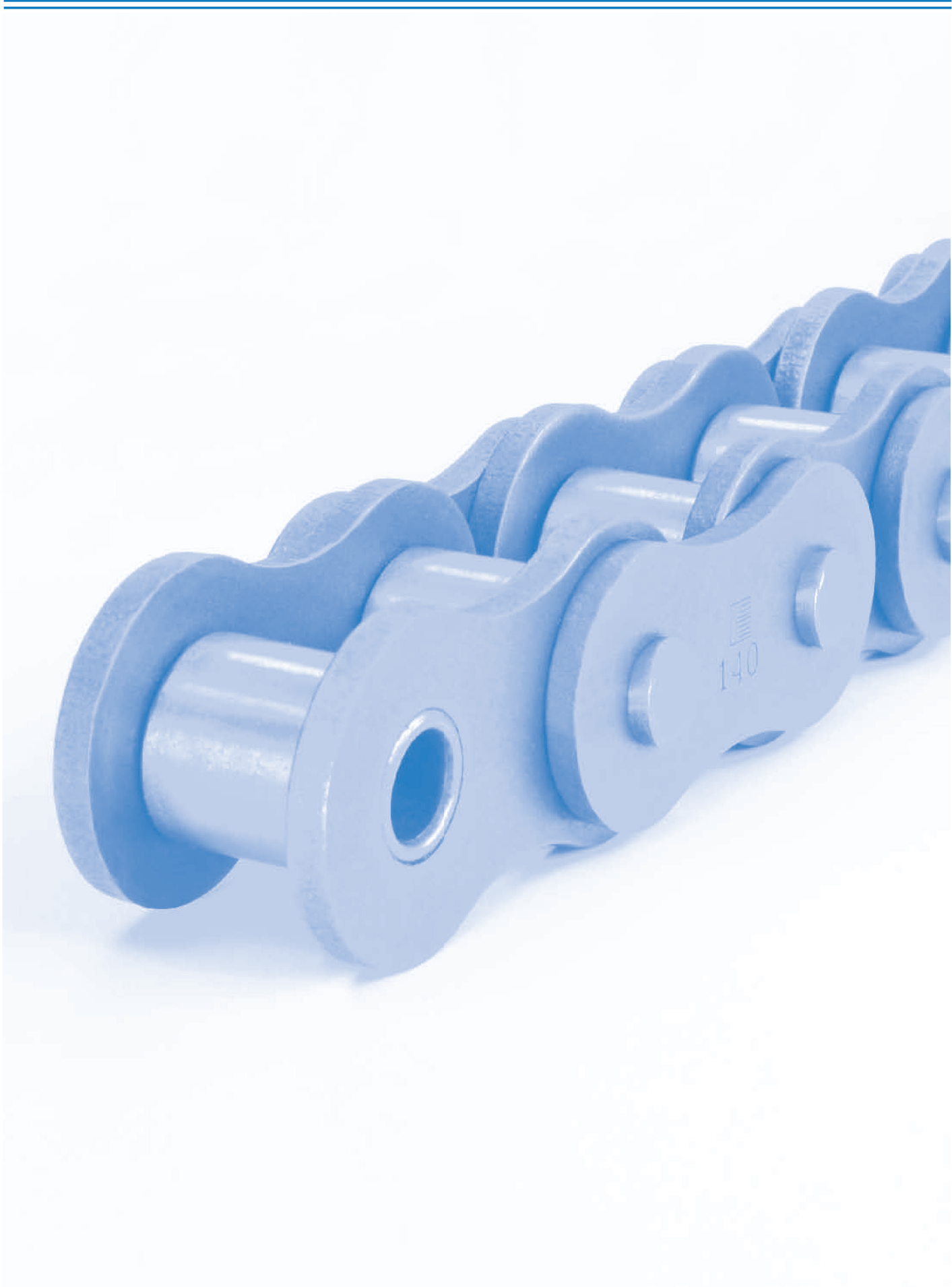
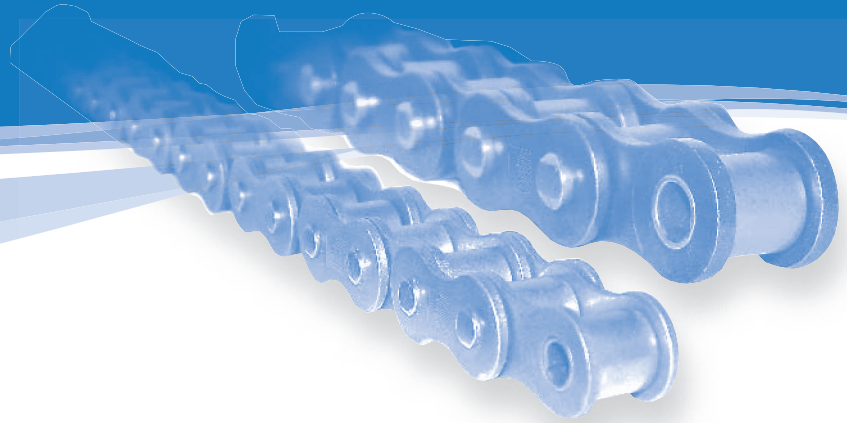


# Roller Chain





## 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 ...

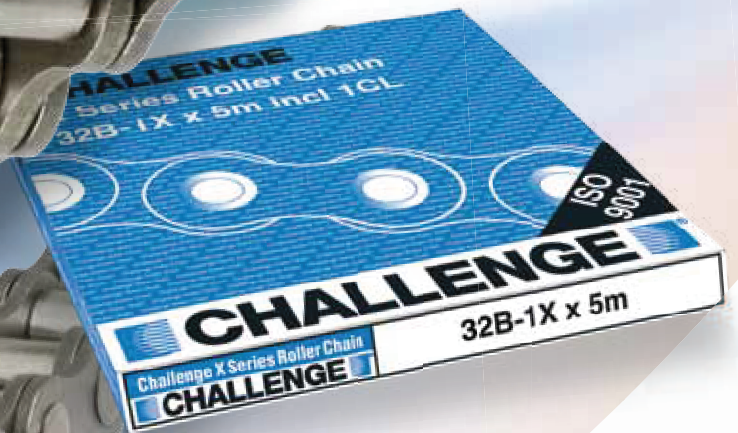
# Who's got the Perfect Spin to bowl your customers over?

## CHALLENGE X Series Spin Riveted Transmission Chain



*Spin Riveted For  
Added Strength*

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

- **Spin Riveted 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...

20B-1X	32B-2X
20B-1XGL	32B-3X
20B-2X	40B-1X
20B-2XGL	40B-1XGL
20B-3X	40B-2X
20B-3XGL	40B-3X
24B-1X	48B-1X
24B-1XGL	48B-1XGL
24B-2X	48B-2X
24B-3X	48B-3X
28B-1X	56B-1X
28B-1XGL	56B-2X
28B-2X	56B-3X
28B-3X	64B-1X
32B-1X	64B-2X
32B-1XGL	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

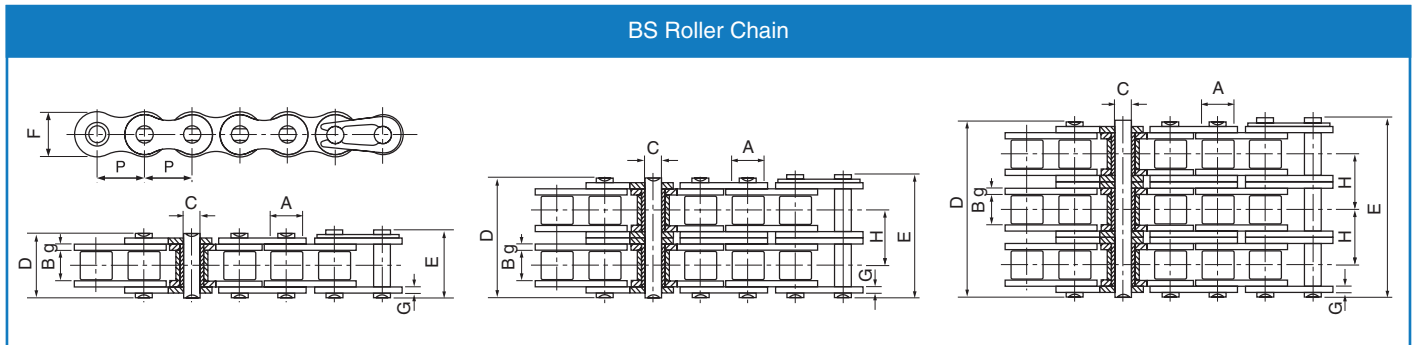
BS Z Series with Solid Pin Chain  
BS ZC Series with Hollow Pin Chain  
BS Z/ZC Series Attachments Chain  
BS ZE Series Deep Link Chain  
M Series Metric Solid Pin Chain  
M Series Chain Attachments  
MC Series Hollow Pin Chain  
MT/ME Series Deep Link Chain  
FV/C Series Metric Solid Pin Chain  
FV/C 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 Designs



# 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 g/G	Transverse pitch	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
	P	A	B		C	D						
<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-1 SSP	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-1	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-1	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-1	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-1	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-1	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-1	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-1	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-1	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>												
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-2 SSP	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-2	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-2	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-2	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-2	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-2	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-2	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-2	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-2	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-3 SSP	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-3	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
*40B-3	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-3	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-3	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-3	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-3	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-3	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-3	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

\* X-Series chains with spin riveted pins also available in these sizes.

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

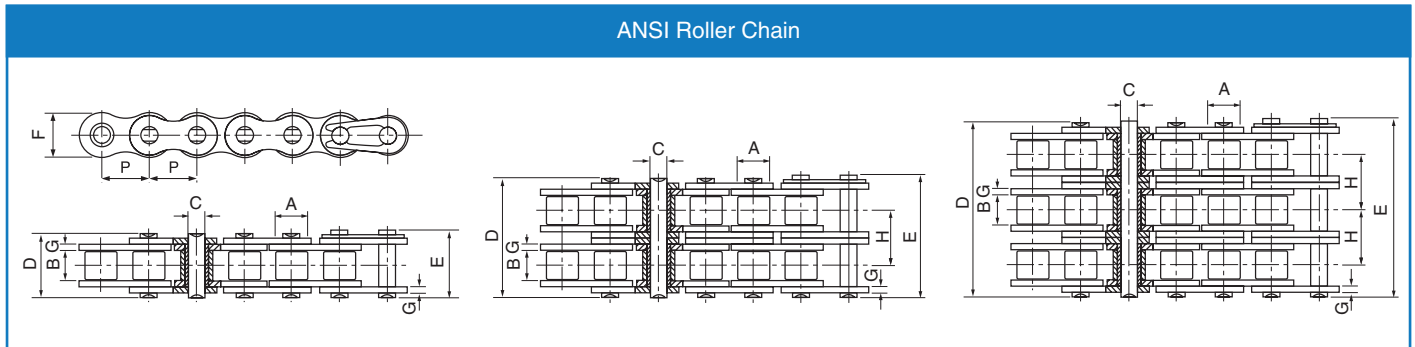
SSP = Straight Side Plate Chain

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
100-1R	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	-	88.5	109.2	3.91
120-1R	38.100	22.23	25.22	11.10	50.30	54.30	35.70	4.80	-	127.0	156.3	5.62
140-1R	44.450	25.40	25.22	12.70	54.40	59.00	41.00	5.60	-	172.4	212.0	7.50
160-1R	50.800	28.58	31.55	14.27	64.80	69.60	47.80	6.40	-	226.8	278.9	10.10
180-1R	57.150	35.71	35.48	17.46	72.80	78.60	53.60	7.20	-	280.2	341.8	13.45
200-1R	63.500	39.68	37.85	19.85	80.30	87.20	60.00	8.00	-	353.8	431.6	16.15
240-1R	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
100-2R	31.750	19.05	18.90	9.53	76.40	80.50	30.00	4.00	35.76	177.0	219.4	7.80
120-2R	38.100	22.23	25.22	11.10	95.80	99.70	35.70	4.80	45.44	254.0	314.9	11.70
140-2R	44.450	25.40	25.22	12.70	103.30	107.90	41.00	5.60	48.87	344.8	427.5	15.14
160-2R	50.800	28.58	31.55	14.27	123.30	128.10	47.80	6.40	58.55	453.6	562.4	20.14
180-2R	57.150	35.71	35.48	17.46	138.60	144.40	53.60	7.20	65.84	560.5	695.0	29.22
200-2R	63.500	39.68	37.85	19.85	151.90	158.80	60.00	8.00	71.55	707.6	877.4	32.24
240-2R	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
100-3R	31.750	19.05	18.90	9.53	112.20	116.30	30.00	4.00	35.76	265.5	309.6	11.77
120-3R	38.100	22.23	25.22	11.10	141.40	145.20	35.70	4.80	45.44	381.0	437.2	17.53
140-3R	44.450	25.40	25.22	12.70	152.20	156.80	41.00	5.60	48.87	517.2	593.3	22.20
160-3R	50.800	28.58	31.55	14.27	181.80	186.60	47.80	6.40	58.55	680.4	780.6	30.02
180-3R	57.150	35.71	35.48	17.46	204.40	210.20	53.60	7.20	65.84	840.7	983.6	38.22
200-3R	63.500	39.68	37.85	19.85	223.50	230.40	60.00	8.00	71.55	1061.4	1217.8	49.03
240-3R	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

