

# Roller Chain

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## Features

Challenge offer a large range of various types of chain including – Transmission, Conveyor, Agricultural, Leaf and many types of special chains

### Challenge Transmission Roller chain

Challenge roller chain is supplied in five meter boxes including one connecting link. Some sizes are available on reels or in 10ft boxes.

**The range includes** – ISO, BS, ANSI and many bespoke chains.

**ISO roller chain** – standard, straight side plate, extended pin, hollow pin, stainless steel, nickel plated, zinc plated, double pitch and specials.

**ANSI roller chain** – standard, heavy duty, cottered, cottered heavy duty, straight side plate, extended pin, stainless steel, nickel plated, zinc plated, double pitch (including extended pin, hollow pin) and specials.

**Roller chain attachments** – cover a large range for both ISO and ANSI chain, Timber, Agricultural and Conveyor chain.

### Challenge transmission chains have a longer life because:

- **Pins** – manufactured from case hardened chrome manganese molybdenum steel. This increases wear resistance with more shock absorption ability.
- **Pre-stretched** – “fit and forget”.
- **Ball swaged holes** – combats fatigue failure.
- **Shot peened rollers and side plates** – reduces fatigue failure.
- **Deep waisted side plates** – increases breaking load and reduces stress.
- **Solid rollers** – prolongs wear life.

HERE'S A CHALLENGE ...

# Who's got the Perfect Spin to bowl your customers over?

## CHALLENGE X Series Transmission Chain

Never a  
problem  
always a ...



**Lock in to:**

Secure source of supply • Superior service  
Product quality and reliability • Manufacturers prices  
*Securing more than just your profits*

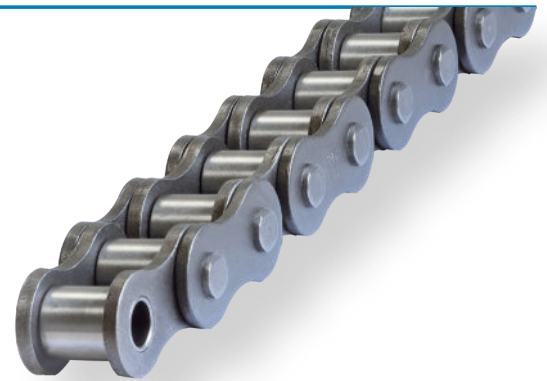
Never a problem always a ...

**CHALLENGE**®

[www.challengept.com](http://www.challengept.com)



# Roller Chain



## The Benefits...

### CHALLENGE X Series Transmission Chain

- **Heavy Rivet Case Hardened Pins in Alloy Steel**  
- For optimum life
- **Pre-stretched** - Fit and forget
- **Ball swaged holes** - Combats fatigue
- **Shot peened**  
- Produces strong surface and reduced fatigue
- **Deep waisted side plates** - Reduces stress
- **Rollers from seamless tube**  
- For strength and long life

### The X Series Range...

British standard		American standard	
20B-1X	32B-2X	100-1X	180-1X
20B-1GLX	32B-3X	100-2X	180-2X
20B-2X	40B-1X	100-3X	180-3X
20B-2GLX	40B-1GLX	120-1X	200-1X
20B-3X	40B-2X	120-1X	200-2X
20B-3GLX	40B-3X	120-1X	200-3X
24B-1X	48B-1X	140-1X	240-1X
24B-1GLX	48B-1GLX	140-2X	240-2X
24B-2X	48B-2X	140-3X	240-3X
24B-3X	48B-3X	160-1X	
28B-1X	56B-1X	160-2X	
28B-1GLX	56B-2X	160-2X	
28B-2X	56B-3X		
28B-3X	64B-1X		
32B-1X	64B-2X		
32B-1GLX	64B-3X		

## Also in the Roller Chain range

#### Roller Chain

- British Standard Roller Chain
- ANSI Standard Roller Chain
- ANSI Heavy Duty Roller Chain
- ANSI Cottered Series Roller Chain
- ANSI Cottered Heavy Duty Series Roller Chain
- ANSI Straight Side Plate Roller Chain
- British Standard Straight Side Plate Roller Chain
- Chain Breakers
- Timing Chain
- Bush Chain
- Bicycle Chain
- Bicycle Chain/Connecting Links
- Roller Chain with Extended Pins
- Special Transmission Roller Chain
- Hollow Pin Roller Chain
- Special Chain with "U" Elements
- Special Chain with "U" and Rubber Elements
- Transport Chain
- Special Chain with Driver
- Stainless Steel Transmission Roller Chain
- Side Bow Chain
- Nickel & Zinc Plated Transmission Roller

- Chain
- Roller Chain Attachments

#### Double Pitch Chain

- Double Pitch Transmission Chain
- Double Pitch Conveyor Chain
- Double Pitch Attachments
- Double Pitch Special Chain
- Double Pitch Extended Pin Chain
- Double Pitch Hollow Pin Chain

#### Leaf Chain

- LH / BL Series Leaf Chain
- LL Series Leaf Chain
- AL Series Leaf Chain
- FL Series Leaf Chain
- Clevis Pins
- Special Leaf Chain with Hollow Pin

#### Timber Chain

- Welded Steel Chain
- Welded Steel Chain Attachments (offset sidebar)
- Welded Steel Chain (offset side bar)
- Offset Sidebar Roller Chain

- Straight Sidebar Roller Chain
- Welded Steel Drag Chain
- Drag Chain Attachments

#### Agricultural Chain

- Steel Agricultural Chain
- Agricultural Chain Attachments

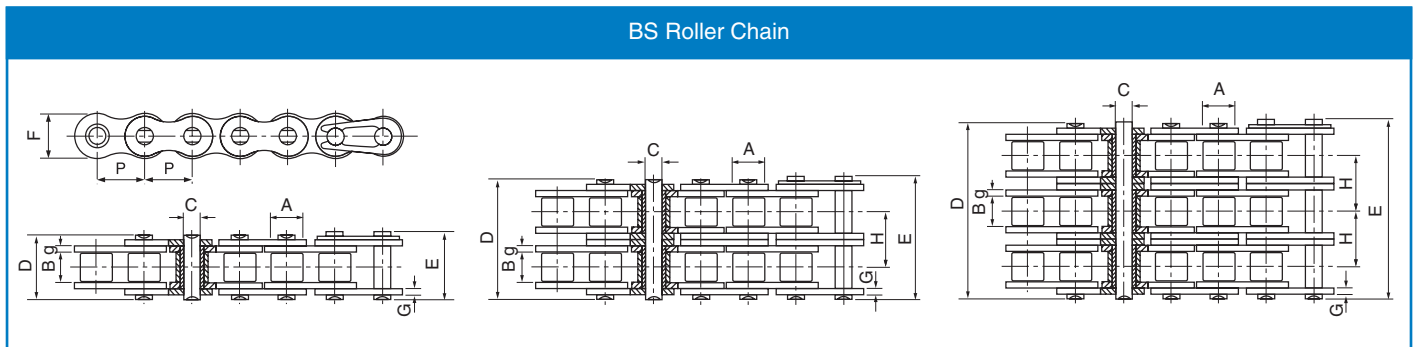
#### Conveyor Chain

- BS Z Series with Solid Pin Chain
- BS ZC Series with Hollow Pin Chain
- BS Z/ZC Series Attachments Chain
- BS ZE Series Deep Link Chain
- M Series Metric Solid Pin Chain
- M Series Chain Attachments
- MC Series Hollow Pin Chain
- MT/ME Series Deep Link Chain
- FV/C Series Metric Solid Pin Chain
- FV/C Series Metric Hollow Pin Chain
- FV/C Series Chain Attachments
- FVT/CE Series Metric Deep Link Chain
- FV/CR Series Metric Scraper Chain
- Special Conveyor Chain
- Special Conveyor Chain
- Conveyor Chain Attachment Chain Designations

# Roller Chain

British Standard Roller Chain

BS228, ISO R606, DIN 8187



ISO Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight
	P	A	B	C	D	E	F	g/G	H	kN	kN	kg/m
<b>SIMPLEX</b>												
04B-1	6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	-	3.00	3.20	0.11
05B-1	8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	-	5.00	5.90	0.20
06B-1SSP	9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30	-	9.00	10.40	0.41
08B-1	12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	-	18.00	19.40	0.69
10B-1	15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	-	22.40	27.50	0.93
12B-1	19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85	-	29.00	32.20	1.15
16B-1	25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1	-	60.00	72.80	2.71
20B-1X	31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	-	95.00	106.70	3.70
24B-1X	38.100	25.40	25.40	14.63	53.40	57.80	33.20	6.0/4.8	-	160.00	178.00	7.10
28B-1X	44.450	27.94	30.99	15.90	65.10	69.50	36.70	7.5/6.0	-	200.00	222.00	8.50
32B-1X	50.800	29.21	30.99	17.81	66.00	71.00	42.00	7.0/6.0	-	250.00	277.50	10.25
40B-1X	63.500	39.37	38.10	22.89	82.20	89.20	52.96	8.5/8.0	-	355.00	394.00	16.35
48B-1X	76.200	48.26	45.72	29.24	99.10	107.00	63.80	12.0/10.0	-	560.00	621.60	25.00
56B-1X	88.900	53.98	53.34	34.32	114.60	123.00	77.80	13.5/12.0	-	850.00	940.00	35.88
64B-1X	101.600	63.50	60.96	39.40	130.00	138.50	90.17	15.0/13.0	-	1120.00	1240.00	46.50
<b>DUPLEX</b>												
04B-2	6.000	4.00	2.80	1.85	12.00	13.00	5.00	0.60	-	4.68	5.50	0.18
05B-2	8.000	5.00	3.00	2.31	13.90	14.50	7.10	0.80	5.64	7.80	10.20	0.33
06B-2SSP	9.525	6.35	5.72	3.28	23.40	24.40	8.20	1.30	10.24	16.90	18.70	0.77
08B-2	12.700	8.51	7.75	4.45	31.20	32.20	11.80	1.60	13.92	32.00	38.70	1.34
10B-2	15.875	10.16	9.65	5.08	36.10	37.50	14.70	1.70	16.59	44.50	56.20	1.84
12B-2	19.050	12.07	11.68	5.72	42.00	43.60	16.00	1.85	19.46	57.80	66.10	2.31
16B-2	25.400	15.88	17.02	8.28	68.00	69.30	21.00	4.15/3.1	31.88	106.00	133.00	5.42
20B-2X	31.750	19.05	19.56	10.19	77.80	81.50	26.40	4.5/3.5	36.45	170.00	211.20	7.20
24B-2X	38.100	25.40	25.40	14.63	101.70	106.20	33.20	6.0/4.8	48.36	280.00	319.20	13.40
28B-2X	44.450	27.94	30.99	15.90	124.60	129.10	36.70	7.5/6.0	59.56	360.00	406.80	16.60
32B-2X	50.800	29.21	30.99	17.81	124.60	129.60	42.00	7.0/6.0	58.55	450.00	508.50	21.00
40B-2X	63.500	39.37	38.10	22.89	154.50	161.50	52.96	8.5/8.0	72.29	630.00	711.90	32.00
48B-2X	76.200	48.26	45.72	29.24	190.40	198.20	63.80	12.0/10.0	91.21	1000.00	1130.00	50.00
56B-2X	88.900	53.98	53.34	34.32	221.20	229.60	77.80	13.5/12.0	106.60	1600.00	1760.00	71.76
64B-2X	101.600	63.50	60.96	39.40	249.90	258.40	90.17	15.0/13.0	119.89	2000.00	2200.00	93.00
<b>TRIPLEX</b>												
05B-3	8.000	5.00	3.00	2.31	19.50	20.20	7.10	0.80	5.64	11.10	13.80	0.48
06B-3SSP	9.525	6.35	5.72	3.28	33.50	34.60	8.20	1.30	10.24	24.90	30.10	1.16
08B-3	12.700	8.51	7.75	4.45	45.10	46.10	11.80	1.60	13.92	47.50	57.80	2.03
10B-3	15.875	10.16	9.65	5.08	52.70	54.10	14.70	1.70	16.59	66.70	84.50	2.77
12B-3	19.050	12.07	11.68	5.72	61.50	63.10	16.00	1.85	19.46	86.70	101.80	3.46
16B-3	25.400	15.88	17.02	8.28	99.80	101.20	21.00	4.15/3.1	31.88	160.00	203.70	8.13
20B-3X	31.750	19.05	19.56	10.19	114.20	117.90	26.40	4.5/3.5	36.45	250.00	290.00	10.82
24B-3X	38.100	25.40	25.40	14.63	150.10	154.60	33.20	6.0/4.8	48.36	425.00	493.00	20.10
28B-3X	44.450	27.94	30.99	15.90	184.20	188.70	36.70	7.5/6.0	59.56	530.00	609.50	24.92
32B-3X	50.800	29.21	30.99	17.81	183.20	188.20	42.00	7.0/6.0	58.55	670.00	770.50	31.56
40B-3X	63.500	39.37	38.10	22.89	226.80	233.80	52.96	8.5/8.0	72.29	950.00	1092.50	48.10
48B-3X	76.200	48.26	45.72	29.24	281.60	289.40	63.80	12.0/10.0	91.21	1500.00	1710.00	75.00
56B-3X	88.900	53.98	53.34	34.32	327.80	336.20	77.80	13.5/12.0	106.60	2240.00	2240.00	107.64
64B-3X	101.600	63.50	60.96	39.40	369.80	378.30	90.17	15.0/13.0	119.89	3000.00	3300.00	139.50

\* SSP =Straight Side Plate Chain

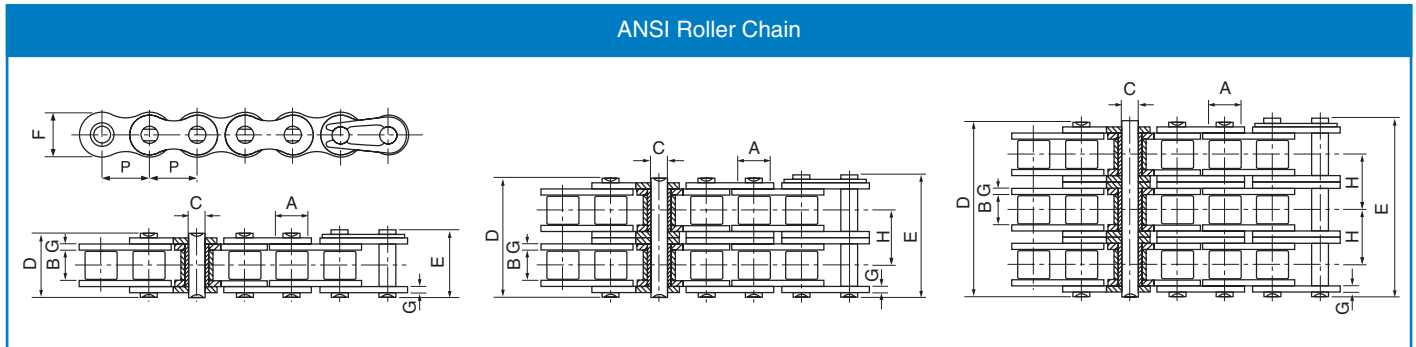
Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Roller Chain

