35-3	5/16 inch	4.77	5.08 1)	3.58	9.0	10.13	32.7	17.2	16.4	0.81	23,700	1.05
40-3	1/2 inch	7.85	7.95	3.96	12.0	14.38	45.4	23.9	22.7	1.32	42,300	1.90
50-3	5/8 inch	9.40	10.16	5.08	15.1	18.11	57.0	30.0	28.5	2.10	66,600	3.09
60-3	3/4 inch	12.60	11.91	5.94	18.0	22.78	71.5	37.6	35.8	3.18	95,400	4.54
80-3	1 inch	15.80	15.88	7.92	24.0	29.29	91.7	47.8	45.9	5.37	170,100	7.89
100-3	1 1/4 inch	19.00	19.05	9.53	30.0	35.76	112.2	60.2	56.1	7.86	265,500	11.77
120-3	1 1/2 inch	25.25	22.23	11.10	35.7	45.44	141.4	74.5	70.7	11.82	381,000	17.53
140-3	1 3/4 inch	25.25	25.40	12.70	41.0	48.87	152.2	80.7	76.1	14.16	517,200	22.20
160-3	2 inch	31.55	28.58	14.27	47.8	58.55	181.8	95.7	90.9	19.50	680,000	30.02

Quadruplex Chains

40-4	1/4 inch	7.85	7.95	3.96	12.0	14.38	59.8	31.1	29.9	1.76	56,400	2.54
60-4	5/16 inch	12.60	11.91	5.94	18.0	22.78	94.3	49.0	47.2	4.24	127,200	6.16
80-4	1 inch	15.80	15.88	7.92	24.0	29.29	121.0	62.4	60.5	7.16	226,800	10.63
100-4	1 1/4 inch	19.00	19.05	9.53	30.0	35.76	148.0	78.1	74.0	10.48	354,000	15.74
120-4	1 1/2 inch	25.25	22.23	11.10	35.7	45.44	186.8	97.2	93.4	15.76	508,000	23.36
140-4	1 3/4 inch	25.25	25.40	12.70	41.0	48.87	201.1	105.2	100.6	18.88	689,600	29.26
160-4	2 inch	31.55	28.58	14.27	47.8	58.55	240.4	125.0	120.2	26.00	907,200	39.90

All dimensions in mm unless otherwise indicated.

Detachable Chains

Detachable Chain can be supplied for chains 3/4" pitch and above. Add suffix 'C' to Part No. - e.g. Ref 160-3C for 2" pitch Triplex Detachable Chain

Attachments

Attachment Plates and Extended Pins are available to order for Simplex and Duplex Chains.

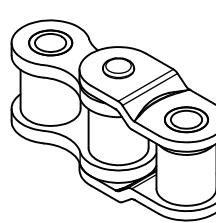
Spares for Std. Chains



Connecting Link (Cotterd Type)
For chains over 1" Pitch, for easy chain assembly
Part Ref. 75



Single Crank Link
Used to make chains of Odd Pitch Lengths - Standard on chains over 1" pitch and optional on chains up to 1".
Part Ref. 87



Double Crank Link
Preferred to Single Crank Link for small pitch chains. Available all chains to 1" pitch.
Part Ref. 86

American Standard Double Pitch Roller Conveyor Chains

Conforming to ANSI B29.3 and B29.4



Double Pitch Roller Chains have their rollers spaced at a pitch of twice that of the corresponding standard roller chain. For example, ANSI 2040 chain has a pitch of 1 inch, twice that of the standard chain ANSI 40 at 1/2 inch. Since Double Pitch chains contain half the number of rollers, bushes, and pins, they are lighter in weight and of lower cost compared to the standard base chain. They are well suited to applications with slow to moderate speeds, medium loads, with long centre

distance between sprockets, found in a variety of variety of conveying systems, and agricultural machines. The Transmission series of chains use figure of 8 shape side plates and standard size rollers, to keep weight to a minimum, and permit the use of sprockets with a maximum hub diameter. Pins, bushes, rollers, and link plate thickness, are the same as the corresponding standard roller chain.

Transmission Series Chains to ANSI B29.3

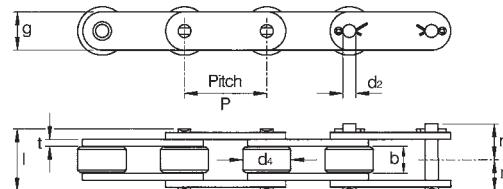
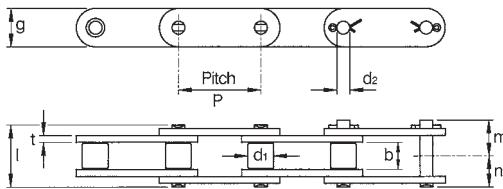