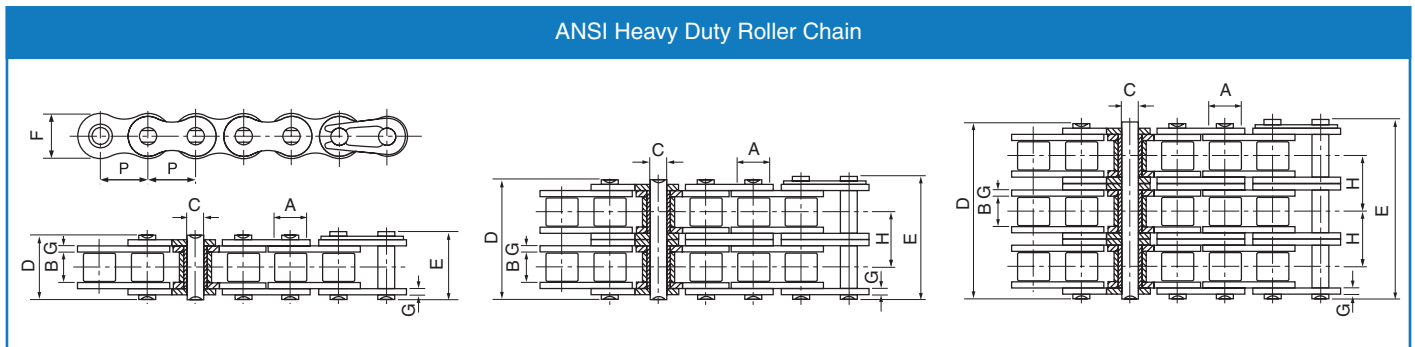
Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.

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.

# 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
	P	A	B	C	D	E	F	G	H			kg/m
<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-1R	31.750	19.05	18.90	9.53	43.60	46.90	30.00	4.80	-	88.50	112.40	4.52
120H-1R	38.100	22.23	25.22	11.10	53.50	57.50	35.70	5.60	-	127.00	160.90	6.60
140H-1R	44.450	25.40	25.22	12.70	57.60	62.20	41.00	6.40	-	172.40	217.30	8.30
160H-1R	50.800	28.58	31.55	14.27	68.20	73.00	47.80	7.20	-	226.80	285.80	10.30
200H-1R	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-2R	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-2R	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-2R	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-2R	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-3R	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-3R	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-3R	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-3R	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-3R	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.

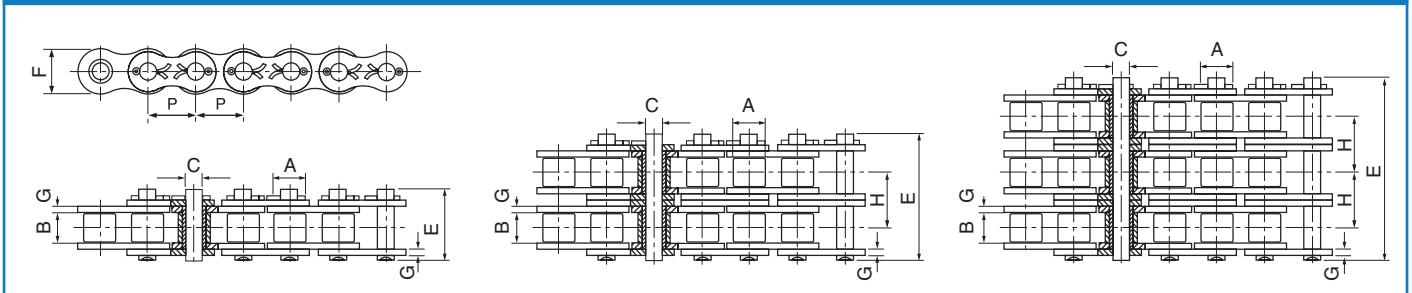
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Roller Chain

## ANSI Cottered Series Roller Chain

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

### ANSI Cottered A Series Roller Chain



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	E	F	G	H	kN	kN	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.

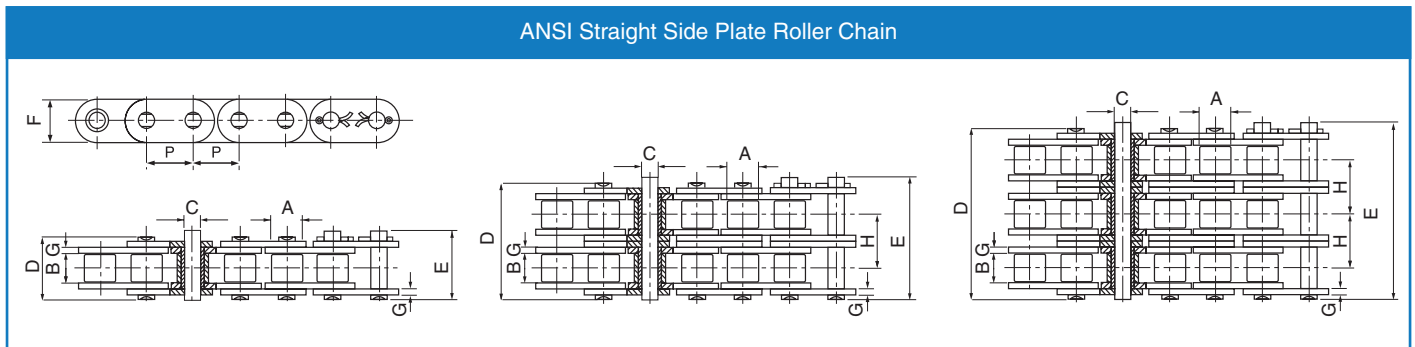




# Roller Chain

## ANSI Straight Side Plate Roller Chain

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

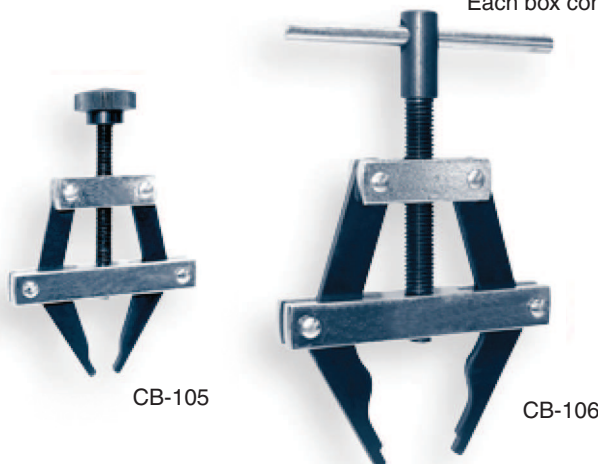


ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight
	P	A	B	C	D	E	F	G	H	kN	kN	kg/m
<b>SIMPLEX</b>												
C40-1R	12.700	7.95	7.85	3.96	16.60	18.80	12.00	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
C100-1R	31.750	19.05	18.90	9.53	40.40	44.70	30.00	4.00	-	88.50	109.20	4.56
C120-1R	38.100	22.23	25.22	11.10	50.30	54.30	35.70	4.80	-	127.00	156.30	6.86
C140-1R	44.450	25.40	25.22	12.70	54.40	59.00	41.00	5.60	-	172.40	212.00	8.49
C160-1R	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
C100-2R	31.750	19.05	18.90	9.53	76.40	80.50	30.00	4.00	35.76	177.00	219.40	9.08
C120-2R	38.100	22.23	25.22	11.10	95.80	99.70	35.70	4.80	45.44	254.00	314.90	13.60
C140-2R	44.450	25.40	25.22	12.70	103.30	107.90	41.00	5.60	48.87	344.80	427.50	16.86
C160-2R	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
C100-3R	31.750	19.05	18.90	9.53	112.20	116.30	30.00	4.00	35.76	265.50	309.60	13.60
C120-3R	38.100	22.23	25.22	11.10	141.40	145.20	35.70	4.80	45.44	381.00	437.20	20.43
C140-3R	44.450	25.40	25.22	12.70	152.20	156.80	41.00	5.60	48.87	517.20	593.30	25.23
C160-3R	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

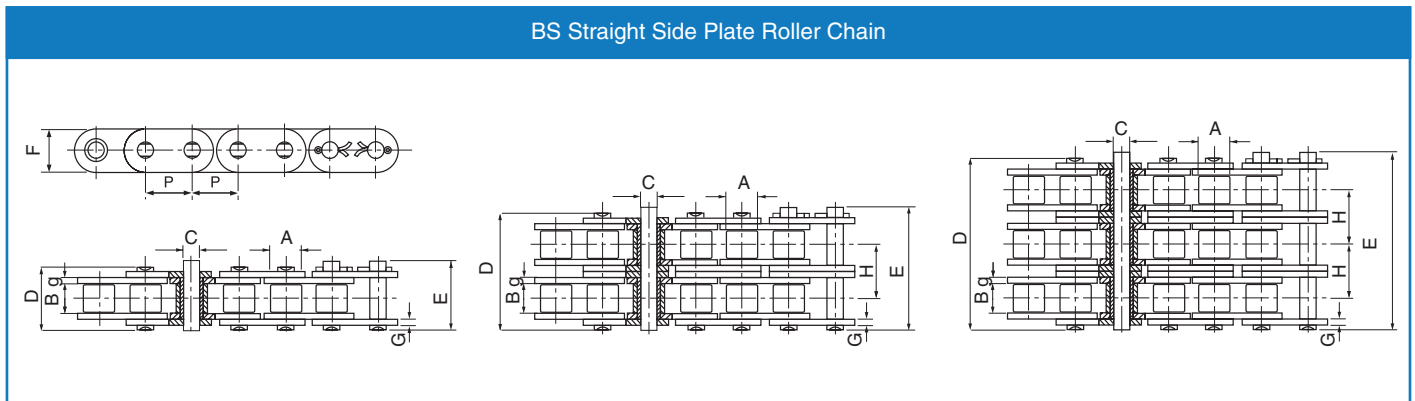
Model	Range	
	From inch	To inch
CB-105 (Small)	1/4"	3/4"
CB-106 (Large)	3/4"	1.1/4"



# Roller Chain

## BS Straight Side Plate Roller Chain

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



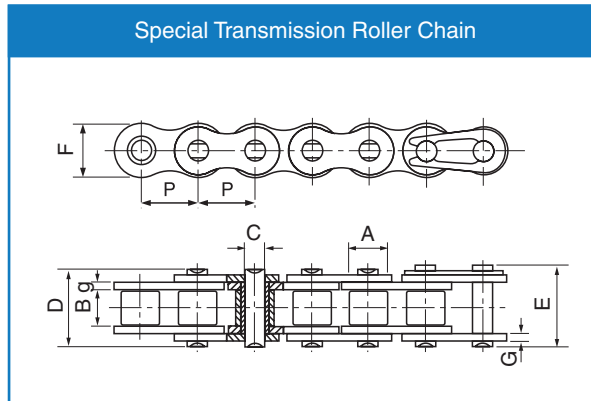
ISO Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness g/G	Transverse pitch	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
	P	A	B	C	D	E						
<b>SIMPLEX</b>												
08B-1 GL	12.700	8.51	7.75	4.45	16.70	18.20	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 GL	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 GL	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 GL	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 GL	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 GL	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 GL	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 GL	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 GL	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 GL	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 GL	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 GL	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 GL	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

\* X-Series chains with spin riveted pins also available in these sizes.