ANSI Standard Roller Chain

ANSI B29.1, ISO R606, DIN 8188



ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight
	P	A	B	C	D	E	F	g/G	H	kN	kN	kg/m
<b>SIMPLEX</b>												
*15-1R	4.763	2.48	2.38	1.62	6.10	6.90	4.30	0.60	-	1.8	2.0	0.08
*25-1R	6.350	3.30	3.18	2.31	7.90	8.40	6.00	0.80	-	3.5	4.6	0.15
*35-1R	9.525	5.08	4.77	3.58	12.40	13.17	9.00	1.30	-	7.9	10.8	0.33
41-1R	12.700	7.77	6.25	3.58	13.75	15.00	9.91	1.30	-	6.7	12.6	0.41
40-1R	12.700	7.95	7.85	3.96	16.60	17.80	12.00	1.50	-	14.1	17.5	0.62
50-1R	15.875	10.16	9.40	5.08	20.70	22.20	15.09	2.03	-	22.2	29.4	1.02
60-1R	19.050	11.91	12.57	5.94	25.90	27.70	18.00	2.42	-	31.8	41.5	1.50
80-1R	25.400	15.88	15.75	7.92	32.70	35.00	24.00	3.25	-	56.7	69.4	2.60
100-1XR	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	-	88.5	109.2	3.91
120-1XR	38.100	22.23	25.22	11.10	50.30	54.30	35.70	4.80	-	127.0	156.3	5.62
140-1XR	44.450	25.40	25.22	12.70	54.40	59.00	41.00	5.60	-	172.4	212.0	7.50
160-1XR	50.800	28.58	31.55	14.27	64.80	69.60	47.80	6.40	-	226.8	278.9	10.10
180-1XR	57.150	35.71	35.48	17.46	72.80	78.60	53.60	7.20	-	280.2	341.8	13.45
200-1XR	63.500	39.68	37.85	19.85	80.30	87.20	60.00	8.00	-	353.8	431.6	16.15
240-1XR	76.200	47.63	47.35	23.81	95.50	103.00	72.39	9.50	-	510.3	622.5	23.20
<b>DUPLEX</b>												
*25-2R	6.350	3.30	3.18	2.31	14.50	15.00	6.00	0.80	6.40	7.0	8.6	0.28
*35-2R	9.525	5.08	4.77	3.58	22.50	23.30	9.00	1.30	10.13	15.8	19.7	0.63
41-2R	12.700	7.77	6.25	3.58	25.70	26.90	9.91	1.30	11.95	13.3	16.9	0.81
40-2R	12.700	7.95	7.85	3.96	31.00	32.20	12.00	1.50	14.38	28.2	35.9	1.12
50-2R	15.875	10.16	9.40	5.08	38.90	40.40	15.09	2.03	18.11	44.4	58.1	2.00
60-2R	19.050	11.91	12.57	5.94	48.80	50.50	18.00	2.42	22.78	63.6	82.1	2.92
80-2R	25.400	15.88	15.75	7.92	62.70	64.30	24.00	3.25	29.29	113.4	141.8	5.15
100-2XR	31.750	19.05	18.90	9.53	76.40	80.50	30.00	4.00	35.76	177.0	219.4	7.80
120-2XR	38.100	22.23	25.22	11.10	95.80	99.70	35.70	4.80	45.44	254.0	314.9	11.70
140-2XR	44.450	25.40	25.22	12.70	103.30	107.90	41.00	5.60	48.87	344.8	427.5	15.14
160-2XR	50.800	28.58	31.55	14.27	123.30	128.10	47.80	6.40	58.55	453.6	562.4	20.14
180-2XR	57.150	35.71	35.48	17.46	138.60	144.40	53.60	7.20	65.84	560.5	695.0	29.22
200-2XR	63.500	39.68	37.85	19.85	151.90	158.80	60.00	8.00	71.55	707.6	877.4	32.24
240-2XR	76.200	47.63	47.35	23.81	183.40	190.80	72.39	9.50	87.83	1020.6	1255.3	45.23
<b>TRIPLEX</b>												
*25-3R	6.350	3.30	3.18	2.31	21.00	21.50	6.00	0.80	6.40	10.5	12.6	0.44
*35-3R	9.525	5.08	4.77	3.58	32.70	33.50	9.00	1.30	10.13	23.7	28.6	1.05
40-3R	12.700	7.95	7.85	3.96	45.40	46.60	12.00	1.50	14.38	42.3	50.0	1.90
50-3R	15.875	10.16	9.40	5.08	57.00	58.50	15.09	2.03	18.11	66.6	77.8	3.09
60-3R	19.050	11.91	12.57	5.94	71.50	73.30	18.00	2.42	22.78	95.4	111.1	4.54
80-3R	25.400	15.88	15.75	7.92	91.70	93.60	24.00	3.25	29.29	170.1	198.4	7.89
100-3XR	31.750	19.05	18.90	9.53	112.20	116.30	30.00	4.00	35.76	265.5	309.6	11.77
120-3XR	38.100	22.23	25.22	11.10	141.40	145.20	35.70	4.80	45.44	381.0	437.2	17.53
140-3XR	44.450	25.40	25.22	12.70	152.20	156.80	41.00	5.60	48.87	517.2	593.3	22.20
160-3XR	50.800	28.58	31.55	14.27	181.80	186.60	47.80	6.40	58.55	680.4	780.6	30.02
180-3XR	57.150	35.71	35.48	17.46	204.40	210.20	53.60	7.20	65.84	840.7	983.6	38.22
200-3XR	63.500	39.68	37.85	19.85	223.50	230.40	60.00	8.00	71.55	1061.4	1217.8	49.03
240-3XR	76.200	47.63	47.35	23.81	271.30	278.60	72.39	9.50	87.83	1530.9	1756.5	71.60

\* Bush chain: **A** in the table indicates the external diameter of the bush

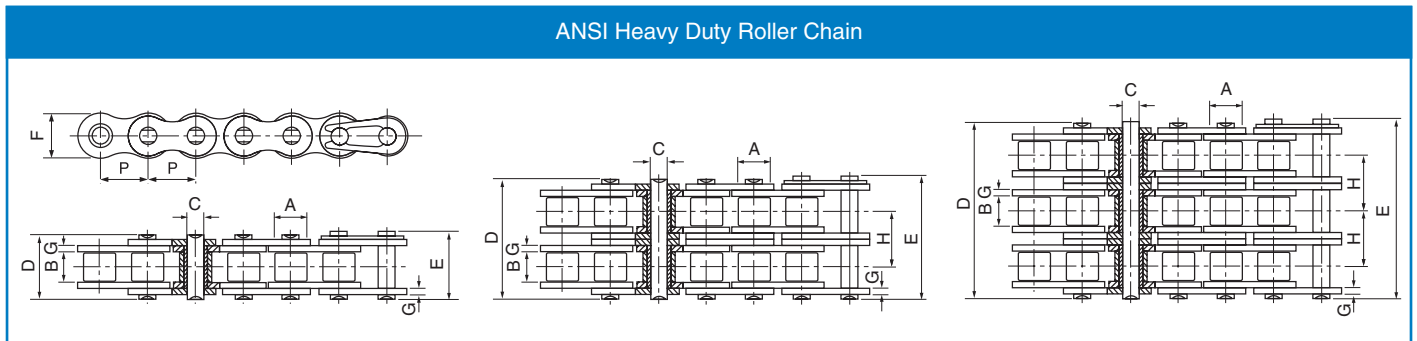
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# Roller Chain

## ANSI Heavy Duty Roller Chain

## ANSI B29.1, ISO R606, DIN 8188



ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
	P	A	B		C	D						
<b>SIMPLEX</b>												
40H-1R	12.700	7.95	7.85	3.96	18.80	19.90	12.00	2.03	-	14.10	19.10	0.82
50H-1R	15.875	10.16	9.40	5.08	22.10	23.40	15.09	2.42	-	22.20	30.20	1.25
60H-1R	19.050	11.91	12.57	5.94	29.20	31.00	18.00	3.25	-	31.80	42.70	1.87
80H-1R	25.400	15.88	15.75	7.92	36.20	37.70	24.00	4.00	-	56.70	71.40	3.10
100H-1XR	31.750	19.05	18.90	9.53	43.60	46.90	30.00	4.80	-	88.50	112.40	4.52
120H-1XR	38.100	22.23	25.22	11.10	53.50	57.50	35.70	5.60	-	127.00	160.90	6.60
140H-1XR	44.450	25.40	25.22	12.70	57.60	62.20	41.00	6.40	-	172.40	217.30	8.30
160H-1XR	50.800	28.58	31.55	14.27	68.20	73.00	47.80	7.20	-	226.80	285.80	10.30
200H-1XR	63.500	39.68	37.85	19.85	86.60	93.50	60.00	9.50	-	353.80	444.50	19.16
<b>DUPLEX</b>												
60H-2R	19.050	11.91	12.57	5.94	55.30	57.10	18.00	3.25	26.11	63.60	84.50	3.71
80H-2R	25.400	15.88	15.75	7.92	68.80	70.30	24.00	4.00	32.59	113.40	145.30	6.15
100H-2R	31.750	19.05	18.90	9.53	82.70	86.00	30.00	4.80	39.09	177.00	225.90	9.03
120H-2XR	38.100	22.23	25.22	11.10	102.40	106.40	35.70	5.60	48.87	254.00	322.70	13.13
140H-2XR	44.450	25.40	25.22	12.70	109.80	114.40	41.00	6.40	52.20	344.80	437.70	16.60
160H-2XR	50.800	28.58	31.55	14.27	130.10	134.90	47.80	7.20	61.90	453.60	571.60	20.20
200H-2XR	63.500	39.68	37.85	19.85	164.90	171.80	60.00	9.50	78.31	707.60	894.90	38.11
<b>TRIPLEX</b>												
60H-3R	19.050	11.91	12.57	5.94	81.40	83.20	18.00	3.25	26.11	95.40	113.90	5.54
80H-3R	25.400	15.88	15.75	7.92	101.40	102.90	24.00	4.00	32.59	170.10	203.50	9.42
100H-3XR	31.750	19.05	18.90	9.53	121.80	125.10	30.00	4.80	39.09	265.50	314.80	12.96
120H-3XR	38.100	22.23	25.22	11.10	151.20	155.20	35.70	5.60	48.87	381.00	444.70	19.64
140H-3XR	44.450	25.40	25.22	12.70	162.00	166.60	41.00	6.40	52.20	517.20	598.40	24.90
160H-3XR	50.800	28.58	31.55	14.27	192.00	196.80	47.80	7.20	61.90	680.40	787.30	30.10
200H-3XR	63.500	39.68	37.85	19.85	243.20	250.10	60.00	9.50	78.31	1061.40	1228.20	57.06

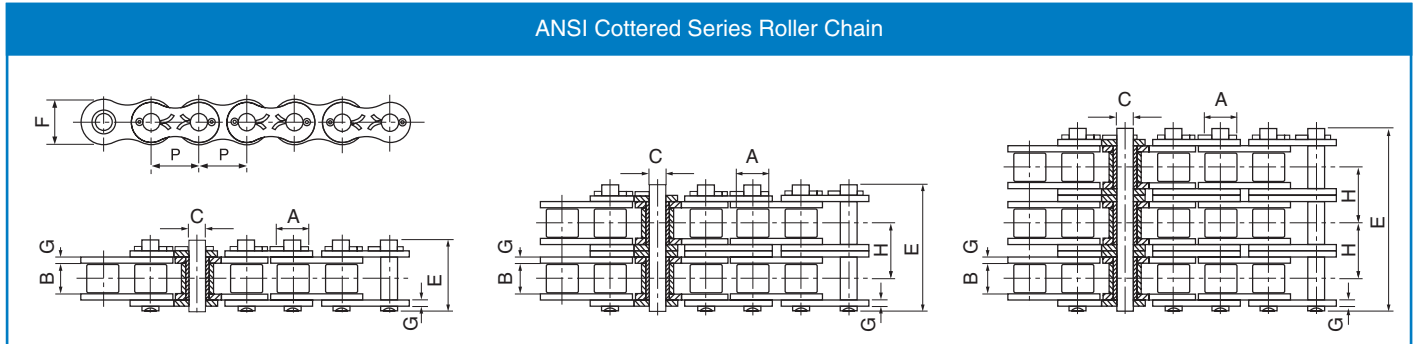
Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Roller Chain

## ANSI Cotted Series Roller Chain

## ANSI B29.1, ISO R606, DIN 8188



ANSI Chain number	Pitch P	Roller diameter A	Width between inner plates B	Pin diameter C	Pin length E	Inner plate height F	Plate thickness G	Transverse pitch H	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
<b>SIMPLEX</b>											
50-1C	15.875	10.16	9.40	5.08	23.00	15.09	2.03	-	22.20	29.40	1.02
60-1C	19.050	11.91	12.57	5.94	28.30	18.00	2.42	-	31.80	41.50	1.50
80-1C	25.400	15.88	15.75	7.92	36.50	24.00	3.25	-	56.70	69.40	2.60
100-1C	31.750	19.05	18.90	9.53	44.70	30.00	4.00	-	88.50	109.20	3.91
120-1C	38.100	22.23	25.22	11.10	54.30	35.70	4.80	-	127.00	156.30	5.62
140-1C	44.450	25.40	25.22	12.70	59.00	41.00	5.60	-	172.40	212.00	7.50
160-1C	50.800	28.58	31.55	14.27	69.60	47.80	6.40	-	226.80	278.90	10.10
180-1C	57.150	35.71	35.48	17.46	78.60	53.60	7.20	-	280.20	341.80	13.45
200-1C	63.500	39.68	37.85	19.85	87.20	60.00	8.00	-	353.80	431.60	16.15
240-1C	76.200	47.63	47.35	23.81	103.00	72.39	9.50	-	510.30	622.50	23.20
<b>DUPLEX</b>											
50-2C	15.875	10.16	9.40	5.08	41.20	15.09	2.03	18.11	44.40	58.10	2.00
60-2C	19.050	11.91	12.57	5.94	51.10	18.00	2.42	22.78	63.60	82.10	2.92
80-2C	25.400	15.88	15.75	7.92	65.80	24.00	3.25	29.29	113.40	141.80	5.15
100-2C	31.750	19.05	18.90	9.53	80.50	30.00	4.00	35.76	177.00	219.40	7.80
120-2C	38.100	22.23	25.22	11.10	99.70	35.70	4.80	45.44	254.00	314.90	11.70
140-2C	44.450	25.40	25.22	12.70	107.90	41.00	5.60	48.87	344.80	427.50	15.14
160-2C	50.800	28.58	31.55	14.27	128.10	47.80	6.40	58.55	453.60	562.40	20.14
180-2C	57.150	35.71	35.48	17.46	144.40	53.60	7.20	65.84	560.50	695.00	29.22
200-2C	63.500	39.68	37.85	19.85	158.80	60.00	8.00	71.55	707.60	877.40	32.24
240-2C	76.200	47.63	47.35	23.81	190.80	72.39	9.50	87.83	1020.60	1255.30	45.23
<b>TRIPLEX</b>											
50-3C	15.875	10.16	9.40	5.08	59.30	15.09	2.03	18.11	66.60	77.80	3.09
60-3C	19.050	11.91	12.57	5.94	73.90	18.00	2.42	22.78	95.40	111.10	4.54
80-3C	25.400	15.88	15.75	7.92	93.60	24.00	3.25	29.29	170.10	198.40	7.89
100-3C	31.750	19.05	18.90	9.53	116.30	30.00	4.00	35.76	265.50	309.60	11.77
120-3C	38.100	22.23	25.22	11.10	145.20	35.70	4.80	45.44	381.00	437.20	17.53
140-3C	44.450	25.40	25.22	12.70	156.80	41.00	5.60	48.87	517.20	593.30	22.20
160-3C	50.800	28.58	31.55	14.27	186.60	47.80	6.40	58.55	680.40	780.60	30.02
180-3C	57.150	35.71	35.48	17.46	210.20	53.60	7.20	65.84	840.70	983.60	38.22
200-3C	63.500	39.68	37.85	19.85	230.40	60.00	8.00	71.55	1061.40	1217.80	49.03
240-3C	76.200	47.63	47.35	23.81	278.60	72.39	9.50	87.83	1530.90	1756.50	71.60

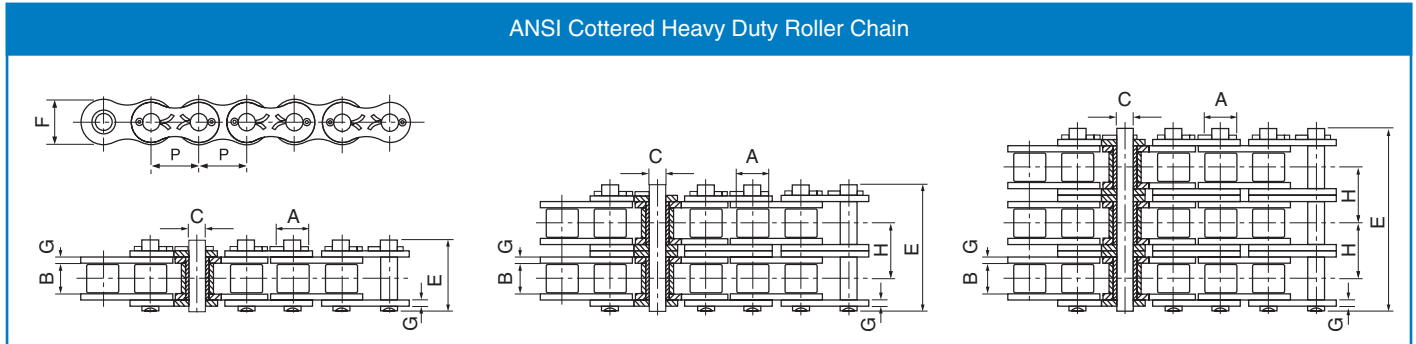
Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.