ANSI No.	Pitch P inches	Inside Width b min. mm	Roller Ø d ₁ max. mm	Pin Ø d ₂ max. mm	Plate Depth g mm	Plate Thickness t mm	Rivet Pin Length l max. mm	Length to Cotter Pin m mm	Length to Rivet Pin n mm	Bearing Area cm ²	Tensile Strength N	Weight Approx. kg/m
2040	1	7.85	7.95	3.96	11.8	1.52	16.6	9.5	8.3	0.44	14,100	0.45
2050	1 1/4	9.40	10.16	5.08	15.0	2.04	20.7	11.9	10.3	0.70	22,200	0.67
2060	1 1/2	12.60	11.91	5.94	18.0	2.38	25.9	14.8	12.9	1.06	31,800	1.02
2080	2	15.80	15.88	7.92	24.0	3.18	32.7	20.2	16.3	1.79	56,700	1.65
2100	2 1/2	19.00	19.05	9.53	30.0	3.96	40.4	24.5	20.2	2.62	88,500	2.89

Conveyor Series Chains to ANSI B29.4 - Standard and Large Diameter Rollers

Conveyor series chains with standard size rollers have straight side plates for increased bearing area when sliding on guides or supporting products. Large size rollers support the chain and load, holding them off the track to minimise

friction and power requirements. Chains 1 1/2" pitch or greater have side plates of same thickness as corresponding ANSI heavy series roller chains.



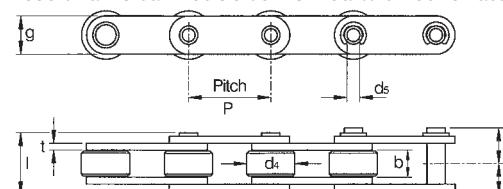
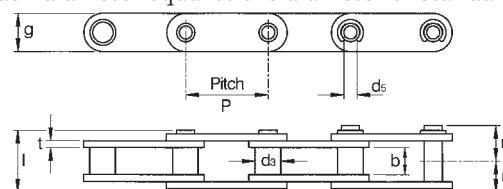
ANSI/CAT. Part No.	Pitch P inches	Inside Width b min. mm	Standard Roller dia. d ₁ max. mm	Large Roller dia. d ₄ max. mm	Side Plate		Pin diameter d ₂ max. mm	Rivet Pin Length l mm	Length to Conn Pin m mm	Length to Rivet Pin n mm	Tensile Strength N	Approx. Weight kg/m			
					Height g	Thickness t						Standard Roller	Large Roller	Thermo-plastic	
C2040	C2042	1	7.85	7.95	15.88	11.7	1.52	3.96	16.6	9.5	8.3	14,100	0.48	0.82	0.49
C2050	C2052	1 1/4	9.40	10.16	19.05	15.0	2.04	5.08	20.7	11.9	10.3	22,200	0.79	1.25	0.81
C2060H	C2062H	1 1/2	12.60	11.91	22.23	17.6	3.18	5.94	29.2	17.0	14.6	31,800	1.37	2.10	1.40
C2080H	C2082H	2	15.80	15.88	28.58	22.4	3.96	7.92	36.2	21.3	18.1	56,700	2.26	3.29	2.27
C2100H	C2102H	2 1/2	19.00	19.05	39.70	29.2	4.75	9.53	43.6	25.1	21.8	88,500	3.42	5.58	-

Hollow Pin Chains - Rollerless and with Large Rollers

Hollow pin conveyor chains are used to support rods to carry wire mesh etc. The standard chain is of bush construction with bush diameter equal to the diameter of standard solid

pin chain. Also available is chain fitted with conventional large diameter rollers.

Note: These chains cannot be combined with other attachment.



Double Pitch Rollerless Hollow Pin Chain

Double Pitch Large Diameter Roller Hollow Pin Chain

Cat. No.	Pitch P Inches	Inside Width b min. mm	Bush Diameter d ₃ mm	Large Roller Dia. d ₄ max. mm	Pin Bore d ₅ min. mm	Sideplate		Rivet Pin Length l mm	Length to Conn. Pin m mm	Length to Rivet Pin n mm	Tensile Strength N	Approx. Weight kg/m		
						Height g	Thickness t					Bush Chain	Large Roller Chain	
C2040HP	C2042HP	1	7.85	7.92	15.88	4.00	12.0	1.50	16.5	9.3	8.3	11000	0.46	0.78
C2050HP	C2052HP	1 1/4	9.40	10.16	19.05	5.12	15.0	2.03	20.5	11.6	10.3	20400	0.76	1.25
C2060HP	C2062HP	1 1/2	12.60	11.91	22.23	6.00	18.0	2.42	25.8	13.9	12.9	24000	1.02	1.72
C2080HP	C2082HP	2	15.80	15.88	28.58	8.05	24.0	3.25	32.4	17.6	16.2	50000	1.81	2.82

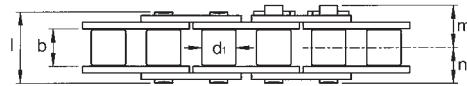
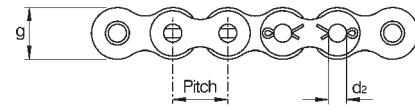
* Large Roller Chains to special order only.