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

# Roller Chain

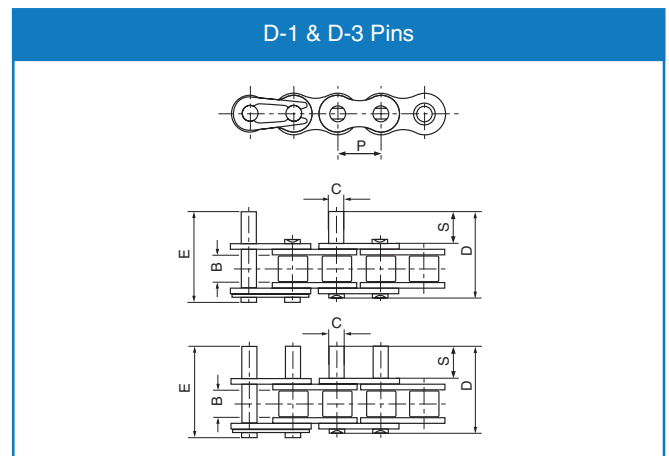
## Special Transmission Roller Chain



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

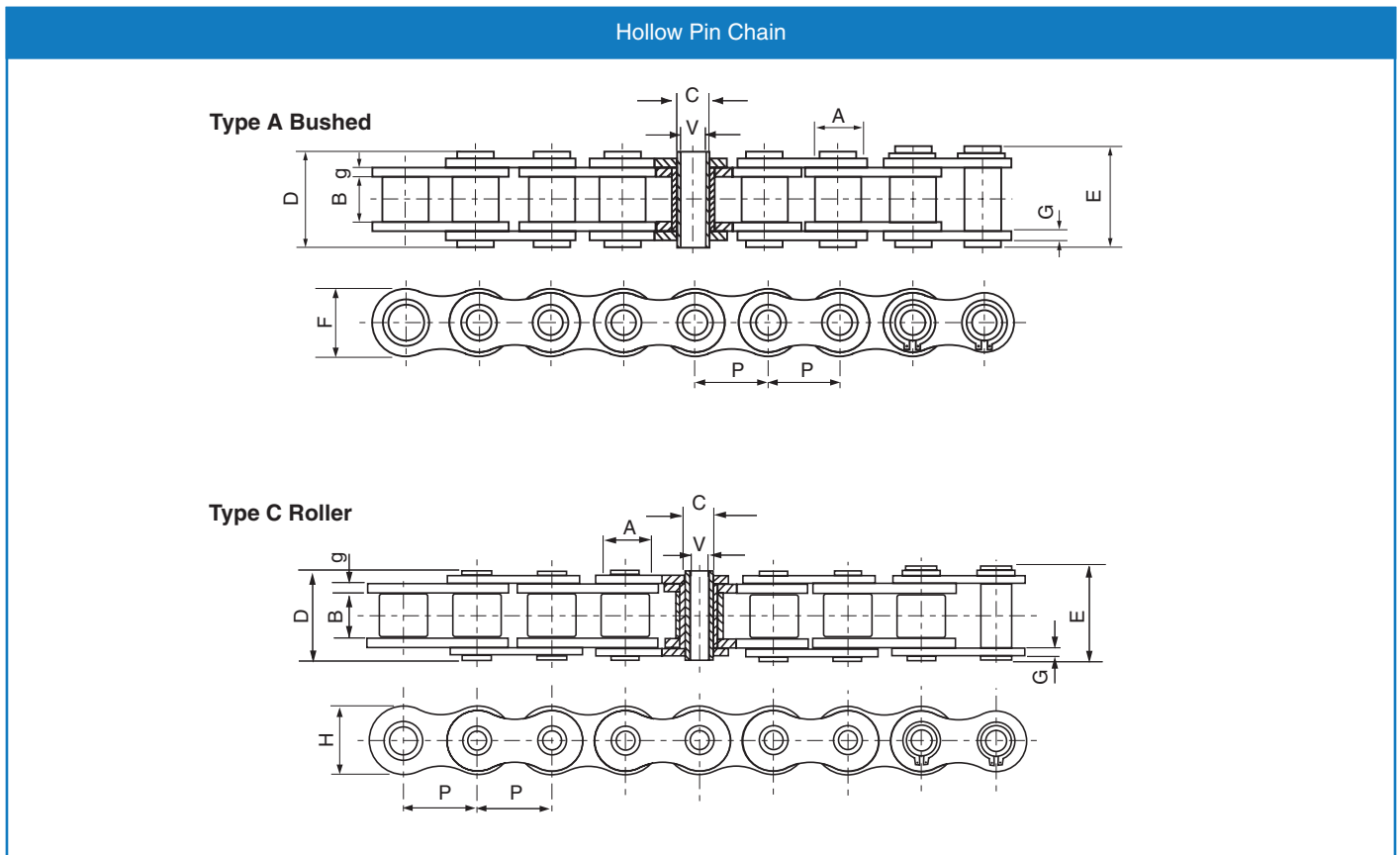


Standard boxed lengths are 5 metres or 10 feet. Each box contains one CL. Special lengths available.



# 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.

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

**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.

Special Chain with "U" Attachments

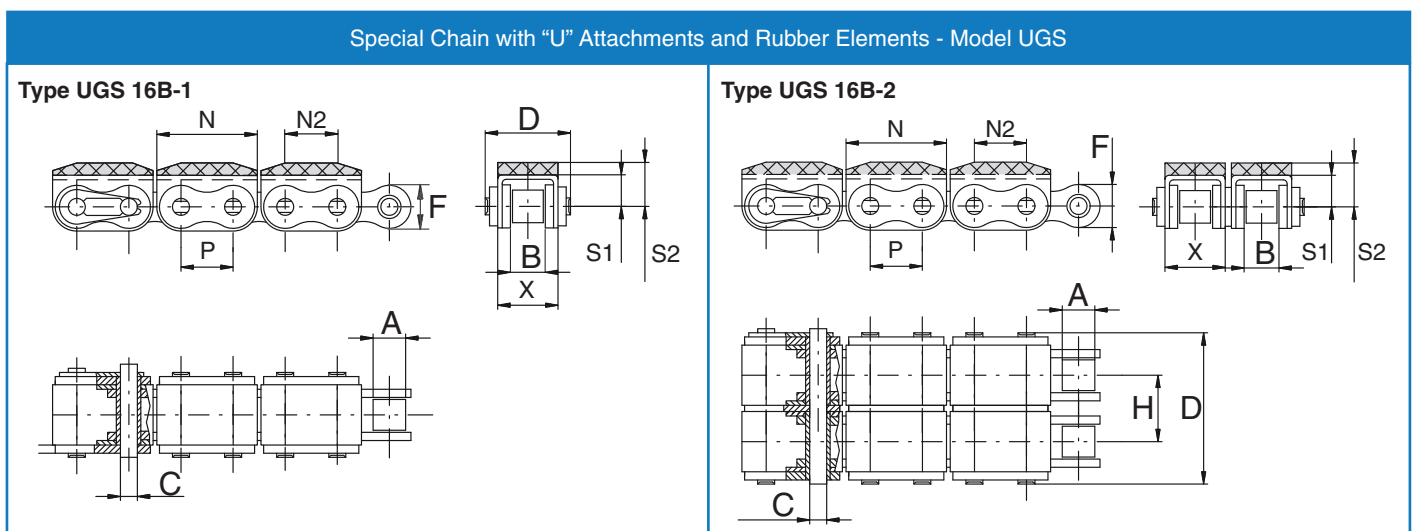
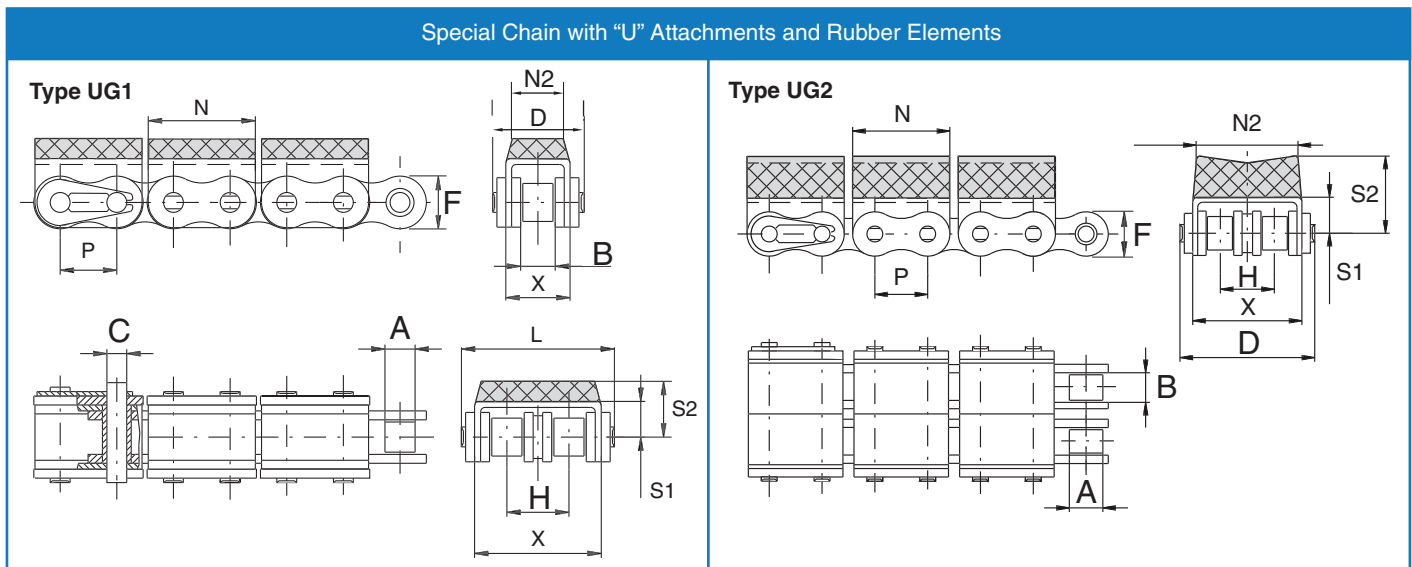
Chain number	Chain Pitch	Roller diameter	Width between inner plates	Pin diameter	Side Plate Height	Pin length	Hole diameter	Hole pitch				Tensile strength kN
	P	A	B	C	F	D	O	P <sub>1</sub>	X	N	S <sub>1</sub>	
08B-1/U1	12.700	8.51	7.75	4.45	11.8	20.4	-	-	14.4	24.0	8.5	14.60
08B-1/U2	12.700	8.51	7.75	4.45	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.

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.