# Roller Chain

## ANSI Cotteded Heavy Duty Roller Chain

## ANSI B29.1, ISO R606, DIN 8188

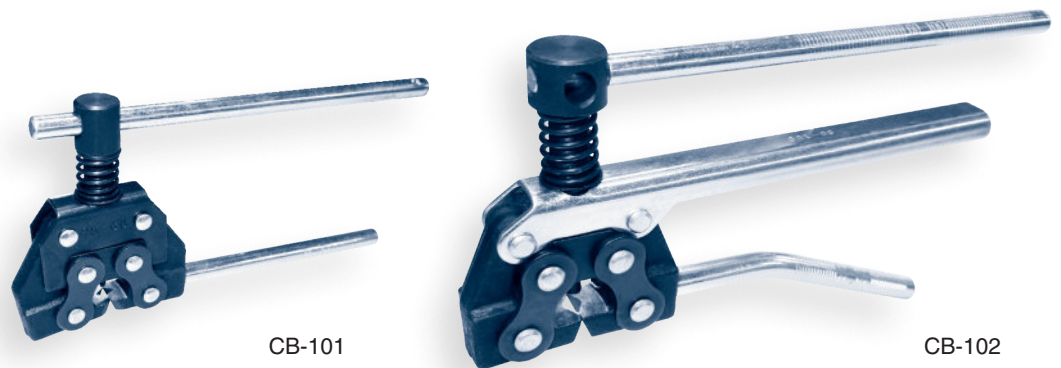


ANSI Chain number	Pitch P	Roller diameter A	Width between inner plates B	Pin diameter C	Pin length E	Inner plate height F	Plate thickness G	Transverse pitch H	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
<b>SIMPLEX</b>											
50H-1C	15.875	10.16	9.40	5.08	24.40	15.09	2.42	-	22.20	30.20	1.25
60H-1C	19.050	11.91	12.57	5.94	31.60	18.00	3.25	-	31.80	42.70	1.87
80H-1C	25.400	15.88	15.75	7.92	39.40	24.00	4.00	-	56.70	71.40	3.10
100H-1C	31.750	19.05	18.90	9.53	46.90	30.00	4.80	-	88.50	112.40	4.52
120H-1C	38.100	22.23	25.22	11.10	57.50	35.70	5.60	-	127.00	160.90	6.60
140H-1C	44.450	25.40	25.22	12.70	62.20	41.00	6.40	-	172.40	217.30	8.30
160H-1C	50.800	28.58	31.55	14.27	73.00	47.80	7.20	-	226.80	285.80	10.30
200H-1C	63.500	39.68	37.85	19.85	93.50	60.00	9.50	-	353.80	444.50	19.16
<b>DUPLEX</b>											
60H-2C	19.050	11.91	12.57	5.94	57.70	18.00	3.25	26.11	63.60	84.50	3.71
80H-2C	25.400	15.88	15.75	7.92	72.00	24.00	4.00	32.59	113.40	145.30	6.15
100H-2C	31.750	19.05	18.90	9.53	86.00	30.00	4.80	39.09	177.00	225.90	9.03
120H-2C	38.100	22.23	25.22	11.10	106.40	35.70	5.60	48.87	254.00	322.70	13.13
140H-2C	44.450	25.40	25.22	12.70	114.40	41.00	6.40	52.20	344.80	437.70	16.60
160H-2C	50.800	28.58	31.55	14.27	134.90	47.80	7.20	61.90	453.60	571.60	20.20
200H-2C	63.500	39.68	37.85	19.85	171.80	60.00	9.50	78.31	707.60	894.90	31.11
<b>TRIPLEX</b>											
60H-3C	19.050	11.91	12.57	5.94	83.80	18.00	3.25	26.11	95.40	113.90	5.54
80H-3C	25.400	15.88	15.75	7.92	104.60	24.00	4.00	32.59	170.10	203.50	9.42
100H-3C	31.750	19.05	18.90	9.53	125.10	30.00	4.80	39.09	265.50	314.80	12.96
120H-3C	38.100	22.23	25.22	11.10	155.20	35.70	5.60	48.87	381.00	444.70	19.64
140H-3C	44.450	25.40	25.22	12.70	166.60	41.00	6.40	52.20	517.20	598.40	24.90
160H-3C	50.800	28.58	31.55	14.27	196.80	47.80	7.20	61.90	680.40	787.30	30.10
200H-3C	63.500	39.68	37.85	19.85	250.10	60.00	9.50	78.31	1061.40	1228.20	57.06

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

## Chain Breakers

Model	Range	
	From inch	To inch
CB-101 (Small)	3/8"	3/4"
CB-102 (Large)	3/4"	1.1/4"

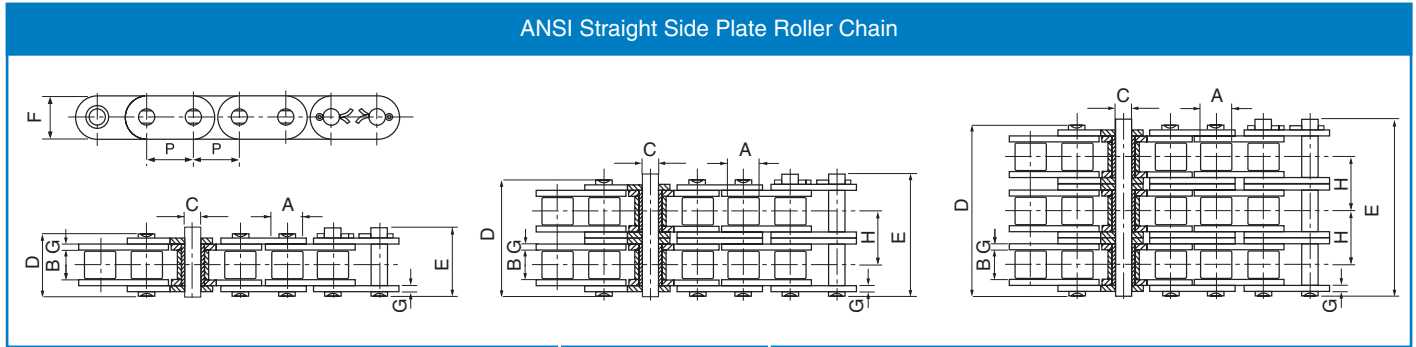


All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Roller Chain

ANSI Straight Side Plate Roller Chain

ANSI B29.1, ISO R606, DIN 8188

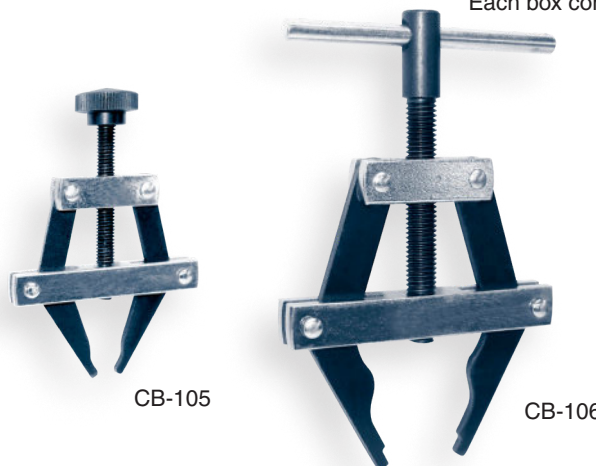


ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight
	P	A	B	C	D	E	F	G	H	kN	kN	kg/m
<b>SIMPLEX</b>												
C40-1R	12.700	7.95	7.85	3.96	16.60	18.80	12.00	1.50	-	14.10	17.50	0.73
C50-1R	15.875	10.16	9.40	5.08	20.70	23.30	15.09	2.03	-	22.20	29.40	1.23
C60-1R	19.050	11.91	12.57	5.94	25.90	28.30	18.0/18.2	2.42	-	31.80	41.50	1.81/1.83
C80-1R	25.400	15.88	15.75	7.92	32.70	36.50	24.00	3.25	-	56.70	69.40	3.09
C100-1XR	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	-	88.50	109.20	4.56
C120-1XR	38.100	22.23	25.22	11.10	50.30	54.30	35.70	4.80	-	127.00	156.30	6.86
C140-1XR	44.450	25.40	25.22	12.70	54.40	59.00	41.00	5.60	-	172.40	212.00	8.49
C160-1XR	50.800	28.58	31.55	14.27	64.80	69.60	47.80	6.40	-	226.80	278.90	11.50
<b>DUPLEX</b>												
C40-2R	12.700	7.95	7.85	3.96	31.00	33.20	12.00	1.50	14.38	28.20	35.90	1.43
C50-2R	15.875	10.16	9.40	5.08	38.90	41.40	15.09	2.03	18.11	44.40	58.10	2.42
C60-2R	19.050	11.91	12.57	5.94	48.80	51.10	18.0/18.2	2.42	22.78	63.60	82.10	3.58/3.62
C80-2R	25.400	15.88	15.75	7.92	62.70	65.80	24.00	3.25	29.29	113.40	141.80	6.12
C100-2XR	31.750	19.05	18.90	9.53	76.40	80.50	30.00	4.00	35.76	177.00	219.40	9.08
C120-2XR	38.100	22.23	25.22	11.10	95.80	99.70	35.70	4.80	45.44	254.00	314.90	13.60
C140-2XR	44.450	25.40	25.22	12.70	103.30	107.90	41.00	5.60	48.87	344.80	427.50	16.86
C160-2XR	50.800	28.58	31.55	14.27	123.30	128.10	47.80	6.40	58.55	453.60	562.40	22.90
<b>TRIPLEX</b>												
C40-3R	12.700	7.95	7.85	3.96	45.40	47.60	12.00	1.50	14.38	42.30	50.00	2.14
C50-3R	15.875	10.16	9.40	5.08	57.00	59.50	15.09	2.03	18.11	66.60	77.80	3.62
C60-3R	19.050	11.91	12.57	5.94	71.50	73.90	18.0/18.2	2.42	22.78	95.40	111.10	5.36/5.41
C80-3R	25.400	15.88	15.75	7.92	91.70	95.10	24.00	3.25	29.29	170.10	198.40	9.10
C100-3XR	31.750	19.05	18.90	9.53	112.20	116.30	30.00	4.00	35.76	265.50	309.60	13.60
C120-3XR	38.100	22.23	25.22	11.10	141.40	145.20	35.70	4.80	45.44	381.00	437.20	20.43
C140-3XR	44.450	25.40	25.22	12.70	152.20	156.80	41.00	5.60	48.87	517.20	593.30	25.23
C160-3XR	50.800	28.58	31.55	14.27	181.80	186.60	47.80	6.40	58.55	680.40	780.60	34.19

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

Chain Pullers

Model	Range	
	From inch	To inch
CB-105 (Small)	1/4"	3/4"
CB-106 (Large)	3/4"	1.1/4"

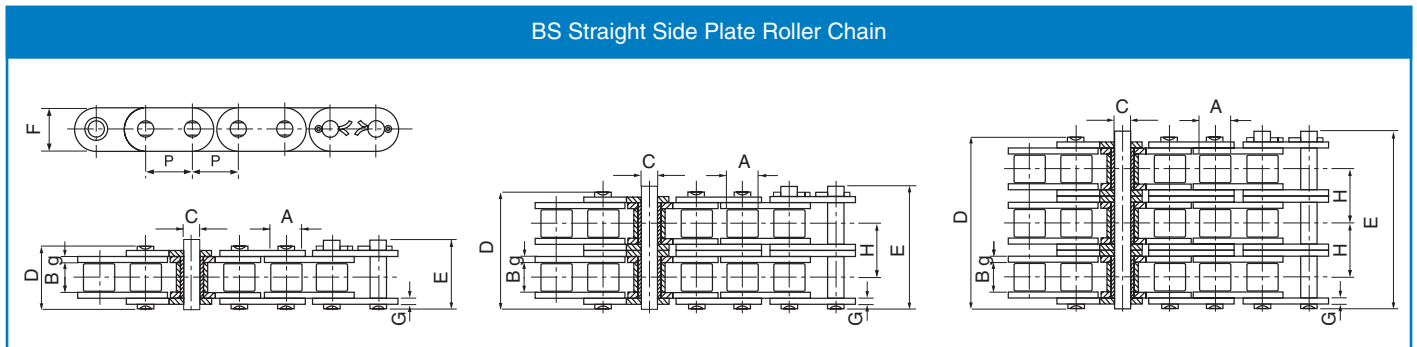


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# Roller Chain

## BS Straight Side Plate Roller Chain

## ANSI B29.1, ISO R606, DIN 8187



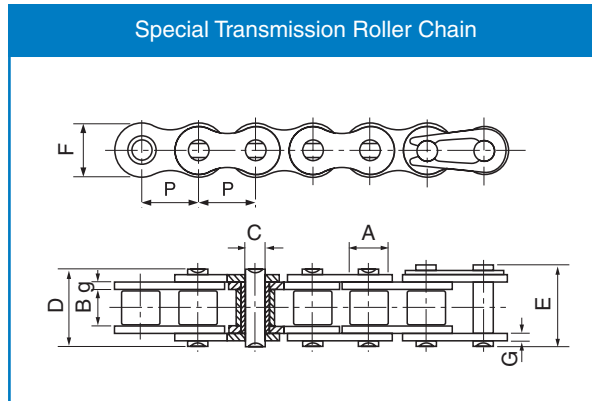
ISO Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight
	P	A	B	C	D	E	F	g/G	H	kN	kN	kg/m
<b>SIMPLEX</b>												
08B-1 GL	12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	-	18.00	19.50	0.80
10B-1 GL	15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	-	22.40	27.90	1.06
12B-1 GL	19.050	12.07	11.68	5.72	22.50	25.20	16.00	1.85	-	29.00	32.20	1.32
16B-1 GL	25.400	15.88	17.02	8.28	36.10	39.10	21.0/24.0	4.15/3.1	-	60.00	72.80	3.08/3.49
20B-1 GLX	31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	-	95.00	106.70	4.16
24B-1 GLX	38.100	25.40	25.40	14.63	53.40	57.80	33.20	6.0/4.8	-	160.00	178.00	7.47
28B-1 GLX	44.450	27.94	30.99	15.90	65.10	69.50	36.70	7.5/6.0	-	200.00	222.00	9.90
32B-1 GLX	50.800	29.21	30.99	17.81	66.00	71.00	42.00	7.0/6.0	-	250.00	277.50	10.45
<b>DUPLEX</b>												
08B-2 GL	12.700	8.51	7.75	4.45	31.20	32.20	11.80	1.60	13.92	32.00	38.70	1.45
10B-2 GL	15.875	10.16	9.65	5.08	36.10	37.50	14.70	1.70	16.59	44.50	57.80	2.00
12B-2 GL	19.050	12.07	11.68	5.72	42.00	44.70	16.00	1.85	19.46	57.80	66.10	2.62
16B-2 GL	25.400	15.88	17.02	8.28	68.00	71.00	21.0/24.0	4.15/3.1	31.88	106.00	133.00	6.10/6.92
20B-2 GLX	31.750	19.05	19.56	10.19	77.80	81.50	26.40	4.5/3.5	36.45	170.00	211.20	8.23
24B-2 GLX	38.100	25.40	25.40	14.63	101.70	106.20	33.20	6.0/4.8	48.36	280.00	319.20	14.77
28B-2 GLX	44.450	27.94	30.99	15.90	124.60	129.10	36.70	7.5/6.0	59.56	360.00	406.80	19.82
32B-2 GLX	50.800	29.21	30.99	17.81	124.60	129.60	42.00	7.0/6.0	58.55	450.00	508.50	20.94
<b>TRIPLEX</b>												
08B-3 GL	12.700	8.51	7.75	4.45	45.10	46.10	11.80	1.60	13.92	47.50	57.80	2.10
10B-3 GL	15.875	10.16	9.65	5.08	52.70	54.10	14.70	1.70	16.59	66.70	84.50	2.87
12B-3 GL	19.050	12.07	11.68	5.72	61.50	64.20	16.00	1.85	19.46	86.70	101.80	3.89
16B-3 GL	25.400	15.88	17.02	8.28	99.80	102.90	21.0/24.0	4.15/3.1	31.88	160.00	203.70	9.12/10.34
20B-3 GLX	31.750	19.05	19.56	10.19	114.20	117.90	26.40	4.5/3.5	36.45	250.00	290.00	11.34
24B-3 GLX	38.100	25.40	25.40	14.63	150.10	154.60	33.20	6.0/4.8	48.36	425.00	493.00	22.10
28B-3 GLX	44.450	27.94	30.99	15.90	184.20	188.70	36.70	7.5/6.0	59.56	530.00	609.50	29.64
32B-3 GLX	50.800	29.21	30.99	17.81	183.20	188.20	42.00	7.0/6.0	58.55	670.00	770.50	31.27