American Standard Attachment Chains and Corrosion Resistant Chains



ANSI Stainless Steel Roller Chains

Standard chains are manufactured from 18-8 (304) stainless steel. These chains can be used in corrosive environments, and at temperatures up to 500 °C. They are well suited to the high moisture, high temperature conditions found in many food preparation and packaging applications. For improved wear life chains with round parts manufactured from precipitation hardened 400 Series steels can be supplied. These chains have slightly less corrosion resistance, and can only operate up to 325 °C.

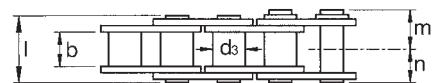
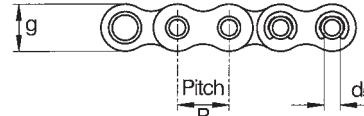


Part No.	Pitch P	Inside Width b mm	Roller Diameter d1 mm	Pin Diameter d2 mm	Plate Depth g mm	Pin Lengths			Bearing Area cm²	Tensile Strength N	Maximum Allowable Load N	Approx. Weight kg/M
						l mm	m mm	n mm				
25SS	1/4 inch	3.18	3.30 1)	2.29	6.0	7.9	4.50	4.0	0.11	2,500	110	0.15
35SS	5/16 inch	4.77	5.08 1)	3.58	9.0	12.4	7.00	6.2	0.27	5,500	260	0.33
40SS	1/2 inch	7.85	7.95	3.96	12.0	16.6	9.5	8.3	0.44	9,600	660	0.62
50SS	5/8 inch	9.40	10.16	5.08	15.1	20.7	11.9	10.4	0.70	15,200	1,020	1.02
60SS	3/4 inch	12.60	11.91	5.94	18.0	25.9	14.8	13.0	1.06	21,700	1,540	1.50
80SS	1 inch	15.80	15.88	7.92	24.0	32.7	19.1	16.4	1.79	38,900	2,650	2.60

Extended pin, K1 and M1 attachments in 18-8 materials can be provided assembled into chains, against specific order.

Stainless Steel Rollerless Hollow Pin Chains to ANSI Dimensions

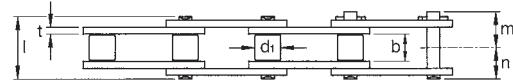
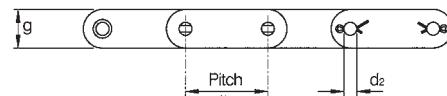
Stainless Steel Hollow Pin Chains allow great flexibility in conveyor design. The design allows many types of crossroads, pins, and custom attachments to be inserted at any point without removing the chain from the drive system. Bush diameters are the same as the equivalent Roller Chain, permitting operation on standard sprockets. Standard supplied chain is in package of 10 foot lengths. Drives should be designed with an even number of pitches for maximum strength.



Part No	Pitch P	Inside Width b mm	Bush Diameter d3 mm	Bore Diameter d5 mm	Plate Depth g mm	Pin Lengths			Bearing Area cm²	Tensile Strength N	Maximum Allowable Load N	Approx. Weight kg/M
						l mm	m mm	n mm				
40HP-SS	1/2 inch	7.85	7.95	4.00	12.0	16.5	9.4	8.3	0.61	7,500	660	0.54
50HP-SS	5/8 inch	9.40	10.16	5.13	15.1	20.7	11.6	10.4	0.94	13,700	1,020	0.91
60HP-SS	3/4 inch	12.60	11.91	6.00	18.0	25.8	13.9	12.9	1.46	16,500	1,540	1.29
80HP-SS	1 inch	15.80	15.88	8.05	24.0	32.5	17.6	16.3	2.54	34,300	2,650	2.26

Double Pitch Stainless Steel Chains

Manufactured in 304 Stainless Steel, this chain is ideal for transportation of packages in food and refrigerated applications. The straight sideplates provide good load carrying capacity with minimised wear.



Part No	Pitch P	Inside Width b mm	Roller Diameter d1 mm	Pin Diameter d2 mm	Plate Depth g mm	Plate Thick t mm	Pin Lengths			Tensile Strength N	Maximum Allowable Load N	Approx. Weight kg/M
							l mm	m mm	n mm			
C2040SS	1 inch	7.85	7.95	3.96	12.0	1.50	16.6	9.5	8.3	9,600	660	0.51
C2050SS	1 1/4 inch	9.40	10.16	5.08	15.0	2.03	20.7	11.9	10.4	15,200	1,020	0.79
C2060SS	1 1/2 inch	12.60	11.91	5.94	18.0	2.42	25.9	14.8	13.0	21,700	1,540	1.13
C2080SS	2 inch	15.80	15.88	7.92	24.0	3.25	32.7	20.7	16.4	38,900	2,650	2.11