# Roller Chain

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



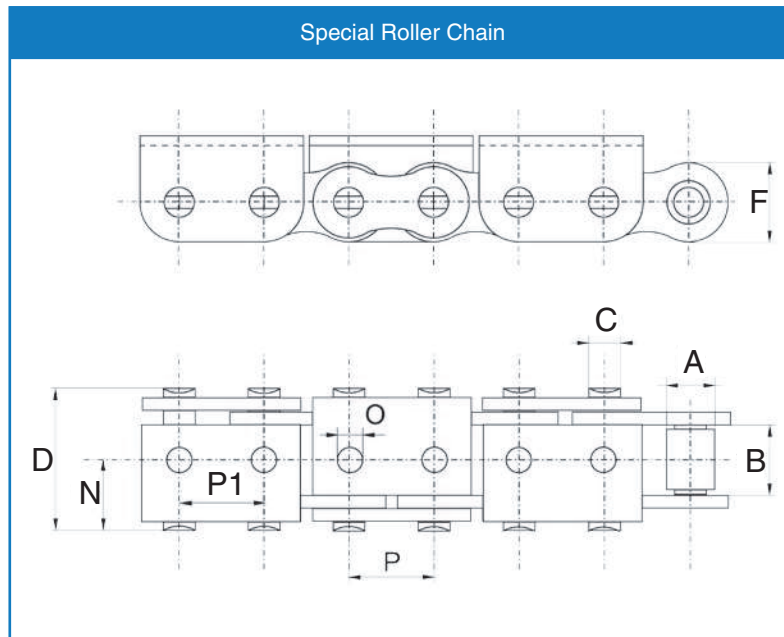
Chain Number	Chain Pitch	Roller diameter	Width between inner plates	Pin diameter	Side Plate Height	Pin length	"U" profile	"U" profile	"U" profile	"U" Profile height	"U" Profile height	Transverse pitch	Min. Tensile strength
	P	A	B	C	F	D	X	N	N2	S1	S2	H	kN
08B-1/UG1	12.700	8.51	7.75	4.45	11.80	20.40	14.4	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

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

## Special Roller Chain

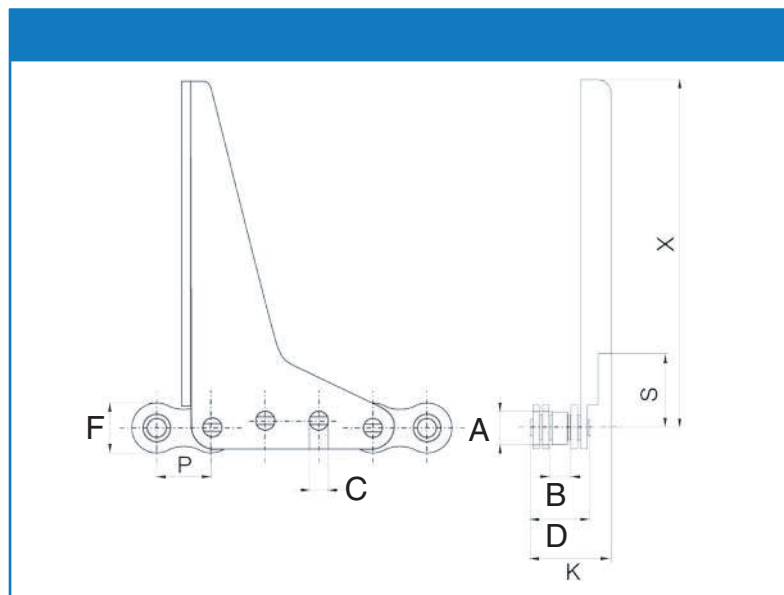


Chain number	Pitch	Width between inner plates	Roller diameter	Pin diameter	Pin length	Side plate height	Hole diameter	Hole pitch	Tensile strength	
	P	B	A	C	D	F	O	P1	N	
16B-1/P	25.4	17.02	15.88	8.28	36.1	21.0	6.5	25.4	15.9	58

## 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	82.60

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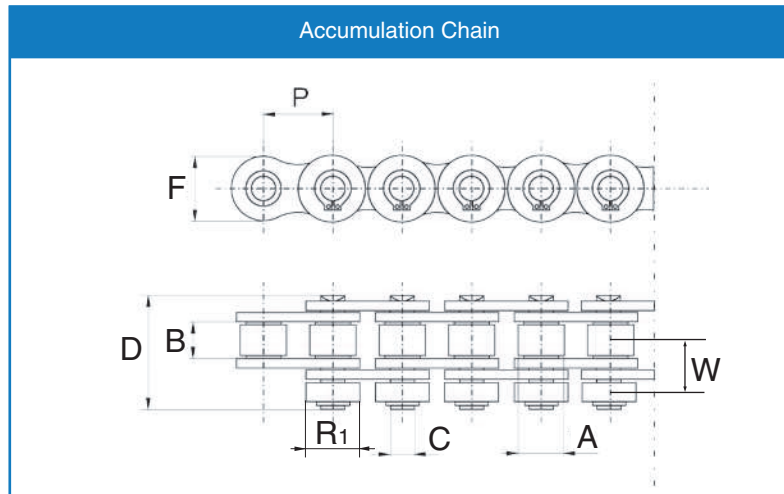


# Roller Chain

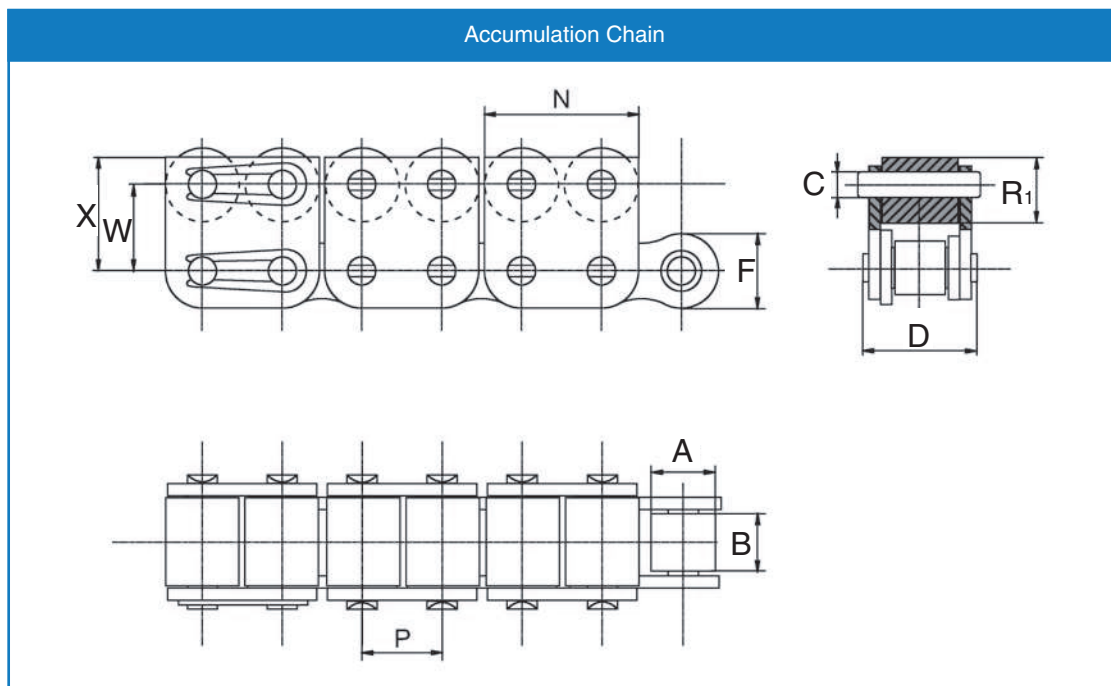
## Accumulation Chain

**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
	$P$	$A$	$B$	$C$	$D$	$R_1$	$W$	kN
10B-1/R	15.875	10.16	9.65	5.08	25.4	14.2	15.1	22.7

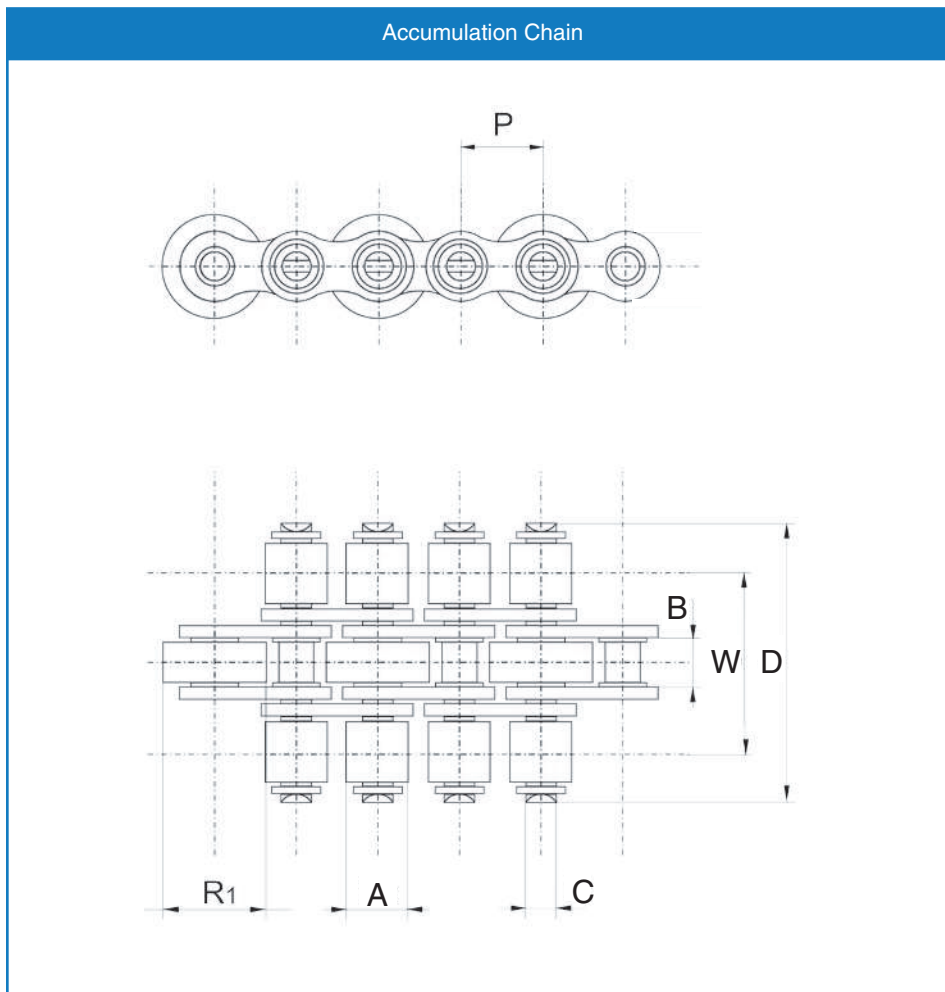


Chain number	Pitch	Roller diameter	Width between inner plates	Roller diameter	Pin diameter	Pin length	Inner plate height	Tensile strength			
	$P$	$A$	$B$	$R_1$	$C$	$D$	$F$	$W$	$X$	$N$	kN
10B/R1	15.875	10.16	10.16	13.0	5.08	19.6	14.2	15.8	20.6	28.4	22.7

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

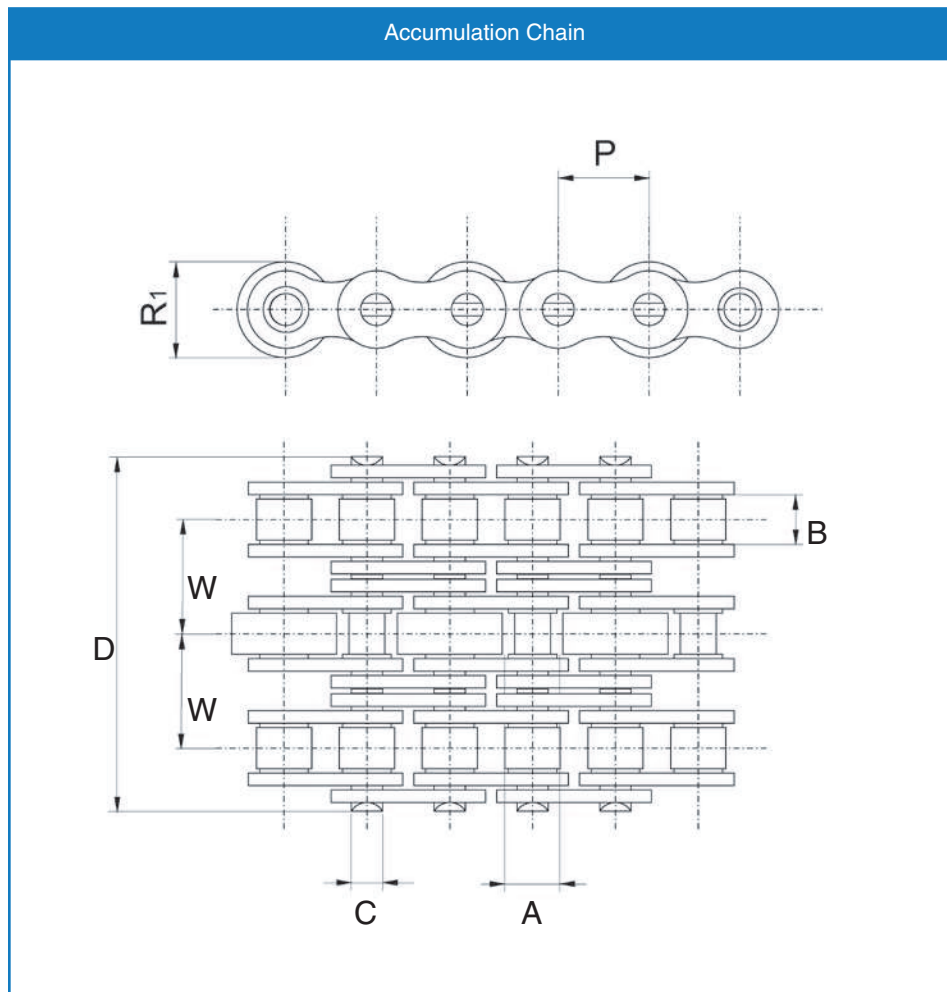
## Accumulation Chain



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

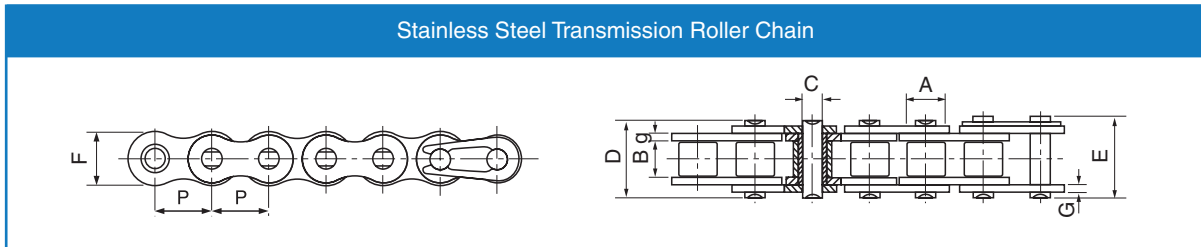


Chain number	Pitch	Roller diameter	Width between inner plate	Pin diameter	Pin length	Roller diameter	Roller pitch	Tensile strength
	P	A	B	C	D	R1	W	kN
12B-3/S2a	19.05	12.07	11.68	5.72	61.7	24.0	19.46	88.5
12B-3/S2	19.05	12.07	11.68	5.72	61.7	26.0	19.46	88.5