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

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# Roller Chain

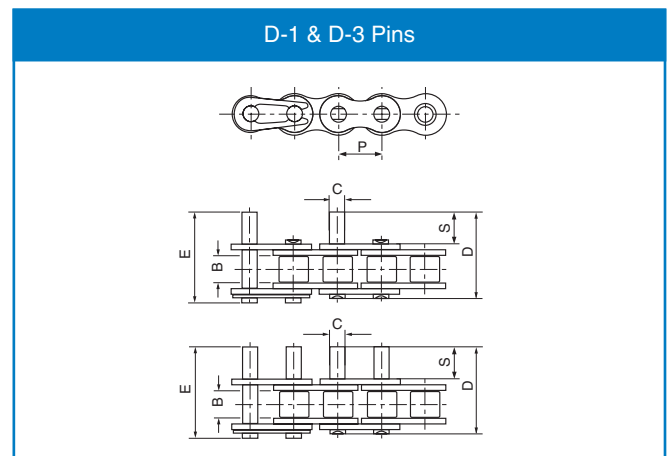
## Special Transmission Roller Chain



ISO Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height F	Plate thickness g/G	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
	P	A	B	C	D	E					
04BH	6.00	4.00	2.80	1.85	8.40	9.40	5.00	0.90	5.00	5.30	0.14
081	12.70	7.75	3.30	3.66	9.30	12.30	9.90	1.00	8.00	9.40	0.28
084	12.70	7.75	4.88	4.09	14.60	17.60	11.50	1.80	15.60	15.70	0.51
415	12.70	7.77	4.76	3.60	11.00	12.40	9.70	1.00	6.86	7.60	0.32
415H	12.70	7.77	4.76	3.96	13.10	14.50	12.00	1.50	14.40	16.10	0.55
415B/083	12.70	7.75	4.88	4.09	12.90	14.40	10.30	1.30	12.00	14.20	0.44
415BF1	12.70	7.75	4.88	4.09	11.50	13.00	10.30	1.00	9.00	10.60	0.38
423	12.70	8.51	6.40	4.45	15.60	17.10	12.40	1.70	19.60	21.90	0.71
478	12.70	7.80	4.80	4.00	11.60	13.65	10.46	1.25	9.80	12.80	0.39
08BF	12.70	8.51	5.55	4.45	14.60	16.10	11.80	1.60	17.80	19.20	0.66
12BH	19.05	12.07	11.68	5.94	25.20	26.80	16.00	2.42	40.00	44.40	1.45
12BHF1	19.05	12.07	11.68	6.10	25.00	27.20	16.50	2.50	44.00	48.80	1.46
16BF1	25.40	15.88	12.20	8.28	31.40	32.70	21.00	4.15/3.1	60.00	71.40	2.60
16BF2	25.40	15.88	17.02	8.28	38.60	39.80	21.00	4.15	60.00	71.40	3.08
16BF5	25.40	15.88	12.70	8.28	30.80	32.10	20.00	3.5/3.0	50.00	57.50	2.37
16BH	25.40	15.88	17.02	8.90	35.70	38.90	24.10	4.0/3.1	80.00	94.20	3.11
24BH	38.10	25.40	25.40	14.63	58.60	63.40	36.20	7.5/6.0	225.00	250.30	9.00

## Extended Pin Chain

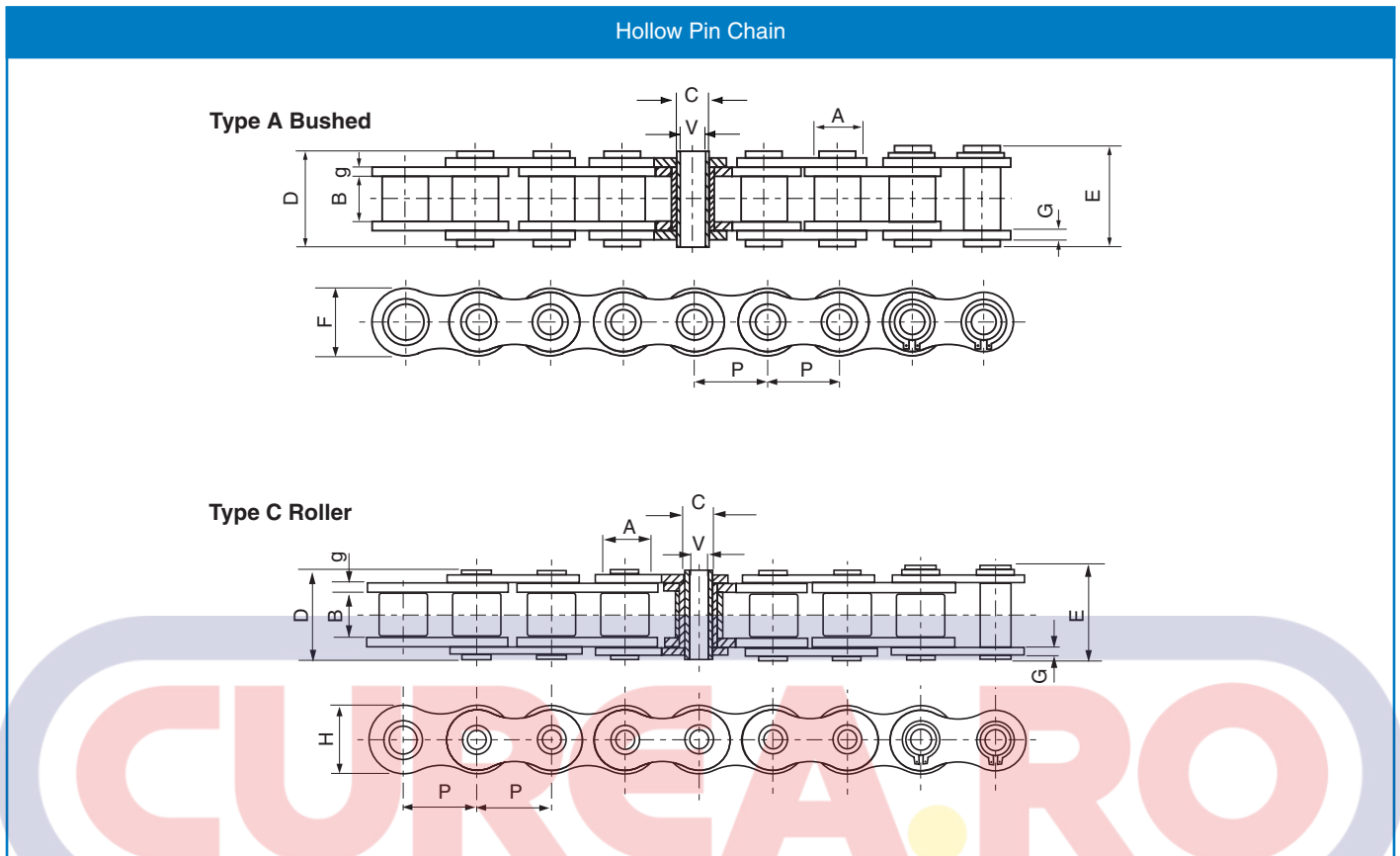
ISO Chain No.	ANSI Chain No.	P	B	C	S	D	E
	35	9.525	4.77	3.58	9.50	20.80	21.60
	40	12.700	7.85	3.96	9.50	25.10	26.20
	50	15.875	9.40	5.08	11.90	31.30	33.10
	60	19.050	12.57	5.94	14.30	38.60	40.60
	80	25.400	15.75	7.92	19.10	50.30	53.30
	100	31.750	18.90	9.53	23.80	61.80	66.10
	120	38.100	25.22	11.10	28.60	76.40	80.40
	140	44.450	25.22	12.70	33.30	84.80	89.40
	160	50.800	31.55	14.27	38.10	99.60	104.40
08B		12.700	7.75	4.45	9.50	25.10	26.60
10B		15.875	9.65	5.08	11.90	30.10	31.50
12B		19.050	11.68	5.72	14.30	35.40	37.10
16B		25.400	17.02	8.28	19.10	53.00	54.30



Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

# Roller Chain

## Hollow Pin Chain



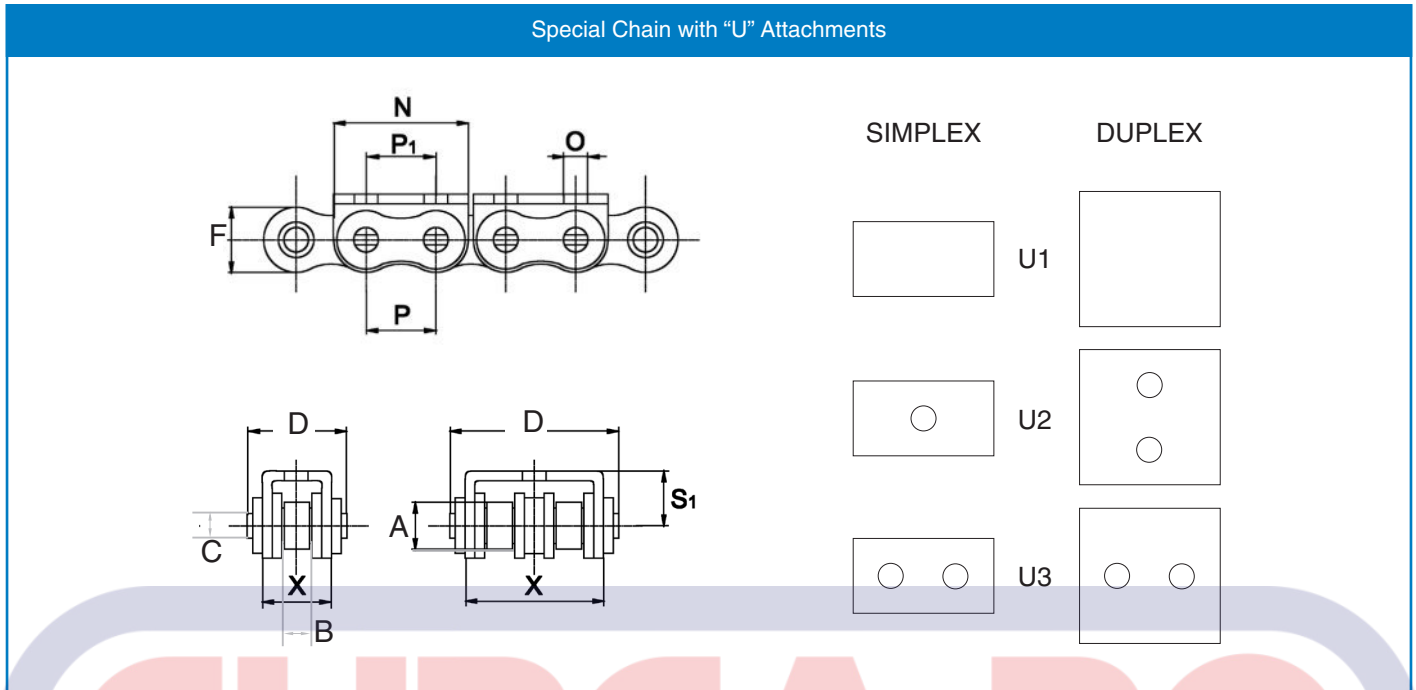
Chain number	Pitch	Roller/Bush diameter	Width between inner plates	Pin diameter		Pin length		Inner plate height	Plate thickness	Minimum tensile strength	Average tensile strength	Weight	Type form
	P	A	B	C	V	D	E	F	g/G	kN	kN	kg/m	
08BHP(4.0)	12.700	8.51	7.75	6.55	4.00	16.4	17.6	11.80	1.6/1.3	11.10	12.1	0.60	A
08BHP(4.5)	12.700	8.51	7.75	6.55	4.50	16.4	17.6	11.80	1.6/1.3	11.10	12.1	0.56	A
10BHP	15.875	10.16	9.65	5.94	4.04	19.3	20.6	14.70	1.70	17.00	20.8	0.86	C
12BHP	19.050	12.07	11.68	6.50	4.00	21.6	22.8	15.90	1.85	23.60	25.9	1.09	C
40HP	12.700	7.95	7.85	5.63	4.00	16.5	17.6	12.00	1.50	11.00	12.2	0.54	A
50HP	15.875	10.16	9.40	7.03	5.13	20.7	21.9	15.09	2.03	20.00	22.6	0.91	A
60HP	19.050	11.91	12.70	8.31	6.00	25.8	26.8	18.00	2.42	24.00	26.9	1.29	A
60HPF1	19.050	11.91	12.70	8.31	5.01	25.5	26.8	18.00	2.42	28.00	30.9	1.37	A
60HB	19.050	11.91	12.70	7.00	5.01	25.5	26.6	18.00	2.42	20.00	22.4	1.35	C
80HP	25.400	15.88	15.75	11.40	8.05	32.5	33.8	24.00	3.25	50.00	58.3	2.26	A

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

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# Roller Chain

**Special Chain -** Challenge produce many special chains. The following pages are examples of a few. Contact Challenge for a quote on any special chains or attachments that aren't shown in our catalogue.



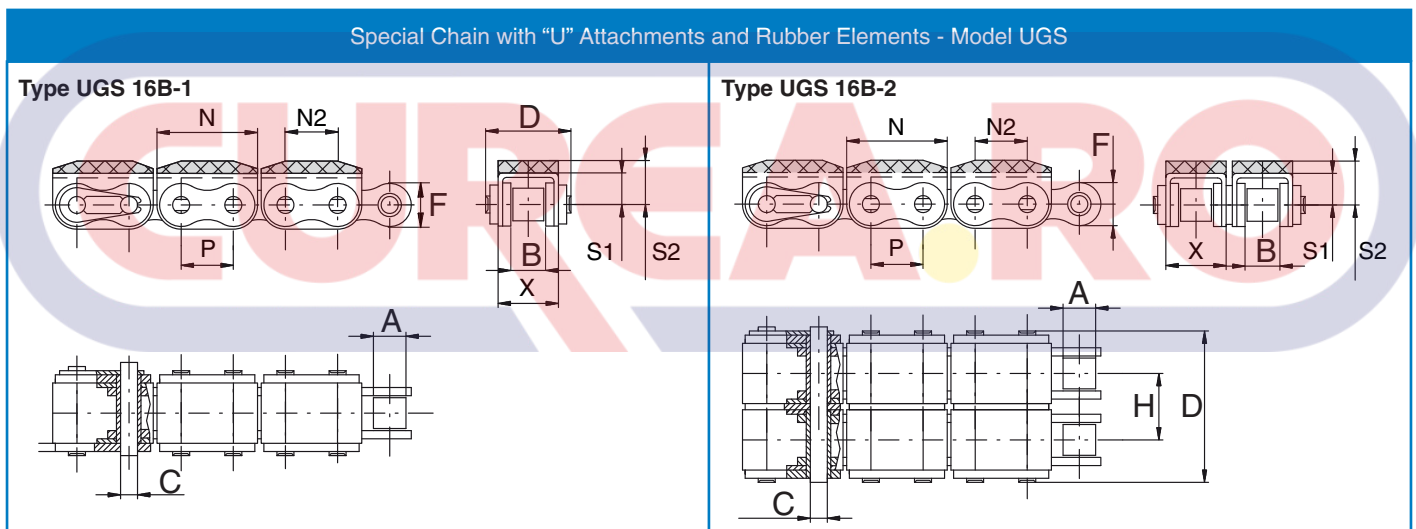
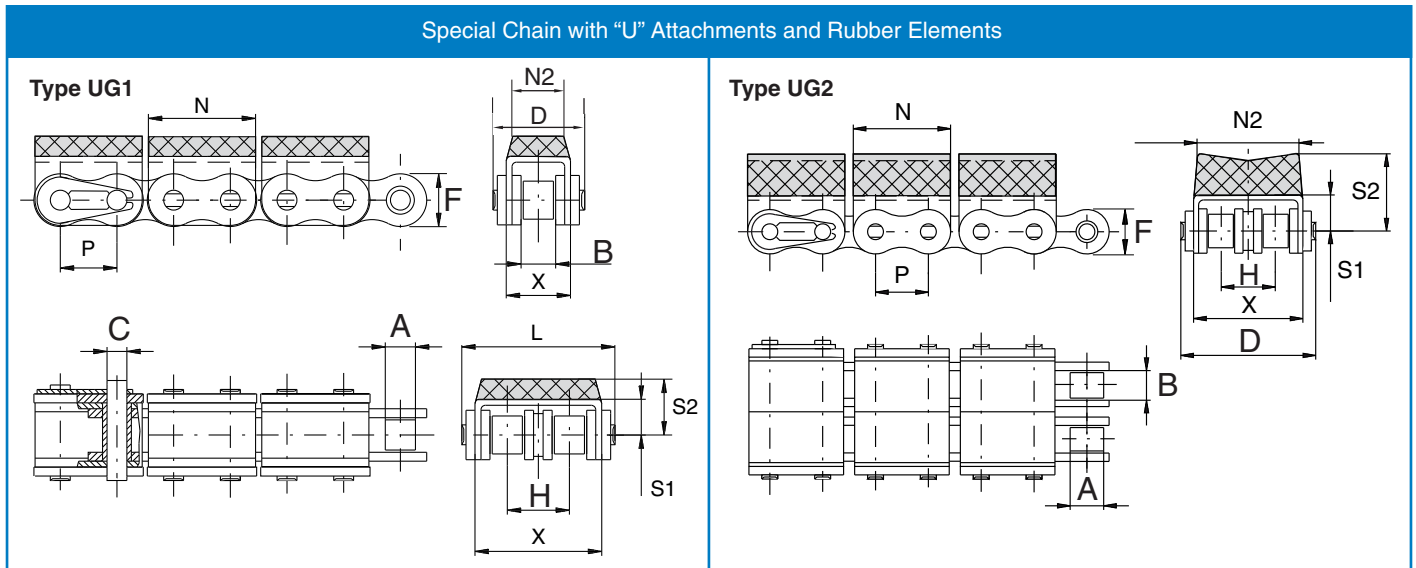
Chain number	Chain Pitch	Roller diameter	Width between inner plates	Pin diameter	Side Plate Height	Pin length	Hole diameter	Hole pitch	X	N	S <sub>1</sub>	Tensile strength
	P	A	B	C	F	D	O	P <sub>1</sub>	X	N	S <sub>1</sub>	kN
08B-1/U1	12.700	8.51	7.75	4.45	11.8	20.4	-	-	14.4	24.0	8.5	14.60
08B-1/U2	12.700	8.51	7.75	4.45	11.8	20.4	5	-	14.4	24.0	8.5	14.60
08B-1/U3	12.700	8.51	7.75	4.45	11.8	20.4	5	12.7	14.4	24.0	8.5	14.60
08B-2/U1	12.700	8.51	7.75	4.45	11.8	34.4	-	-	28.4	24.0	8.1	28.60
08B-2/U2	12.700	8.51	7.75	4.45	11.8	34.4	4	14.0	28.4	24.0	8.1	28.60
08B-2/U3	12.700	8.51	7.75	4.45	11.8	34.4	4	12.7	28.4	24.0	8.1	28.60
10B-1/U1	15.875	10.16	9.65	5.08	14.7	22.8	-	-	16.4	30.0	10.6	18.20
10B-1/U2	15.875	10.16	9.65	5.08	14.7	22.8	5	-	16.4	30.0	10.6	18.20
10B-1/U3	15.875	10.16	9.65	5.08	14.7	22.8	5	15.8	16.4	30.0	10.6	18.20
10B-2/U1	15.875	10.16	9.65	5.08	14.7	39.0	-	-	33.3	30.0	10.6	36.30
10B-2/U2	15.875	10.16	9.65	5.08	14.7	39.0	5	16.6	33.3	30.0	10.6	36.30
10B-2/U3	15.875	10.16	9.65	5.08	14.7	39.0	5	15.8	33.3	30.0	10.6	36.30
12B-1/U1	19.050	12.07	11.68	5.72	16.0	26.5	-	-	19.4	35.0	13.0	23.60
12B-1/U2	19.050	12.07	11.68	5.72	16.0	26.5	5	-	19.4	35.0	13.0	23.60
12B-1/U3	19.050	12.07	11.68	5.72	16.0	26.5	5	19.0	19.4	35.0	13.0	23.60
12B-2/U1	19.050	12.07	11.68	5.72	16.0	46.5	-	-	39.4	35.0	12.0	46.60
12B-2/U2	19.050	12.07	11.68	5.72	16.0	46.5	5	19.5	39.4	35.0	12.0	46.60
12B-2/U3	19.050	12.07	11.68	5.72	16.0	46.5	5	19.0	39.4	35.0	12.0	46.60
16B-1/U1	25.400	15.88	17.02	8.28	21.0	39.2	-	-	29.4	49.0	15.4	58.00
16B-1/U2	25.400	15.88	17.02	8.28	21.0	39.2	5	-	29.4	49.0	15.4	58.00
16B-1/U3	25.400	15.88	17.02	8.28	21.0	39.2	5	25.4	29.4	49.0	15.4	58.00
16B-2/U1	25.400	15.88	17.02	8.28	21.0	73.0	-	-	29.4	49.0	15.4	98.00
16B-2/U2	25.400	15.88	17.02	8.28	21.0	73.0	5	-	29.4	49.0	15.4	98.00
16B-2/U3	25.400	15.88	17.02	8.28	21.0	73.0	5	25.4	29.4	49.0	15.4	98.00

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

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# Roller Chain

## Special Chain with "U" Attachments and Rubber Elements



Chain Number	Chain Pitch	Roller diameter	Width between inner plates	Pin diameter	Side Plate Height	Pin length	"U" profile	"U" profile	"U" profile	"U" Profile height	"U" Profile height	Transverse pitch	Min. Tensile strength
	P	A	B	C	F	D	X	N	N2	S1	S2	H	kN
08B-1/UG1	12.700	8.51	7.75	4.45	11.80	20.40	14.4	24	10.0	8.50	13.00	-	14.60
08B-2/UG1	12.700	8.51	7.75	4.45	11.80	34.40	28.4	24	20.0	8.10	12.50	13.92	28.60
10B-1/UG1	15.875	10.16	9.65	5.08	14.70	22.80	16.4	30	13.5	10.60	17.00	-	18.20
10B-2/UG1	15.875	10.16	9.65	5.08	14.70	39.00	33.3	30	30.0	10.60	15.50	16.59	36.30
12B-1/UG1	19.050	12.07	11.68	5.72	16.00	26.50	19.4	35	12.0	13.00	21.00	-	23.60
12B-2/UG1	19.050	12.07	11.68	5.72	16.00	46.50	39.4	35	36.0	12.00	20.00	19.46	46.60
16B-1/UG1	25.400	15.88	17.02	8.28	21.00	39.20	29.4	49	22.0	15.40	21.40	-	58.00
16B-2/UG1	25.400	15.88	17.02	8.28	21.00	73.00	29.4	49	22.0	15.40	21.40	31.88	98.00
12B-1/UG2	19.050	12.07	11.68	5.72	16.00	26.50	19.4	35	13.5	13.00	21.00	-	23.60
12B-2/UG2	19.050	12.07	11.68	5.72	16.00	46.50	39.4	35	36.0	12.00	28.00	19.46	46.60
16B-1/UGS	25.400	15.88	17.02	8.28	21.00	39.20	29.4	49	25.4	15.40	21.40	-	58.00
16B-2/UGS	25.400	17.02	15.88	8.28	21.00	73.00	29.4	49	25.4	15.40	21.40	31.88	98.00

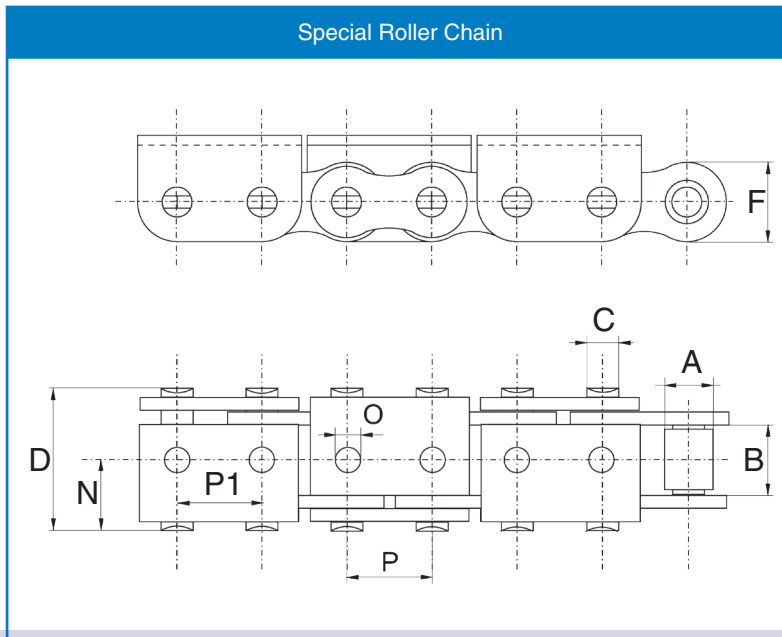
Rubber tops are produced using NBR (Nitrile Buna Rubber) with hardness 65-75 Shore A

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

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# Roller Chain

## Special Roller Chain

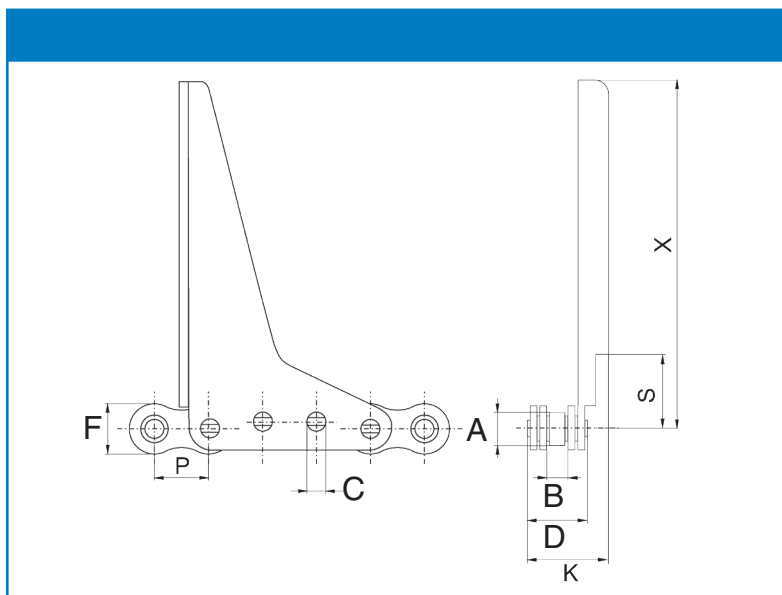


Chain number	Pitch	Width between inner plates	Roller diameter	Pin diameter	Pin length	Side plate height	Hole diameter	Hole pitch	Tensile strength
	P	B	A	C	D	F	O	P1	N
16B-1/P	25.4	17.02	15.88	8.28	36.1	21.0	6.5	25.4	15.9

## Special Chain with Driver

**Note:** Various configurations of this chain are available.

Please provide dimensions when enquiring.



Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length	Side plate height	Attachment width	Attachment height	Tensile strength
	P	A	B	C	L	F	K	X	S
08 X3/Z1	12.70	7.75	4.88	4.09	13.00	9.90	16.00	85.00	17.50

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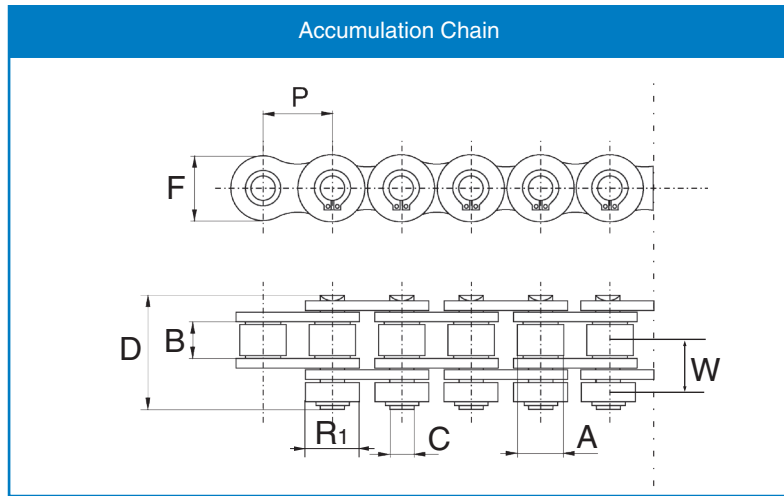


# Roller Chain

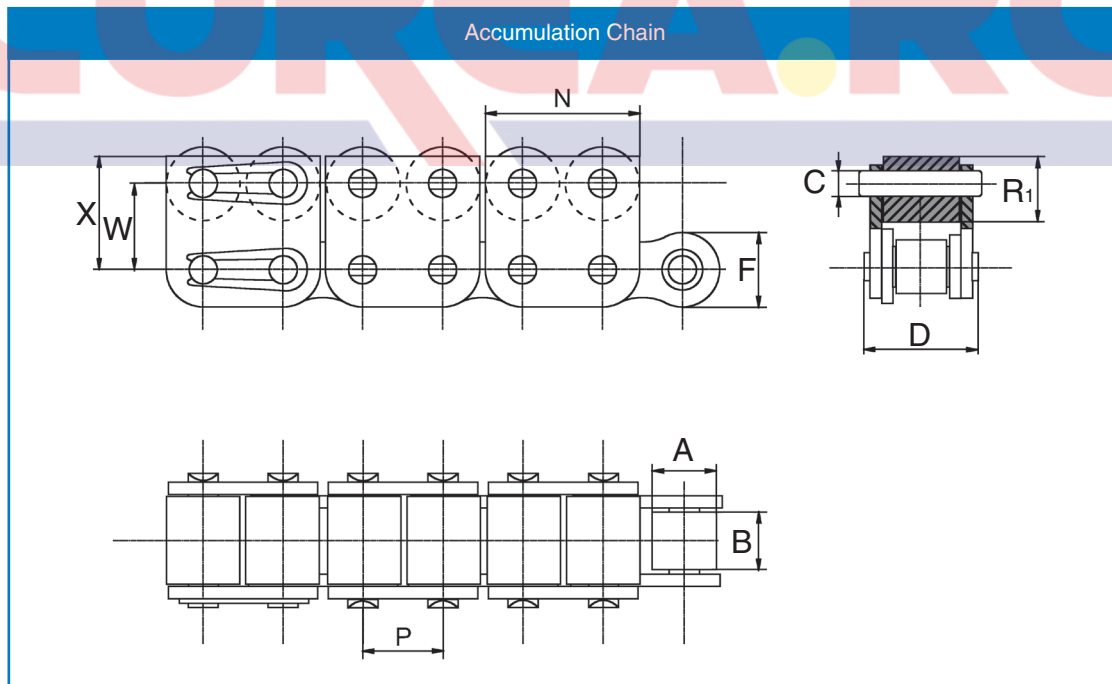
## Accumulation Chain

**Note:** all accumulation chain is available with various roller dimensions as well as different pitches to those quoted below.

To avoid confusion please always supply the chain and accumulation roller dimensions.



Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length	Roller diameter	Roller pitch	Tensile strength
	P	A	B	C	D	R <sub>1</sub>	W	kN
10B-1/R	15.875	10.16	9.65	5.08	25.4	14.2	15.1	22.7

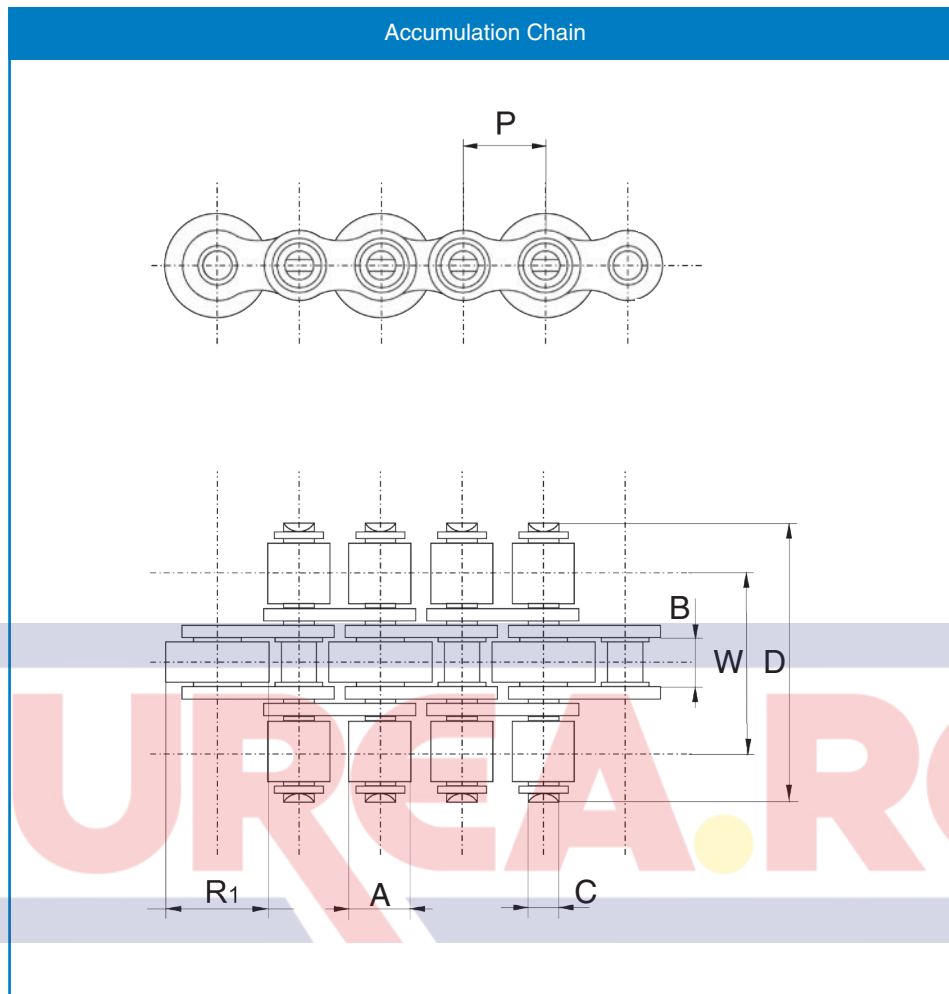


Chain number	Pitch	Roller diameter	Width between inner plates	Roller diameter	Pin diameter	Pin length	Inner plate height	Tensile strength			
	P	A	B	R <sub>1</sub>	C	D	F	W	X	N	kN
10B/R1	15.875	10.16	10.16	13.0	5.08	19.6	14.2	15.8	20.6	28.4	22.7