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

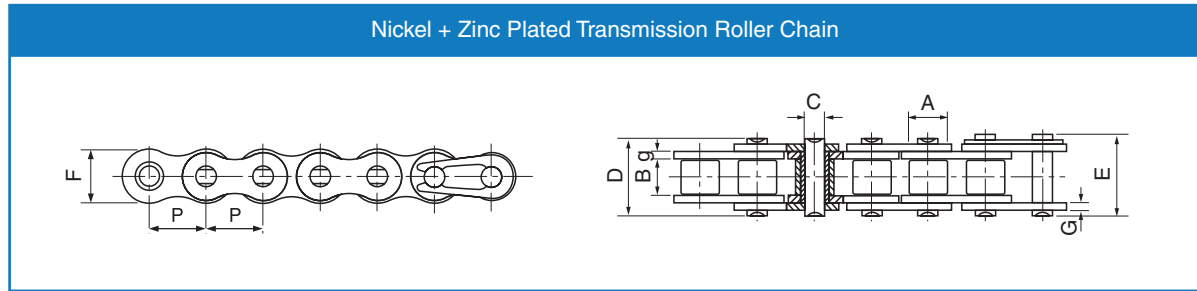
\* Bush chain: **A** in the table indicates the external diameter of the bush  
 # Straight side plate chain

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

Duplex and Triplex chains are also 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

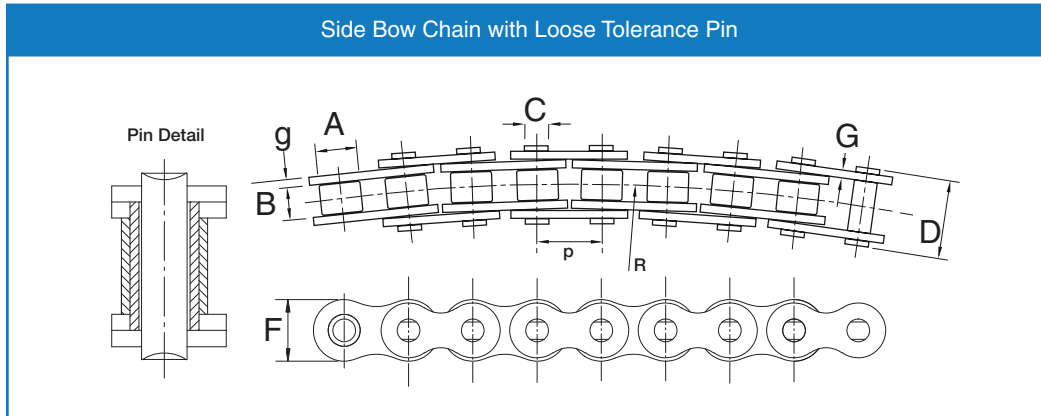
# Straight side plate chain

Duplex and Triplex chains are also available.

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

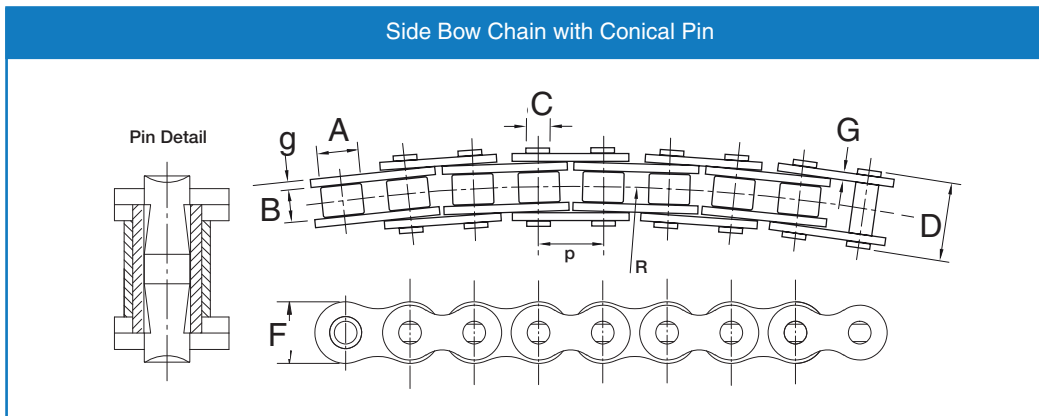
# Roller Chain

## 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

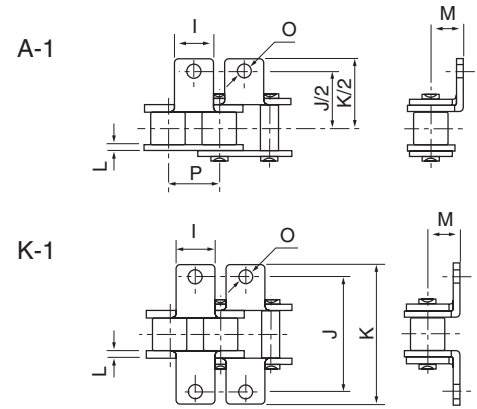
Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.



# Roller Chain Attachments

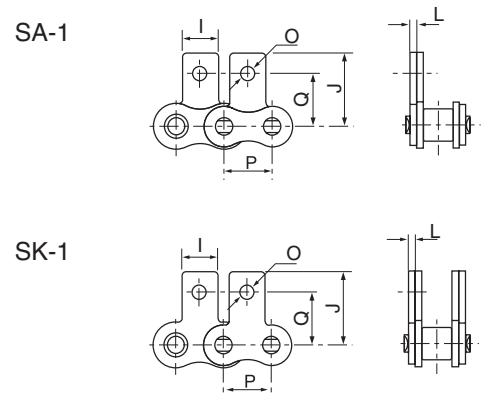
## A-1 & K-1 Attachments

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



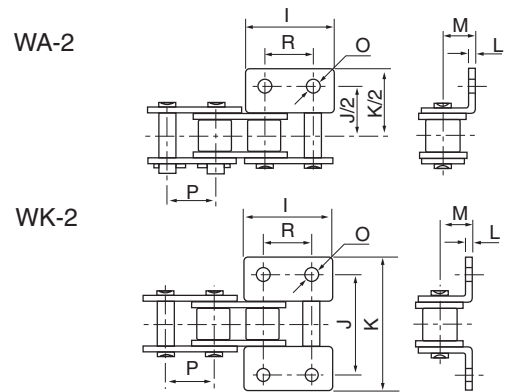
## SA-1 & SK-1 Attachments

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



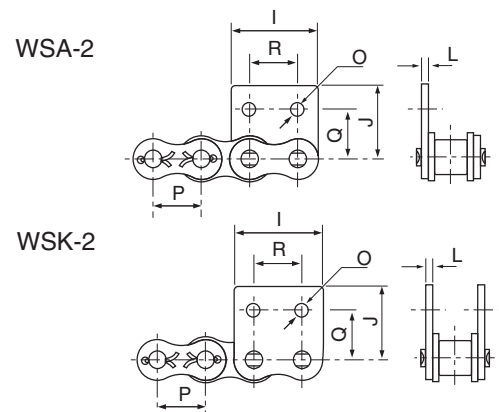
## WA-2 & WK-2 Attachments

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

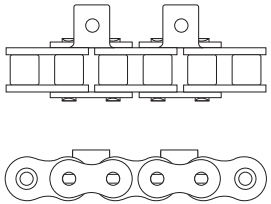


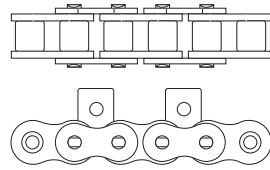
\* Straight side plates

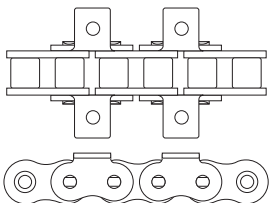
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

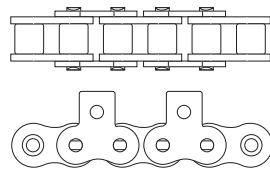
# Roller Chain Attachments

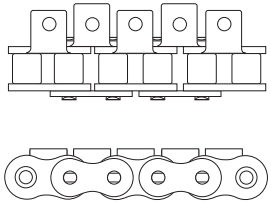
## Attachment Chain Designation

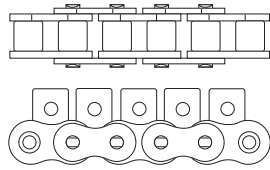
1. Standard Chains with bent attachment A1 - one hole - one side - every outer	
	Chain Reference
	06BA-2
	08BA-2
	10BA-2
	12BA-2
16BA-2	

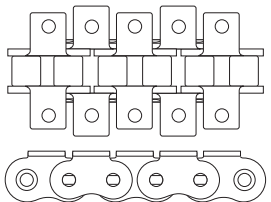
7. Standard Chains with straight attachment SA1 - one hole - one side - every outer	
	Chain Reference
	06BSA-2
	08BSA-2
	10BSA-2
	12BSA-2
16BSA-2	

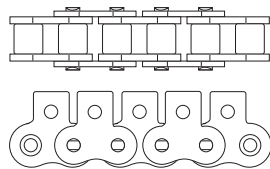
2. Standard Chains with bent attachment K1 - one hole - both sides - every outer	
	Chain Reference
	06BK-2
	08BK-2
	10BK-2
	12BK-2
16BK-2	

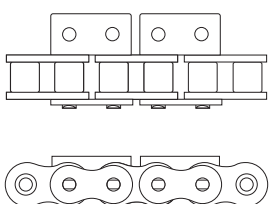
8. Standard Chains with straight attachment SK1 - one hole - both sides - every outer	
	Chain Reference
	06BSK-2
	08BSK-2
	10BSK-2
	12BSK-2
16BSK-2	

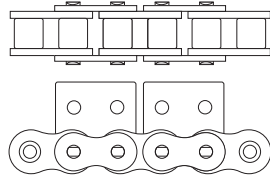
3. Standard Chains with bent attachment A1 - one hole - one side - every outer and inner	
	Chain Reference
	06BA-1
	08BA-1
	10BA-1
	12BA-1
16BA-1	

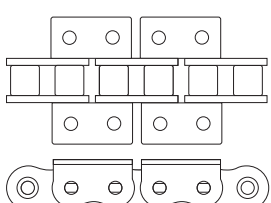
9. Standard Chains with straight attachment SA1 - one hole - one side - every outer and inner	
	Chain Reference
	06BSA-1
	08BSA-1
	10BSA-1
	12BSA-1
16BSA-1	