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Roller Chain

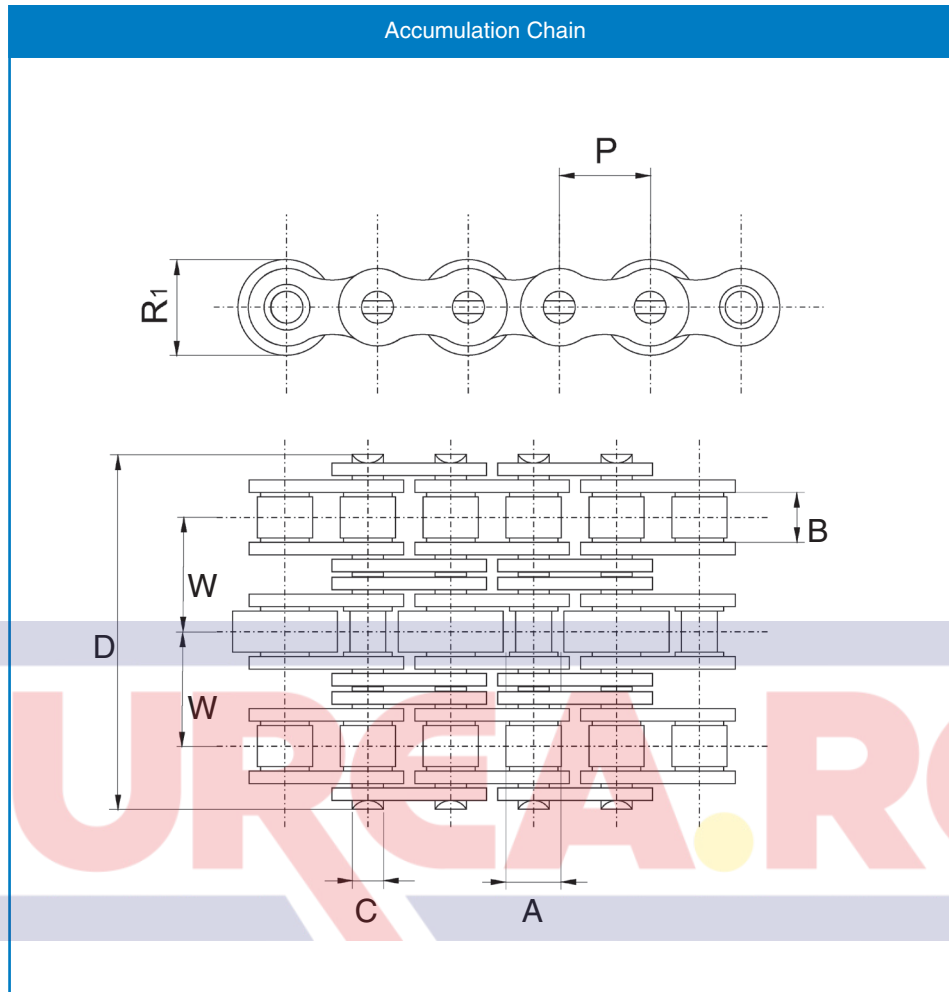
## Accumulation Chain



Chain number	Pitch P	Roller diameter. A	Width between inner plates B	Pin diameter C	Pin length D	Roller diameter R1	Roller pitch W	Tensile strength kN	Weight kg/m
08B-1/S6	12.70	8.51	7.75	4.47	27	16.0	19.1	18.2	1.17
08B-1/S7	12.70	8.51	7.75	4.47	33	16.0	22.0	18.2	1.38
12B-1/S1	19.05	12.07	11.68	5.72	48	26.0	31.5	29.5	3.50
12B-1/S2	19.05	12.07	11.68	5.72	43	26.0	29.2	29.5	3.20
12B-1/S2a	19.05	12.07	11.68	5.72	43	24.0	29.2	29.5	2.80
12B-1/S3	19.05	12.07	11.68	5.72	40	28.0	27.0	29.5	3.40
16B-1/S5	25.40	15.88	17.02	8.28	65	38.5	44.9	58.0	7.00

# Roller Chain

## Accumulation Chain

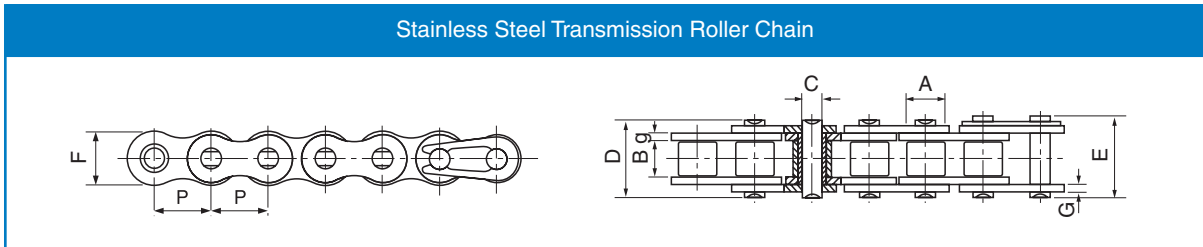


Chain number	Pitch	Roller diameter	Width between inner plate	Pin diameter	Pin length	Roller diameter	Roller pitch	Tensile strength
	P	A	B	C	D	R <sub>1</sub>	W	kN
12B-3/S2a	19.05	12.07	11.68	5.72	61.7	24.0	19.46	88.5
12B-3/S2	19.05	12.07	11.68	5.72	61.7	26.0	19.46	88.5

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Roller Chain

## Stainless Steel Transmission Roller Chain (Grade 304)



ISO Chain number	ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height F	Plate thickness g/G	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
		P	A	B	C	D	E					
	*35SS	9.525	5.08	4.77	3.58	12.40	13.17	9.00	1.30	5.50	6.60	0.33
	40SS	12.700	7.95	7.85	3.96	16.60	17.80	12.00	1.50	9.60	10.80	0.63
	50SS	15.875	10.16	9.40	5.08	20.70	22.20	15.09	2.03	15.20	17.20	1.03
	60SS	19.050	11.91	12.57	5.94	25.90	27.70	18.00	2.42	21.70	26.40	1.51
	80SS	25.400	15.88	15.75	7.92	32.70	35.00	24.00	3.25	38.90	46.60	2.62
	100SS	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	60.00	70.20	3.94
04BSS		6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	2.00	2.40	0.11
05BSS		8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	3.50	4.10	0.20
#06BSS		9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30	6.20	6.80	0.41
08BSS		12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	12.00	14.30	0.70
10BSS		15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	14.50	17.20	0.94
12BSS		19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85	18.50	20.90	1.16
16BSS		25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1	40.00	47.60	2.73
20BSS		31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	59.00	69.60	3.73

\* Bush chain: **A** in the table indicates the external diameter of the bush

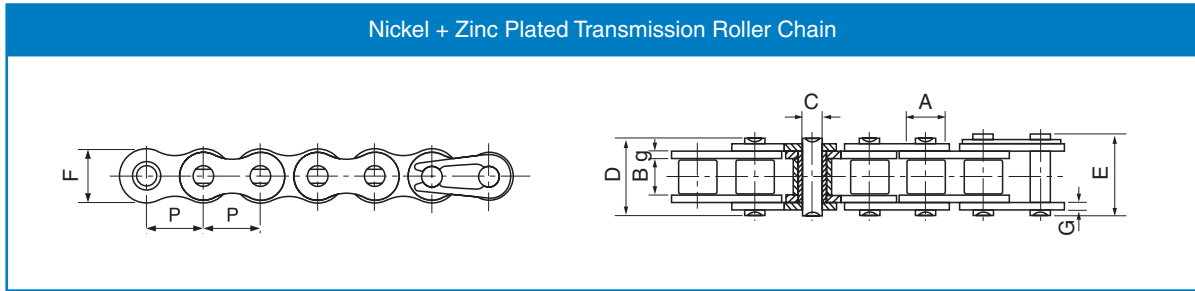
# Straight side plate chain

Duplex and Triplex chains are also available.

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

# Roller Chain

## Nickel Plated Transmission Roller Chain



ISO Chain number	ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height F	Plate thickness g/G	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
		P	A	B	C	D	E					
	*25NP	6.350	3.30	3.18	2.31	7.90	8.40	6.00	0.80	3.50	4.60	0.15
	*35NP	9.525	5.08	4.77	3.58	12.40	13.17	9.00	1.30	7.90	10.80	0.33
	41NP	12.700	7.77	6.25	3.58	13.75	15.00	9.91	1.30	6.67	12.60	0.41
	40NP	12.700	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	17.50	0.62
	50NP	15.875	10.16	9.40	5.08	20.70	22.20	15.09	2.03	22.20	29.40	1.02
	60NP	19.050	11.91	12.57	5.94	25.90	27.70	18.00	2.42	31.80	41.50	1.50
	80NP	25.400	15.88	15.75	7.92	32.70	35.00	24.00	3.25	56.70	69.40	2.60
	100NP	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	88.50	109.20	3.91
04BNP		6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	3.00	3.20	0.11
05BNP		8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	5.00	5.90	0.20
#06BNP		9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30	9.00	10.40	0.41
08BNP		12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	18.00	19.40	0.69
10BNP		15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	22.40	27.50	0.93
12BNP		19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85	29.00	32.20	1.15
16BNP		25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1	60.00	72.80	2.71
20BNP		31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	95.00	106.70	3.70

Duplex and Triplex chains are also available.

## Zinc Plated Transmission Roller Chain

ISO Chain number	ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height F	Plate thickness g/G	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
		P	A	B	C	D	E					
	*25ZP	6.350	3.30	3.18	2.31	7.90	8.40	6.00	0.80	3.50	4.60	0.14
	*35ZP	9.525	5.08	4.77	3.58	12.40	13.17	9.00	1.30	7.90	10.80	0.33
	41ZP	12.700	7.77	6.25	3.58	13.75	15.00	9.91	1.30	6.67	12.60	0.41
	40ZP	12.700	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	17.50	0.62
	50ZP	15.875	10.16	9.40	5.08	20.70	22.20	15.09	2.03	22.20	29.40	1.02
	60ZP	19.050	11.91	12.57	5.94	25.90	27.70	18.00	2.42	31.80	41.50	1.50
	80ZP	25.400	15.88	15.75	7.92	32.70	35.00	24.00	3.25	56.70	69.40	2.60
	100ZP	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	88.50	109.20	3.91
04BZP		6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	3.00	3.20	0.11
05BZP		8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	5.00	5.90	0.20
#06BZP		9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30	9.00	10.40	0.41
08BZP		12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	18.00	19.40	0.69
10BZP		15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	22.40	27.50	0.93
12BZP		19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85	29.00	32.20	1.15
16BZP		25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1	60.00	72.80	2.71
20BZP		31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	95.00	106.70	3.70

\* Bush chain: A in the table indicates the external diameter of the bush

# Straight side plate chain

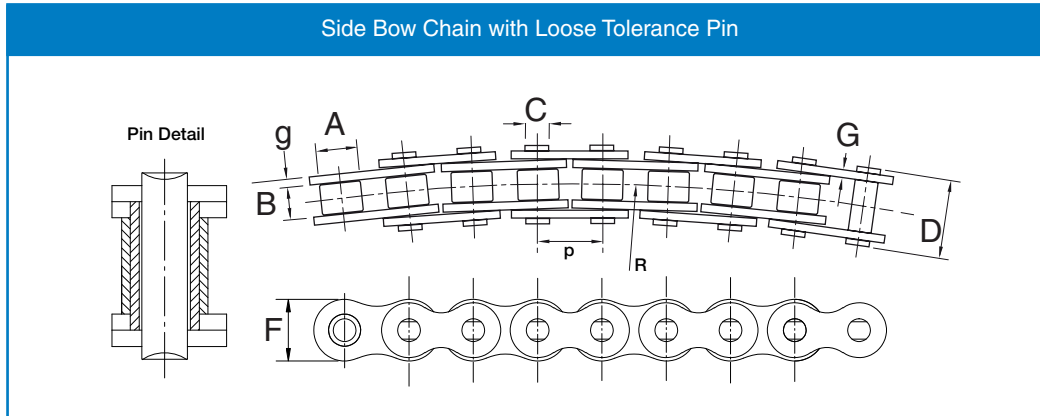
Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

Duplex and Triplex chains are also available.

All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

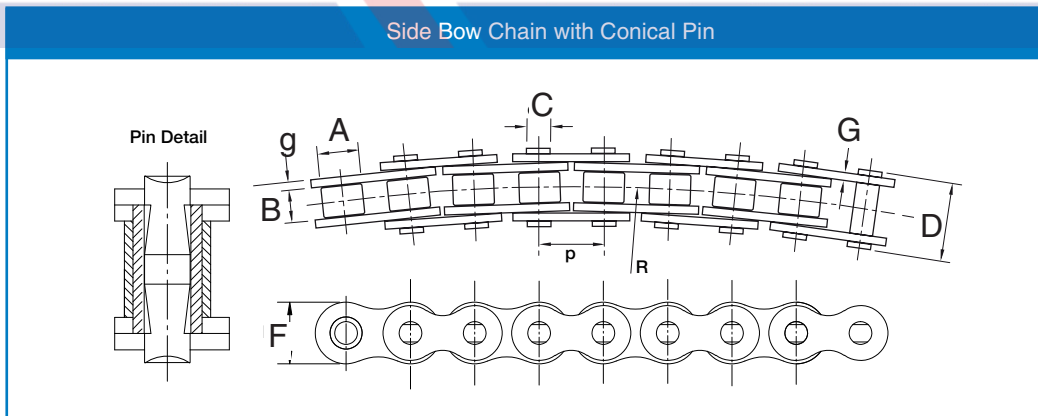
# Roller Chain

## Side Bow Chain with Loose Tolerance Pin



Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length	Inner plate height	Plate thickness	Min. side bow radius	Average tensile strength	Weight
	P	A	B	C	D	F	g/G	R	kN	kg/m
40SB	12.700	7.95	7.85	3.45	16.9	11.7	1.50	350	11.00	0.80
50SB	15.875	10.16	9.40	4.37	20.7	14.9	2.03	400	20.00	1.09
60SB	19.050	11.91	12.57	5.34	26.6	18.0	2.42	500	28.00	1.54
63SB	19.050	11.91	12.68	5.08	28.8	17.2	2.42 / 2.03	350	25.00	1.40
80SB	25.400	15.88	15.75	7.19	34.0	24.0	3.25	715	39.00	2.60
08BSB	12.700	8.51	7.75	3.97	17.4	11.8	1.50	400	11.20	0.70
08BSBF1	12.700	8.51	7.75	3.97	16.3	11.8	1.60 / 1.20	400	11.00	0.65
10BSB	15.875	10.16	9.65	4.50	20.1	14.7	1.70	400	18.70	0.93
12BSB	19.050	12.07	11.68	5.12	23.1	16.0	1.85	500	21.00	1.16
16BSB	25.400	15.88	17.22	7.90	36.5	21.0	3.70 - 3.00	500	53.50	2.53

## Side Bow Chain with Conical Pin



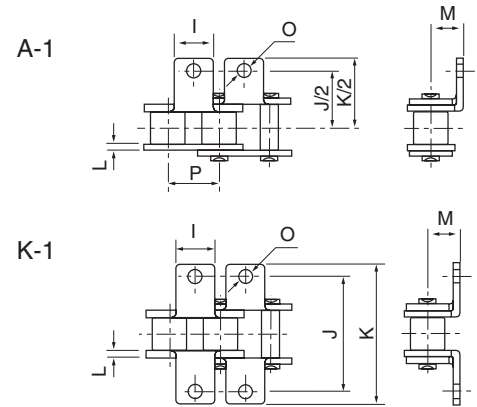
Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length	Inner plate height	Plate thickness	Min. side bow radius	Average tensile strength	Weight
	P	A	B	C	D	F	g/G	R	kN	kg/m
40SB	12.700	7.95	7.85	3.98	16.9	11.7	1.50	350	11.00	0.80
50SB	15.875	10.16	9.40	5.08	20.7	14.9	2.03	400	20.00	1.09
60SB	19.050	11.91	12.57	5.94	26.6	18.0	2.42	500	28.00	1.54
80SB	25.400	15.88	15.75	7.92	34.0	24.0	3.25	711	39.00	2.60
08BSB	12.700	8.51	7.75	4.45	17.4	11.8	1.50	400	11.20	0.70
08BSBF1	12.700	8.51	7.75	4.45	16.3	11.8	1.60 - 1.20	400	11.00	0.65
10BSB	15.875	10.16	9.65	5.08	20.1	14.7	1.70	400	18.70	0.93
12BSB	19.050	12.07	11.68	5.72	23.1	16.0	1.85	500	21.00	1.16
16BSB	25.400	15.88	17.22	8.28	36.5	21.0	3.70 - 3.00	500	53.50	2.53
C2050SB	31.750	10.16	9.40	5.08	21.3	15.0	2.03	800	20.50	0.84