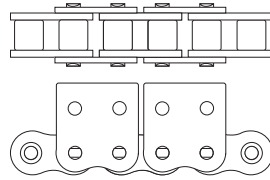
4. Standard Chains with bent attachment K1 - one hole - both sides - every outer and inner	
	Chain Reference
	06BK-1
	08BK-1
	10BK-1
	12BK-1
16BK-1	

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

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

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

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

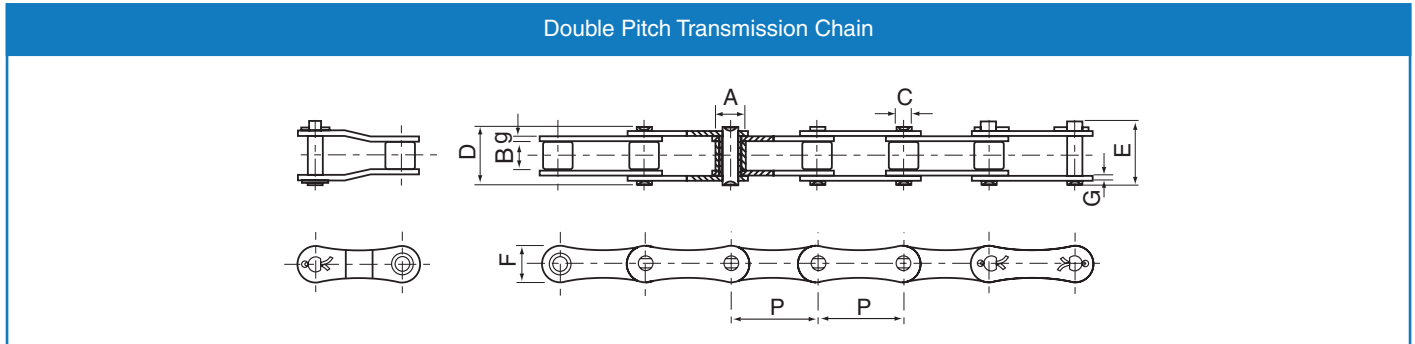
12. Standard Chains with straight attachment WSK2 - two holes - both sides - every outer	
	Chain Reference
	06BSK-2
	08BSK-2
	10BSK-2
	12BSK-2
16BSK-1	

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

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# Double Pitch Chain

## Double Pitch Transmission Chain

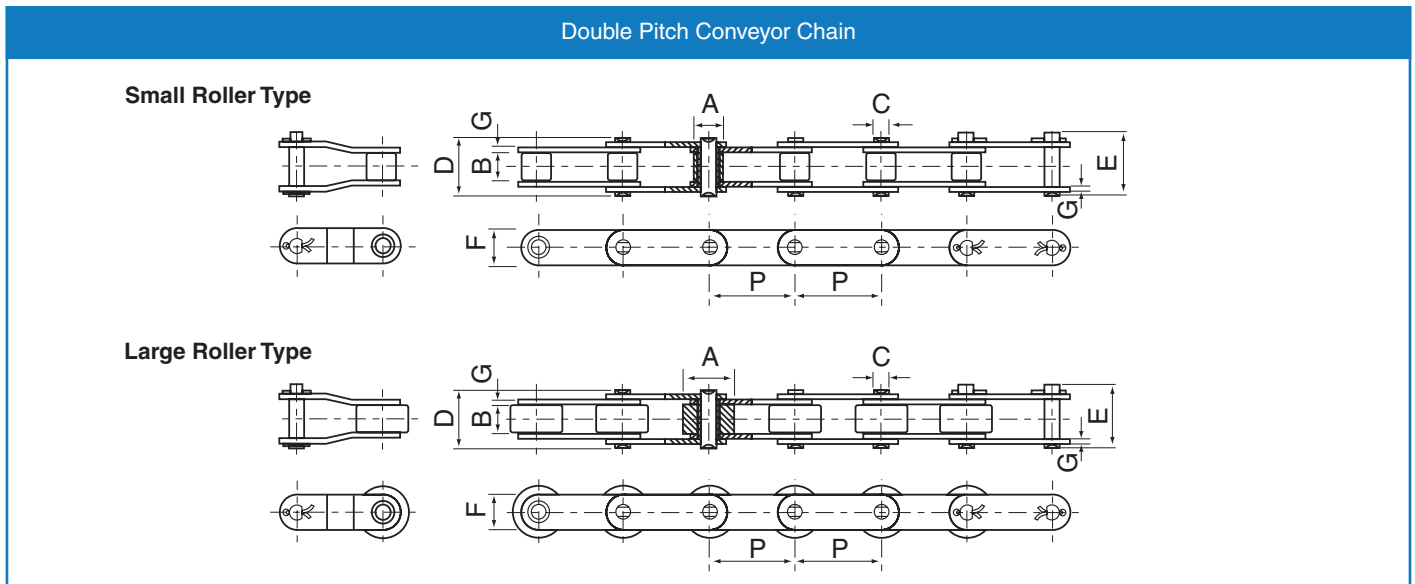


ISO Chain number	ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness g/G	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
		P	A	B	C	D	E	F				
	A2040	25.40	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	16.70	0.42
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



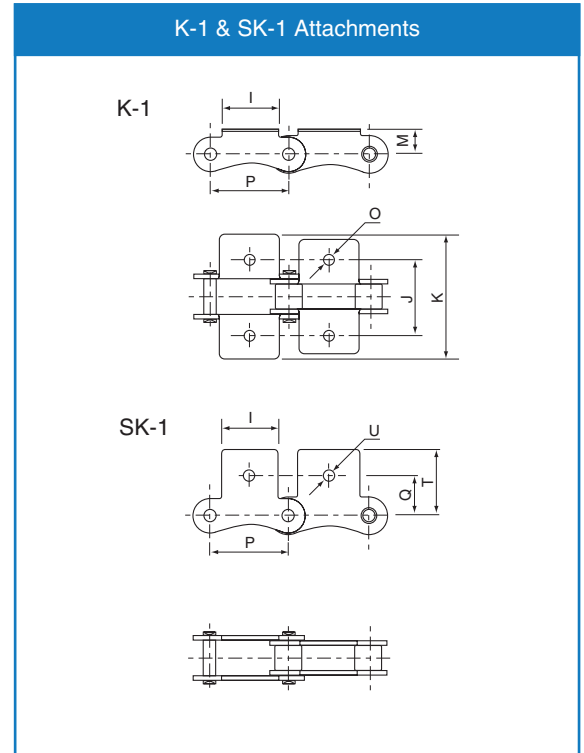
ISO Chain number	ANSI Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Side plate height	Plate thickness	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
		P	A	B	C	D	E					
	C2040	25.40	7.95	7.85	3.96	16.60	17.80	12.00	1.50	14.10	16.70	0.50
	C2042		15.88									
C208B	C2040H	25.40	7.95	7.85	3.96	18.80	19.90	12.00	2.03	14.10	17.20	0.65
	C208BL		8.51									
		25.40	15.88	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

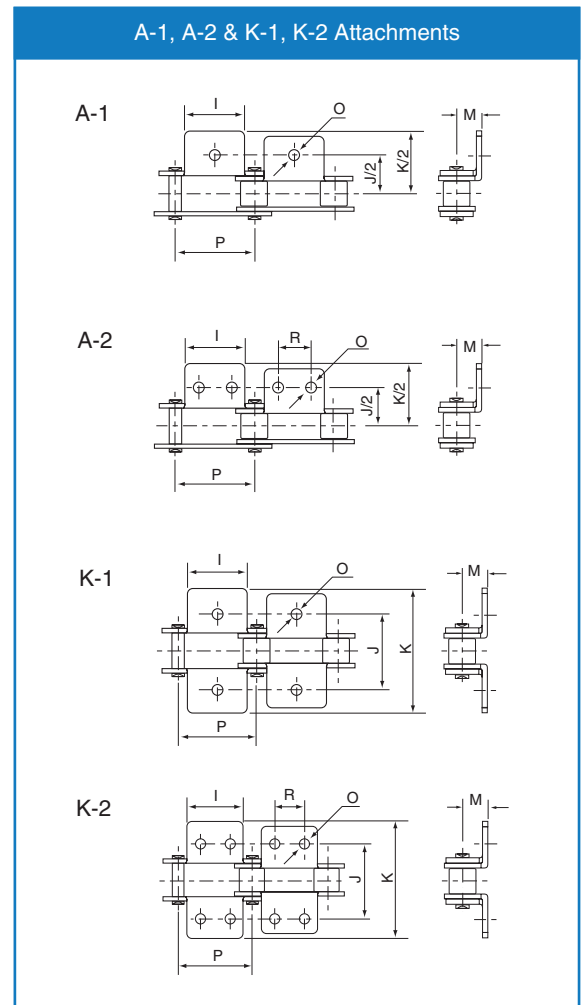
## K-1 & SK-1 Attachments

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
	C2040 C2042	25.40	19.10	9.50	25.40	39.60	9.10	3.40
C208B C208BL		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

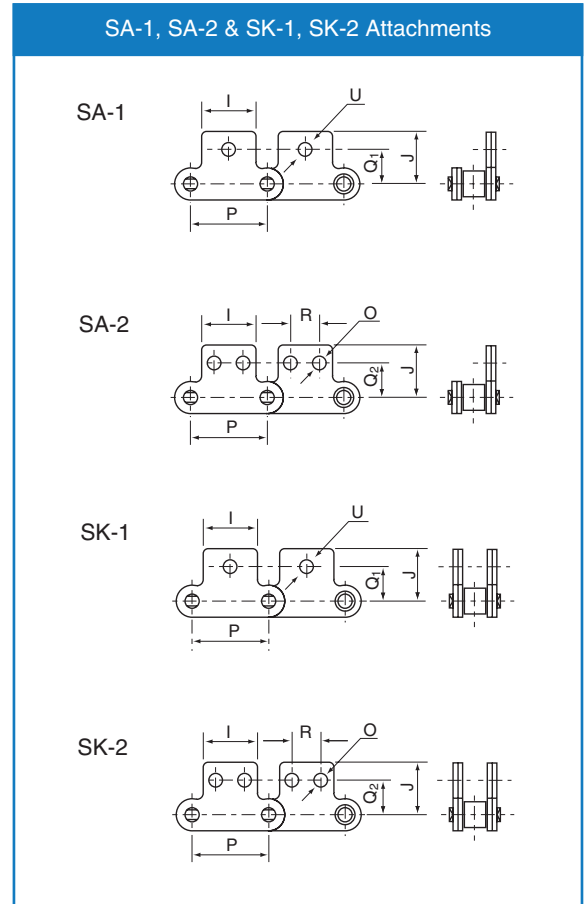


All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.

# Double Pitch Attachments

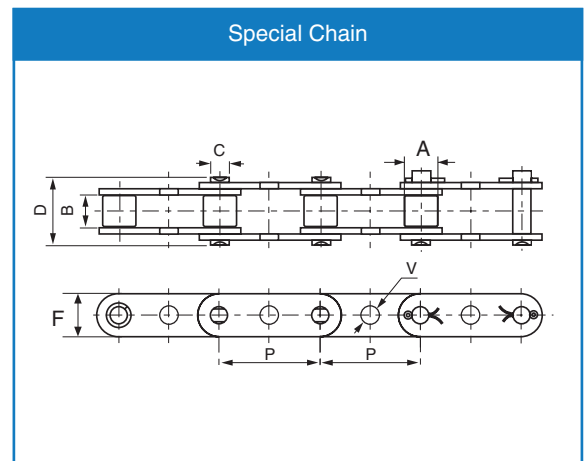
## SA-1, SA-2 & SK-1, SK-2 Attachments

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

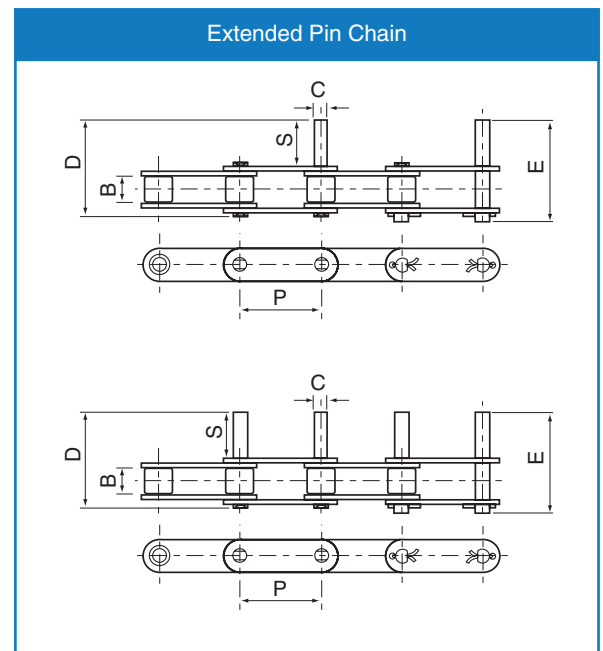




# Double Pitch Chain

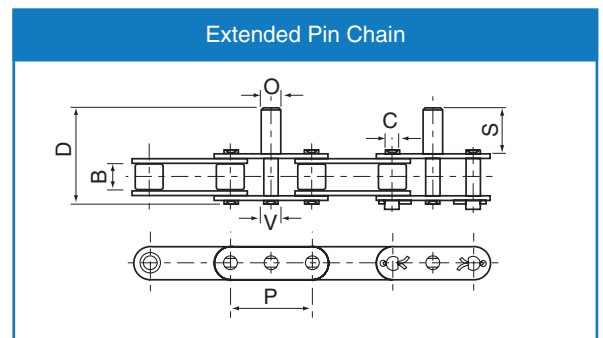
## Extended Pin Chain

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



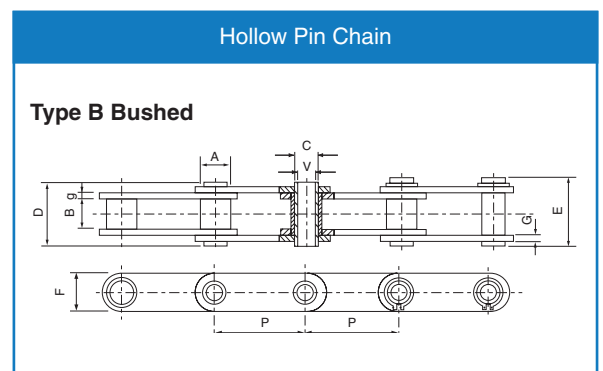
## Extended Pin Chain

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

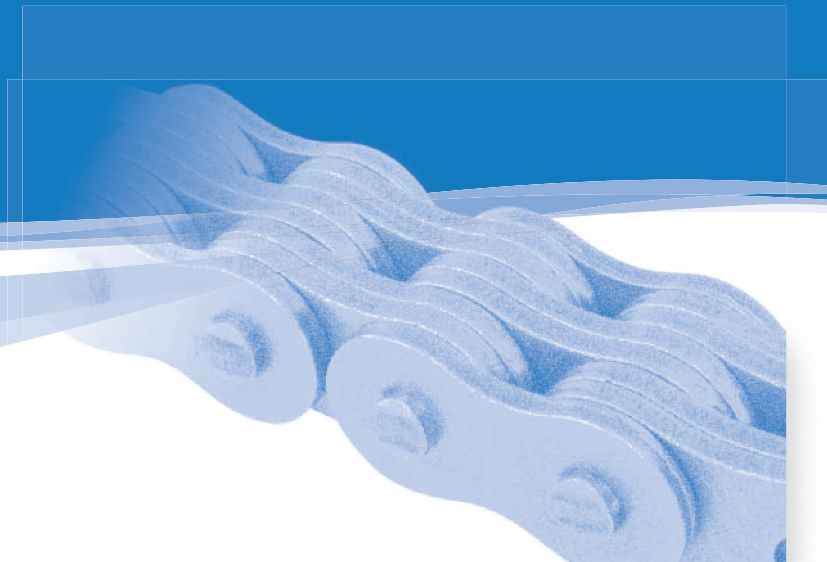


## Hollow Pin Chain - Bushed Type (No Roller)

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
				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
O2060HP	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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## Challenge Leaf Chain

### **Applications:**

Leaf chain is used in lifting applications such as Fork Lifts, Pneumatic and Hydraulic Jack fittings, etc. all of which move at slow speeds

Challenge offer Leaf Chain complying with ANSI standards in types BL (heavy duty), AL (light duty), EL and FLC

Where applicable, ISO equivalents are also given

### **Construction:**

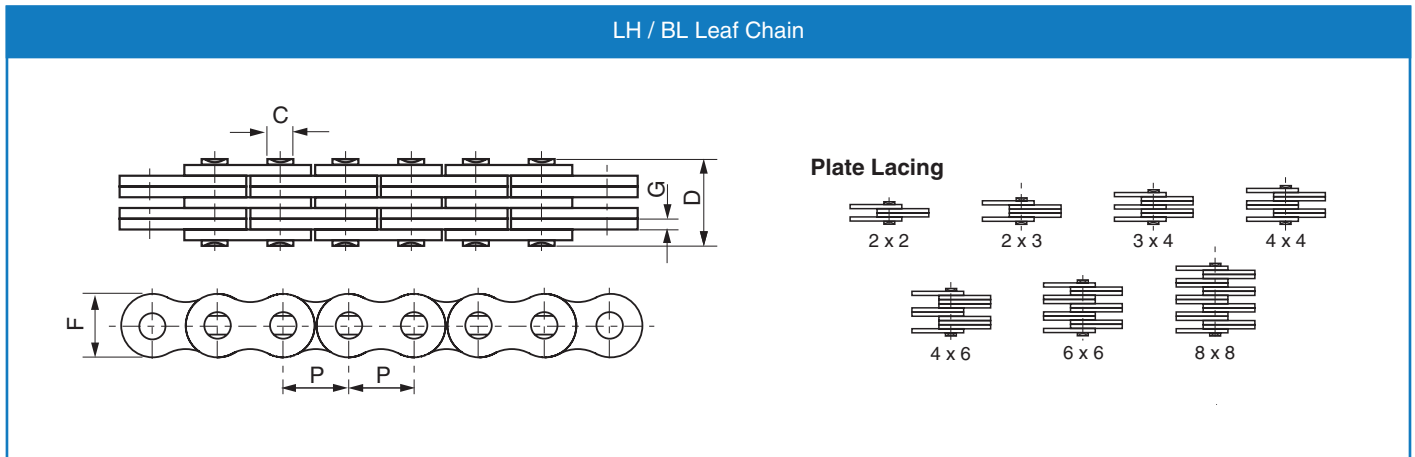
**Link plates** - produced from alloy steel, especially selected to withstand sudden shock loads. Heat treated to assure maximum breaking loads and wear resistance

**Bearing pins** - produced from heat treated alloy steel giving excellent resistance to bending

# Leaf Chain

LH / BL Series Leaf Chain

ANSI B29.8, ISO 4347, DIN 8152



ISO Chain number	ANSI Chain number	Pitch P	Chain lacing	Plate height F	Plate thickness G	Pin diameter C	Pin length D	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
LH0822	BL422	12.700	2x2	12.07	2.08	5.09	11.05	22.20	27.60	0.64
LH0823	BL423		2x3				13.16	22.20	27.60	0.80
LH0834	BL434		3x4				17.40	33.40	41.40	1.12
LH0844	BL444		4x4				19.51	44.50	56.00	1.28
LH0846	BL446		4x6				23.75	44.50	56.00	1.60
LH0866	BL466		6x6				27.99	66.70	81.70	1.92
LH0888	BL488		8x8				36.45	89.00	109.40	2.56
LH1022	BL522	15.875	2x2	15.09	2.44	5.96	12.90	33.40	43.10	0.88
LH1023	BL523		2x3				15.37	33.40	43.10	1.10
LH1034	BL534		3x4				20.32	48.90	65.60	1.50
LH1044	BL544		4x4				22.78	66.70	84.50	1.80
LH1046	BL546		4x6				27.74	66.70	84.50	2.20
LH1066	BL566		6x6				32.69	100.10	125.10	2.65
LH1088	BL588		8x8				42.57	133.40	169.50	3.50
LH1222	BL622	19.050	2x2	18.11	3.30	7.94	17.37	48.90	63.60	1.45
LH1223	BL623		2x3				20.73	48.90	63.60	1.80
LH1234	BL634		3x4				27.43	75.60	102.80	2.50
LH1244	BL644		4x4				30.78	97.90	120.90	2.90
LH1246	BL646		4x6				37.49	97.90	120.90	3.60
LH1266	BL666		6x6				44.20	146.80	190.80	4.30
LH1288	BL688		8x8				57.61	195.70	238.80	5.80
LH1622	BL822	25.400	2x2	24.13	4.09	9.54	21.34	84.50	108.20	2.20
LH1623	BL823		2x3				25.48	84.50	108.20	2.70
LH1634	BL834		3x4				33.76	129.00	170.00	3.80
LH1644	BL844		4x4				37.90	169.00	214.60	4.30
LH1646	BL846		4x6				46.18	169.00	214.60	5.40
LH1666	BL866		6x6				54.46	253.60	324.50	6.50
LH1688	BL888		8x8				71.02	338.10	432.70	8.60

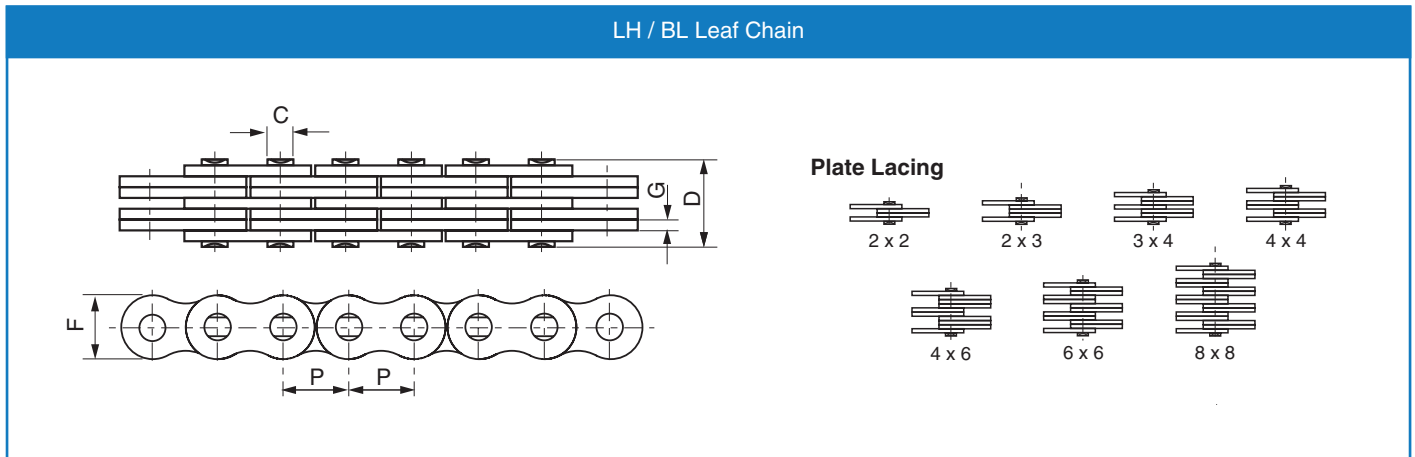
Available on reels.

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.