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# Roller Chain Attachments

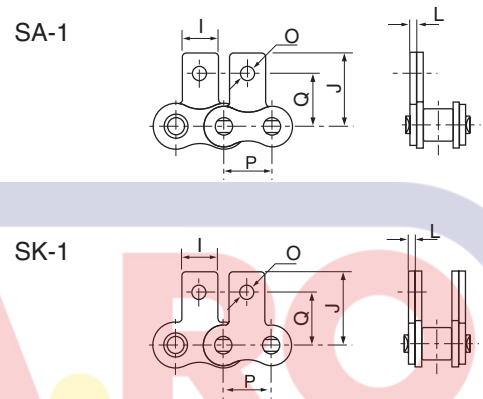
## A-1 & K-1 Attachments

ISO No.	ANSI No.	P	I	J	K	L	M	O
	40	12.700	9.50	25.40	35.20	1.50	7.90	3.40
	50	15.875	12.70	31.75	46.20	2.03	10.30	5.50
	60	19.050	15.90	38.10	55.60	2.42	11.90	5.50
	80	25.400	19.10	50.80	64.80	3.25	15.90	6.80
	100	31.750	25.40	63.50	87.30	4.00	19.80	9.20
	120	38.100	28.60	76.20	108.50	4.80	23.00	9.80
	140	44.450	34.90	88.90	123.00	5.60	28.60	11.40
	160	50.800	38.10	101.60	142.80	6.40	31.80	13.10
*06B		9.525	8.00	19.04	27.00	1.30	6.50	3.50
08B		12.700	9.50	25.40	36.40	1.60	8.90	4.50
10B		15.875	14.30	31.75	44.60	1.70	10.31	5.30
12B		19.050	16.00	38.10	52.40	1.85	13.46	6.40
16B		25.400	19.10	50.80	72.60	3.10	15.88	6.40



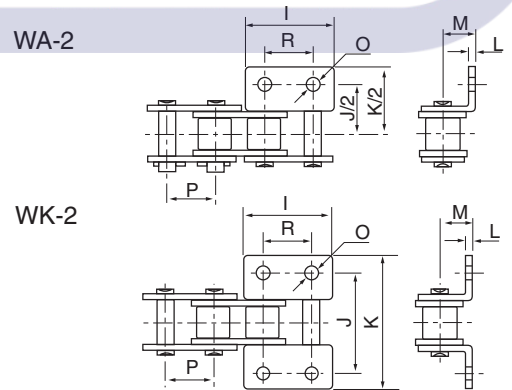
## SA-1 & SK-1 Attachments

ISO No.	ANSI No.	P	I	J	Q	L	O
	40	12.700	9.50	19.05	12.70	1.50	3.40
	50	15.875	12.70	25.25	15.90	2.03	5.50
	60	19.050	15.90	29.33	18.30	2.42	5.50
	80	25.400	19.10	34.70	24.60	3.25	6.80
	100	31.750	25.40	43.30	31.80	4.00	9.20
	120	38.100	28.60	51.60	36.50	4.80	9.80
	140	44.450	34.90	62.00	44.50	5.60	11.40
	160	50.800	38.10	69.85	50.80	6.40	13.10
*06B		9.525	8.00	13.50	9.52	1.30	3.50
08B		12.700	9.50	18.90	13.35	1.60	4.30
10B		15.875	14.30	22.95	16.50	1.70	5.30
12B		19.050	16.00	28.60	21.45	1.85	6.40
16B		25.400	19.10	34.00	23.15	3.10	6.40



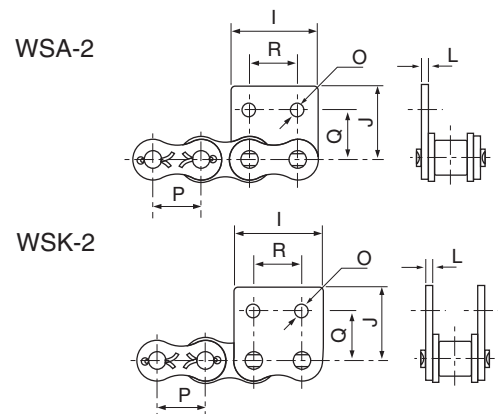
## WA-2 & WK-2 Attachments

ISO No.	ANSI No.	P	I	R	J	K	L	M	O
	40	12.700	23.00	12.70	25.40	35.60	1.50	7.90	3.40
	50	15.875	28.80	15.88	31.80	46.80	2.03	10.30	5.50
	60	19.050	34.65	19.05	38.10	56.40	2.42	11.90	5.50
	80	25.400	45.90	25.40	50.80	73.20	3.25	15.90	6.80
	100	31.750	57.65	31.75	63.50	89.80	4.00	19.80	9.20
08B		12.700	24.00	12.70	25.40	36.40	1.60	8.90	4.30
10B		15.875	29.58	15.88	31.80	44.60	1.70	10.31	5.30
12B		19.050	34.05	19.05	38.10	52.40	1.85	13.46	6.40
16B		25.400	46.40	25.40	50.80	72.60	3.10	15.88	6.40



## WSA-2 & WSK-2 Attachments

ISO No.	ANSI No.	P	I	R	J	Q	L	O
	40	12.700	23.00	12.70	17.40	12.70	1.50	3.40
	50	15.875	28.80	15.88	23.05	15.90	2.03	5.50
	60	19.050	34.65	19.05	26.86	18.30	2.42	5.50
	80	25.400	45.90	25.40	35.45	24.60	3.25	6.80
	100	31.750	57.65	31.75	44.00	31.80	4.00	9.20
08B		12.700	23.30	12.70	18.90	13.35	1.60	4.30
10B		15.875	29.58	15.88	22.95	16.50	1.70	5.30
12B		19.050	34.05	19.05	28.60	21.45	1.85	6.40
16B		25.400	46.40	25.40	34.00	23.15	3.10	6.40



\* Straight side plates

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# Roller Chain Attachments

## Standard Attachment Chains Designations

1. Bent attachment A1 - one hole - one side - every outer	
	Chain Reference
	06BA-2
	08BA-2
	10BA-2
	12BA-2
16BA-2	

7. Straight attachment SA1 - one hole - one side - every outer	
	Chain Reference
	06BSA-2
	08BSA-2
	10BSA-2
	12BSA-2
16BSA-2	

2. Bent attachment K1 - one hole - both sides - every outer	
	Chain Reference
	06BK-2
	08BK-2
	10BK-2
	12BK-2
16BK-2	

8. Straight attachment SK1 - one hole - both sides - every outer	
	Chain Reference
	06BSK-2
	08BSK-2
	10BSK-2
	12BSK-2
16BSK-2	

3. Bent attachment A1 - one hole - one side - every outer and inner	
	Chain Reference
	06BA-1
	08BA-1
	10BA-1
	12BA-1
16BA-1	

9. Straight attachment SA1 - one hole - one side - every outer and inner	
	Chain Reference
	06BSA-1
	08BSA-1
	10BSA-1
	12BSA-1
16BSA-1	

4. Bent attachment K1 - one hole - both sides - every outer and inner	
	Chain Reference
	06BK-1
	08BK-1
	10BK-1
	12BK-1
16BK-1	

10. Straight attachment SK1 - one hole - both sides - every outer and inner	
	Chain Reference
	06BSK-1
	08BSK-1
	10BSK-1
	12BSK-1
16BSK-1	

5. Bent attachment WA2 - two holes - one side - every outer	
	Chain Reference
	06BWA-2
	08BWA-2
	10BWA-2
	12BWA-2
16BWA-2	

11. Straight attachment WSA2 - two holes - one side - every outer	
	Chain Reference
	06BWSA-2
	08BWSA-2
	10BWSA-2
	12BWSA-2
16BWSA-2	

6. Bent attachment WK2 - two holes - both sides - every outer	
	Chain Reference
	06BWK-2
	08BWK-2
	10BWK-2
	12BWK-2
16BWK-2	

12. Straight attachment WSK2 - two holes - both sides - every outer	
	Chain Reference
	06BSK-2
	08BSK-2
	10BSK-2
	12BSK-2
16BSK-2	

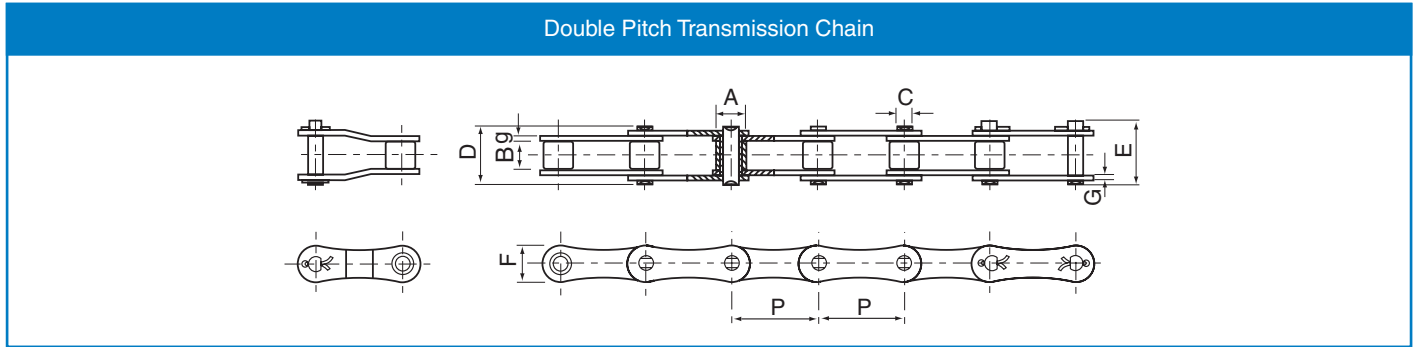
Standard boxed lengths are 5 metres or 10 feet.  
Special lengths available.

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# Double Pitch Chain

## Double Pitch Transmission Chain

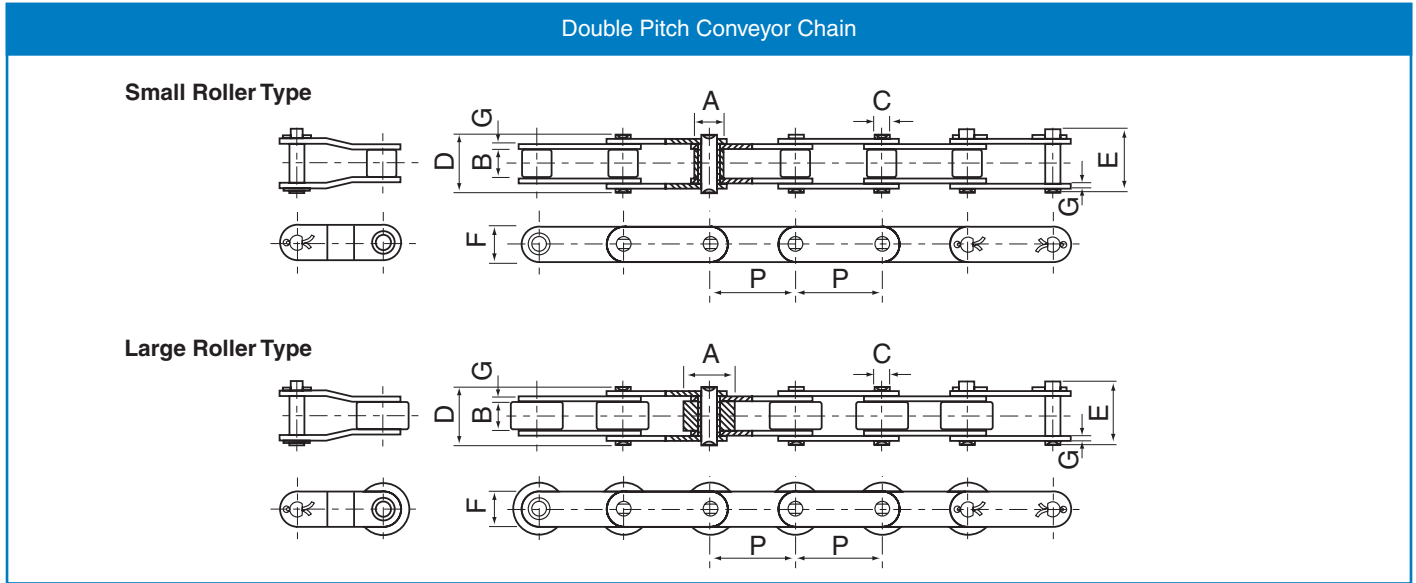


ISO Chain number	ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness g/G	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
		P	A	B	C	D	E	F				
	A2040	25.40	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	16.70	0.42
208B		25.40	8.51	7.75	4.45	16.70	18.20	11.80	1.60	18.00	19.40	0.45
	A2050	31.75	10.16	9.40	5.08	20.70	22.20	15.00	2.03	22.20	28.10	0.73
210B		31.75	10.16	9.65	5.08	19.50	20.90	14.70	1.70	22.40	27.50	0.65
	A2060	38.10	11.91	12.57	5.94	25.90	27.70	18.00	2.42	31.80	36.80	1.02
212B		38.10	12.07	11.68	5.72	22.50	25.20	16.00	1.85	29.00	32.20	0.76
	A2080	50.80	15.88	15.75	7.92	32.70	36.50	24.00	3.25	56.70	65.70	1.70
216AH		50.80	15.88	15.75	7.92	36.20	39.40	24.00	4.00	56.70	70.00	2.17
216B		50.80	15.88	17.02	8.28	36.10	39.10	21.00	4.15/3.1	60.00	72.80	1.75
	A2100	63.50	19.05	18.90	9.53	40.40	44.70	30.00	4.00	88.50	102.60	2.55
220B		63.50	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	95.00	106.70	2.62
	A2120	76.20	22.23	25.22	11.10	50.30	54.30	35.70	4.80	127.00	147.30	4.06
224B		76.20	25.40	25.40	14.63	53.40	57.80	33.20	6.0/4.8	160.00	178.00	4.70
228B		88.90	27.94	30.99	15.90	65.10	69.50	36.70	7.5/6.0	200.00	222.00	6.23
232B		101.60	29.21	30.99	17.81	66.00	71.00	42.00	7.0/6.0	250.00	277.50	6.72

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

# Double Pitch Chain

## Double Pitch Conveyor Chain



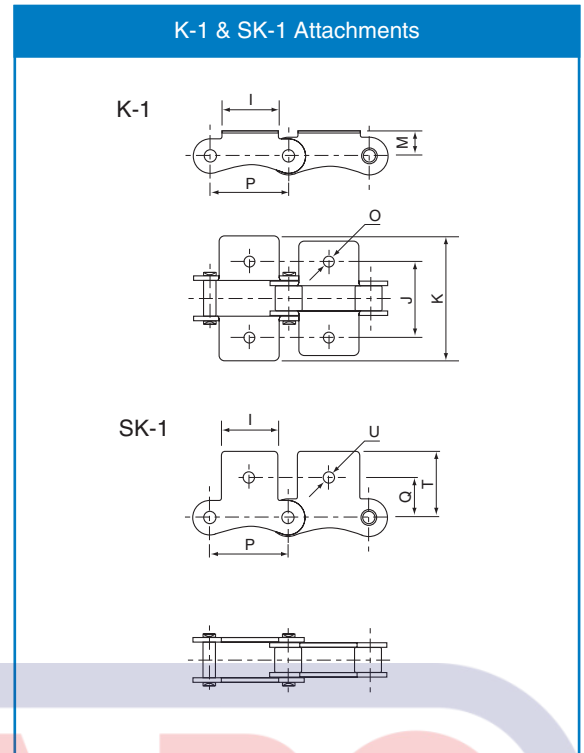
ISO Chain number	ANSI Chain number	Pitch P	Roller diameter A	Width between inner plates		Pin length		Side plate height F	Plate thickness G	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
				B	C	D	E					
C208B C208BL	C2040	25.40	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	16.70	0.50
	C2042		15.88									0.84
	C2040H	25.40	7.95	7.85	3.96	18.80	19.90	12.00	2.03	14.10	17.20	0.65
	C208BL	25.40	8.51	7.75	4.45	16.70	18.20	11.80	1.60	18.00	19.40	0.55
	C2050	31.75	10.16	9.40	5.08	20.70	22.20	15.00	2.03	22.20	28.10	0.78
	C2052		19.05									1.27
	C2060	38.10	11.91	12.57	5.94	25.90	27.70	18.00	2.42	31.80	36.80	1.12
	C2062		22.23									1.61
	C2060H	38.10	11.91	12.57	5.94	29.20	31.60	18.00	3.25	31.80	41.60	1.44
	C2062H		22.23									2.07
	C2080	50.80	15.88	15.75	7.92	32.70	36.50	24.00	3.25	56.70	65.70	2.08
	C2082		28.58									3.12
	C2080H	50.80	15.88	15.75	7.92	36.20	39.40	24.40	4.00	56.70	70.00	2.54
	C2082H		28.58									3.58
	C2100	63.50	19.05	18.90	9.53	40.40	44.70	30.00	4.00	88.50	102.60	3.01
	C2102		39.67									4.83
	C2100H	63.50	19.05	18.90	9.53	43.60	46.90	30.00	4.80	88.50	112.40	3.56
	C2102H		39.67									5.38
	C2120	76.20	22.23	25.22	11.10	50.30	54.30	35.70	4.80	127.00	147.30	4.66
	C2122		44.45									7.66
	C2120H	76.20	22.23	25.22	11.10	53.50	57.50	35.70	5.60	127.00	160.90	5.26
	C2122H		44.45									8.26
	C2160	101.60	28.58	31.75	14.27	64.80	69.60	47.80	6.40	226.80	278.90	8.23
	C2162		57.15									11.95
	C2160H	101.60	28.58	31.75	14.27	68.20	73.00	47.80	7.20	226.80	285.80	9.06
	C2162H		57.15									12.77

Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

# Double Pitch Attachments

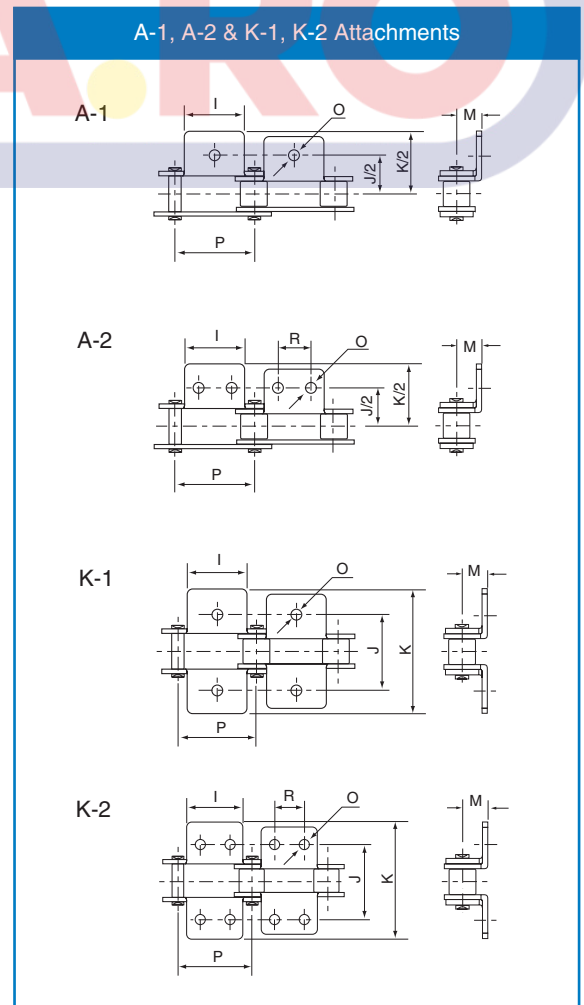
## K-1 & SK-1 Attachments

ANSI Chain number	P	I	J	K	M	O	Q	T	U
A2040	25.40	19.1	25.4	39.6	9.1	3.4	11.1	20.5	5.5
A2050	31.75	23.8	31.8	49.0	11.1	5.5	14.3	25.0	6.6
A2060	38.10	28.6	42.9	67.8	14.7	5.5	17.5	32.9	9.2
A2080	50.80	38.1	55.6	87.8	19.1	6.8	22.2	43.5	11.0
A2100	63.50	47.6	66.6	107.5	23.4	9.2	28.6	50.4	13.0
A2120	76.20	57.2	79.3	127.5	27.8	11.0			



## A-1, A-2 & K-1, K-2 Attachments

ISO Chain number	ANSI Chain number	P	I	R	J	K	M	O
C208B C208BL	C2040 C2042	25.40	19.10	9.50	25.40	39.60	9.10	3.40
		25.40	23.20	12.70	25.40	39.60	9.10	4.50
	C2050 C2052	31.75	23.80	11.90	31.80	49.00	11.10	5.50
	C2060 C2062	38.10	28.60	14.30	42.90	67.80	14.70	5.50
	C2060H C2062H	38.10	28.60	14.30	42.90	67.80	14.70	5.50
	C2080 C2082	50.80	38.10	19.10	55.60	87.80	19.10	6.80
	C2080H C2082H	50.80	38.10	19.10	55.60	87.80	19.10	6.80
	C2100 C2102	63.50	47.60	23.80	66.60	107.50	23.40	9.20
	C2100H C2102H	63.50	47.60	23.80	66.60	107.50	23.40	9.20
	C2120 C2122	76.20	57.20	28.60	79.30	121.40	27.80	11.00
	C2120H C2122H	76.20	57.20	28.60	79.30	121.40	27.80	11.00
	C2160 C2162	101.60	76.20	38.10	104.70	151.60	36.50	13.10
	C2160H C2162H	101.60	76.20	38.10	104.70	151.60	36.50	13.10

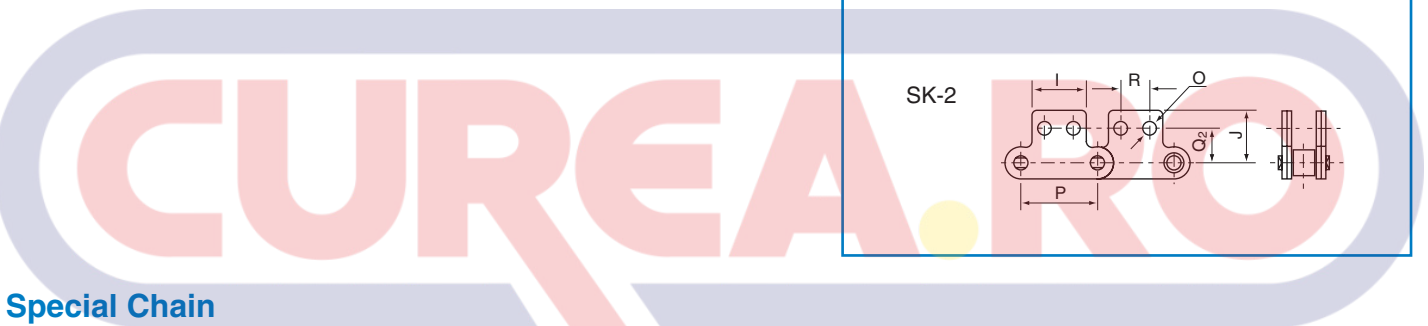
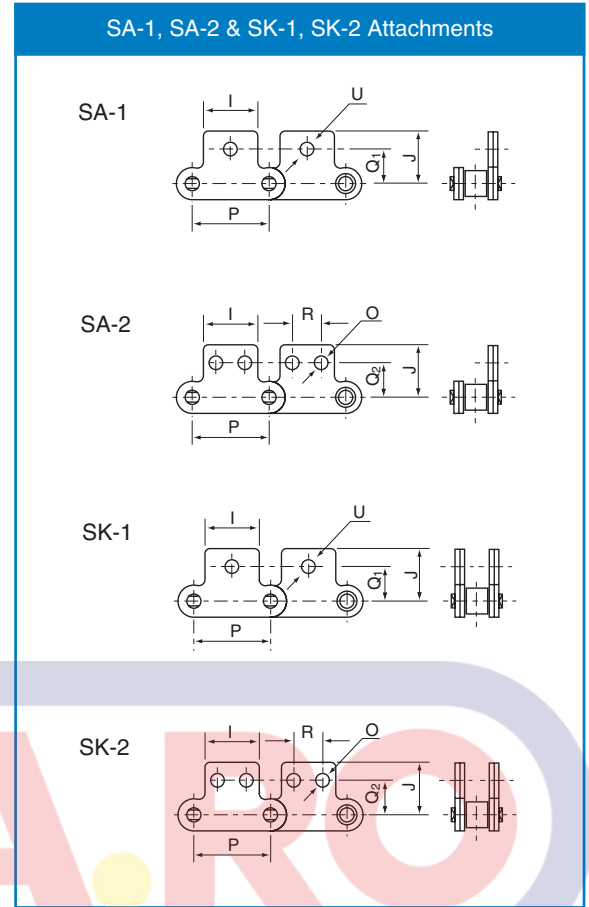


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# Double Pitch Attachments

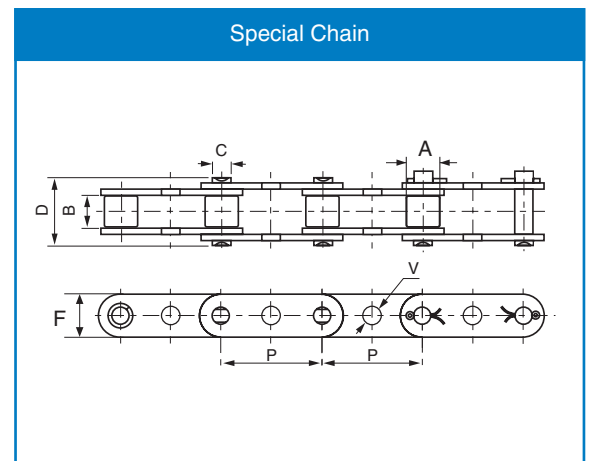
## SA-1, SA-2 & SK-1, SK-2 Attachments

ISO Chain number	ANSI Chain number	P	I	R	Q <sub>1</sub>	Q <sub>2</sub>	J	O	U
	C2040 C2042	25.40	19.10	9.50	11.10	13.50	20.50	3.40	5.50
C208B C208BL		25.40	23.20	12.70	11.10	13.50	20.50	4.50	5.50
	C2050 C2052	31.75	23.80	11.90	14.30	15.90	25.00	5.50	6.60
	C2060 C2062	38.10	28.60	14.30	17.50	19.10	32.90	5.50	9.20
	C2060H C2062H	38.10	28.60	14.30	17.50	19.10	32.90	5.50	9.20
	C2080 C2082	50.80	38.10	19.10	22.20	25.40	43.50	6.60	11.00
	C2080H C2082H	50.80	38.10	19.10	22.20	25.40	43.50	6.60	11.00
	C2100 C2102	63.50	47.60	23.80	28.60	31.80	50.40	8.40	13.00
	C2100H C2102H	63.50	47.60	23.80	28.60	31.80	50.40	8.40	13.00



## Special Chain (Attachment Holes in Side Plate)

ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length	Side plate height	Side plate hole diameter
	P	A	B	C	D	F	V
C2040 C2042	25.40	7.95 15.88	7.85	3.96	16.60	12.00	4.10
C2050 C2052	31.75	10.16 19.05	9.40	5.08	20.70	15.00	5.10
C2060 C2062	38.10	11.91 22.23	12.57	5.94	25.90	18.00	6.10
C2060H C2062H	38.10	11.91 22.23	12.57	5.94	29.20	18.00	6.10
C2080 C2082	50.80	15.88 28.58	15.75	7.92	32.70	24.00	8.10
C2080H C2082H	50.80	15.88 28.58	15.75	7.92	36.20	24.00	8.10
C2100 C2102	63.50	19.05 39.67	18.90	9.53	40.40	30.00	10.10
C2100H C2102H	63.50	19.05 39.67	18.90	9.53	43.60	30.00	10.10

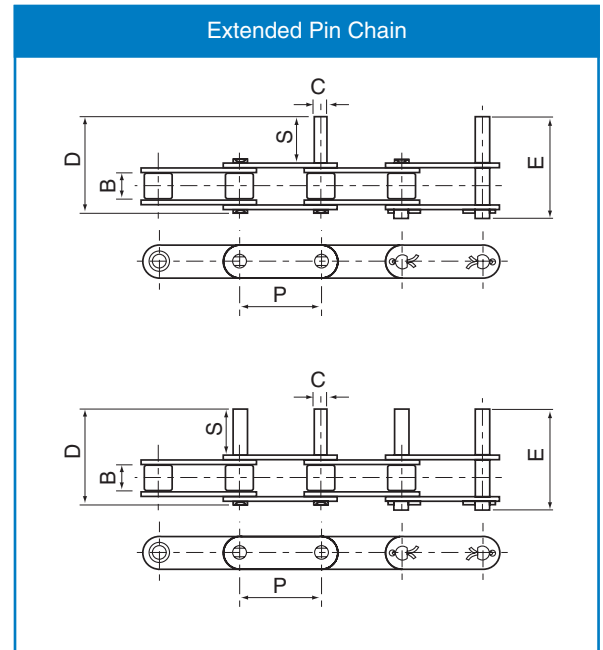


Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

## Double Pitch Chain

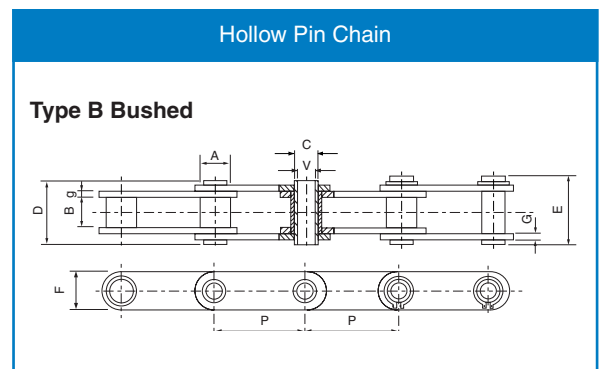
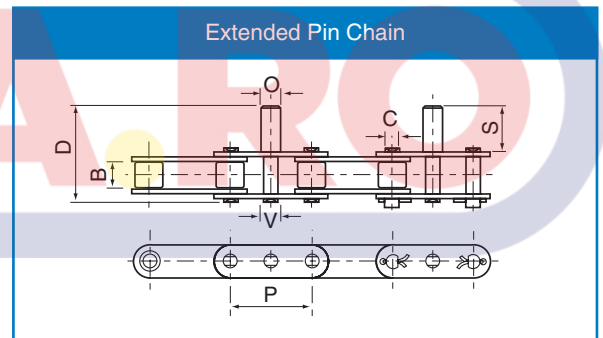
### Extended Pin Chain

ANSI Chain number	Pitch					
	P	B	C	S	D	E
C2040 C2042	25.40	7.85	3.96	9.50	25.10	26.20
C2050 C2052	31.75	9.40	5.08	11.90	31.30	33.10
C2060 C2062	38.10	12.57	5.94	14.30	38.60	40.60
C2060H C2062H	38.10	12.57	5.94	14.30	42.00	43.80
C2080 C2082	50.80	15.75	7.92	19.10	50.30	53.30
C2080H C2082H	50.80	15.75	7.92	19.10	53.50	55.00
C2100 C2102	63.50	18.90	9.53	23.80	61.80	66.10
C2100H C2102H	63.50	18.90	9.53	23.80	65.00	68.30
C2120H C2122H	76.20	25.22	11.10	28.60	79.60	83.60
C2160H C2162H	101.60	31.75	14.27	38.10	103.00	107.80



### Extended Pin Chain

Chain number	Pitch						
	P	B	C	V	O	S	D
C2060H	38.10	12.57	5.94	5.94	8.00	25.00	53.00
C2060H	38.10	12.57	5.94	8.08	10.00	35.00	63.00
C2060H	38.10	12.57	5.94	5.94	12.70	41.20	69.20
C2060H	38.10	12.57	5.94	5.94	14.28	41.20	69.20



### Hollow Pin Chain - Bushed Type (No Roller)

Chain number	Pitch	Roller diameter	Width between inner plates		Pin diameter		Pin length		Side plate height	Plate thickness g/G	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m	Type
	P		A	B	C	V	D	E						
C2040HP	25.400	7.95	7.85	5.63	4.00	16.5	17.6	12.00	1.50	11.00	12.6	0.46	B	
C2050HP	31.750	10.16	9.40	7.22	5.12	20.5	21.8	15.00	2.03	20.40	22.8	0.76	B	
02060HP	38.100	11.91	12.70	8.31	6.00	25.8	26.8	17.00	2.42	24.00	27.1	1.02	B	
C2080HP	50.800	15.88	15.75	11.40	8.05	32.5	33.8	24.00	3.25	50.00	55.2	1.81	B	

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