# Leaf Chain

## LH / BL Series Leaf Chain (cont)

ANSI B29.8, ISO 4347, DIN 8152



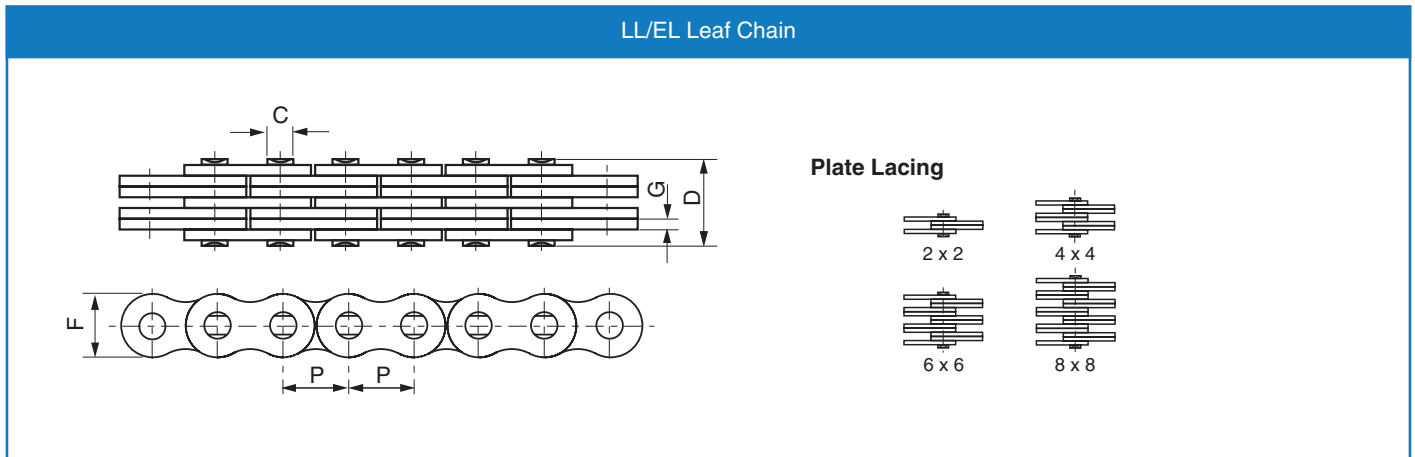
ISO Chain number	ANSI Chain number	Pitch P	Chain lacing	Plate height F	Plate thickness G	Pin diameter C	Pin length D	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
LH2022	BL1022	31.750	2x2	30.18	4.90	11.11	25.37	115.60	150.80	3.40
LH2023	BL1023		2x3				30.33	115.60	150.80	4.30
LH2034	BL1034		3x4				40.23	182.40	231.60	6.00
LH2044	BL1044		4x4				45.19	231.30	291.40	6.90
LH2046	BL1046		4x6				55.09	231.30	291.40	8.60
LH2066	BL1066		6x6				65.00	347.00	430.30	10.30
LH2088	BL1088	8x8	84.81	462.60	555.10	13.80				
LH2422	BL1222	38.100	2x2	36.20	5.77	12.71	29.62	151.20	192.00	4.60
LH2423	BL1223		2x3				35.43	151.20	192.00	5.80
LH2434	BL1234		3x4				47.07	244.60	315.90	8.10
LH2444	BL1244		4x4				52.88	302.50	381.10	9.30
LH2446	BL1246		4x6				64.52	302.50	381.10	11.60
LH2466	BL1266		6x6				76.15	453.70	543.60	13.90
LH2488	BL1288	8x8	99.42	605.00	726.00	18.60				
LH2822	BL1422	44.450	2x2	42.24	6.55	14.29	33.55	191.30	225.70	6.10
LH2823	BL1423		2x3				40.16	191.30	225.70	7.60
LH2834	BL1434		3x4				53.37	315.80	372.60	10.60
LH2844	BL1444		4x4				59.97	382.60	451.20	12.20
LH2846	BL1446		4x6				73.18	382.60	451.20	15.20
LH2866	BL1466		6x6				86.39	578.30	682.40	18.20
LH2888	BL1488	8x8	112.80	765.10	902.80	24.30				
LH3222	BL1622	50.800	2x2	48.26	7.52	17.46	39.01	289.10	341.10	8.00
LH3223	BL1623		2x3				46.58	289.10	341.10	10.00
LH3234	BL1634		3x4				61.72	440.40	519.60	14.00
LH3244	BL1644		4x4				69.29	578.30	680.40	16.00
LH3246	BL1646		4x6				84.43	578.30	680.40	20.00
LH3266	BL1666		6x6				99.57	857.40	1000.70	24.00
LH3288	BL1688	8x8	129.84	1156.50	1364.60	32.00				
LH4022	BL2022	63.500	2x2	60.33	9.91	23.81	51.74	433.70	511.70	15.80
LH4023	BL2023		2x3				61.70	433.70	511.70	19.80
LH4034	BL2034		3x4				81.61	649.40	766.20	27.70
LH4044	BL2044		4x4				91.57	867.40	1023.50	31.60
LH4046	BL2046		4x6				111.48	867.40	1023.50	39.50
LH4066	BL2066		6x6				131.39	1301.10	1535.20	47.40
LH4088	BL2088	8x8	171.22	1734.80	2046.50	63.20				

Available on reels.

# Leaf Chain

## LL/EL Series Leaf Chain

## ANSI B29.8-1958, ISO 4347



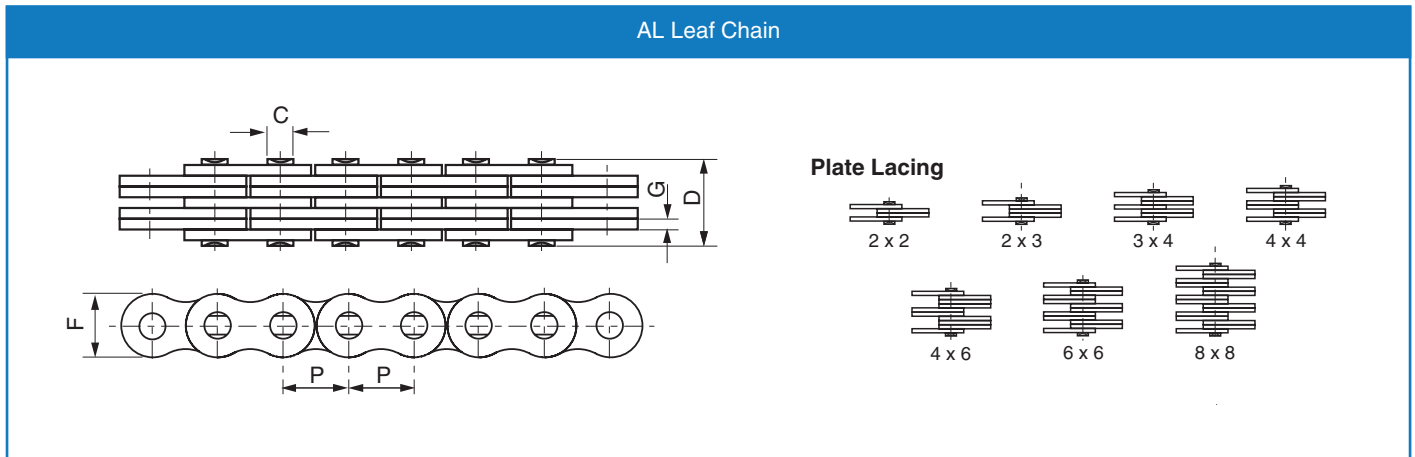
ISO Chain number	ANSI Chain number	Pitch P	Chain lacing	Plate height F	Plate thick- G	Pin diameter C	Pin length strength D	Minimum tensile strength kN	Average tensile metre kN	Weight kg/m
LL0822	EL0422	12.700	2x2	10.60	1.30	4.45	7.60	17.80	20.40	0.35
LL0844	EL0444		4x4				13.00	31.10	35.70	0.69
LL0866	EL0466		6x6				18.20	44.50	50.90	1.00
LL0888	EL0488		8x8				23.50	62.20	71.20	1.33
LL1022	EL0522	15.875	2x2	13.70	1.60	5.08	9.20	22.30	25.50	0.54
LL1044	EL0544		4x4				15.80	44.50	51.00	1.06
LL1066	EL0566		6x6				22.10	66.70	76.30	1.57
LL1088	EL0588		8x8				28.80	89.00	101.90	2.10
LL1222	EL0622	19.050	2x2	16.00	1.85	5.72	10.40	28.90	33.20	0.73
LL1244	EL0644		4x4				17.90	57.80	66.40	1.44
LL1266	EL0666		6x6				25.40	86.70	99.70	2.15
LL1288	EL0688		8x8				32.90	115.60	132.90	2.84
LL1622	EL0822	25.400	2x2	21.00	3.10	8.28	17.20	58.00	66.70	1.52
LL1644	EL0844		4x4				29.60	144.00	164.60	2.90
LL1666	EL0866		6x6				42.40	200.00	230.00	4.30
LL1688	EL0888		8x8				55.40	288.00	331.20	5.71
LL2022	EL1022	31.750	2x2	26.40	3.70	10.19	20.10	95.00	109.20	2.33
LL2044	EL1044		4x4				33.80	190.00	218.50	4.40
LL2066	EL1066		6x6				50.10	285.00	324.60	6.79
LL2088	EL1088		8x8				65.40	380.00	435.10	8.75
LL2422	EL1222	38.100	2x2	33.40	5.00	14.63	28.40	170.00	195.50	4.47
LL2444	EL1244		4x4				46.30	340.00	380.80	8.22
LL2466	EL1266		6x6				66.40	510.00	571.20	12.22
LL2488	EL1288		8x8				86.60	680.00	775.20	16.30
LL2822	EL1422	44.450	2x2	37.08	6.00	15.90	32.20	200.00	224.00	5.10
LL2844	EL1444		4x4				56.40	400.00	448.00	9.90
LL2866	EL1466		6x6				80.60	600.00	672.00	14.60
LL2888	EL1488		8x8				105.20	800.00	896.00	19.40
LL3222	EL1622	50.800	2x2	42.00	6.00	17.81	33.20	260.00	291.20	5.80
LL3244	EL1644		4x4				57.40	520.00	582.40	11.40
LL3266	EL1666		6x6				81.60	780.00	873.60	16.90
LL3288	EL1688		8x8				105.00	1050.00	1176.00	24.00
LL4022	EL2022	63.500	2x2	52.76	8.25	22.89	44.70	360.00	403.20	10.30
LL4044	EL2044		4x4				77.90	780.00	873.60	20.00
LL4066	EL2066		6x6				111.10	1080.00	1209.60	29.50
LL4088	EL2088		8x8				145.50	1560.00	1747.20	39.10
LL4822	EL2422	76.200	2x2	63.88	10.30	29.24	56.10	560.00	627.20	18.50
LL4844	EL2444		4x4				97.40	1120.00	1554.40	35.70
LL4866	EL2466		6x6				138.90	1168.00	1308.10	53.00
LL4888	EL2488		8x8				182.40	2240.00	2508.80	70.40

Available on reels.

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.

# Leaf Chain

## AL Series Leaf Chain



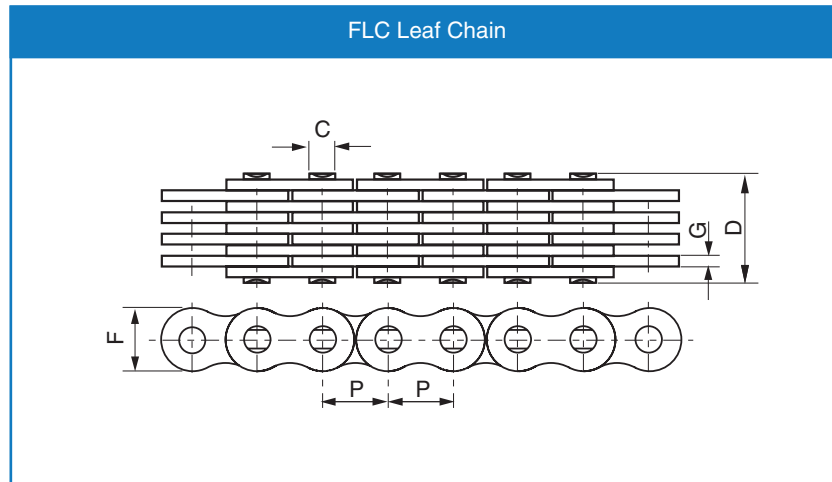
ANSI Chain number	Pitch P	Chain lacing	Plate height F	Plate thickness G	Pin diameter C	Pin length D	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
AL322	9.525	2x2	7.70	1.30	3.58	6.80	9.00	10.20	0.23
AL422		2x2				7.90	14.10	16.90	0.39
AL444	12.700	4x4	10.40	1.50	3.96	14.40	28.20	35.20	0.74
AL466		6x6				20.50	42.30	52.70	1.10
AL522		2x2				10.30	22.00	27.50	0.61
AL534	15.875	3x4	12.80	2.03	5.08	17.00	33.00	46.00	1.10
AL544		4x4				18.90	44.00	55.00	1.19
AL566		6x6				26.90	66.00	82.50	1.79
AL622		2x2				12.40	37.00	44.40	0.86
AL644	19.050	4x4	15.60	2.42	5.94	22.70	64.00	78.80	1.69
AL666		6x6				32.40	101.00	118.60	2.52
AL822		2x2				16.00	56.70	68.60	1.54
AL844	25.400	4x4	20.50	3.25	7.92	29.40	113.40	135.60	3.00
AL866		6x6				42.50	170.00	202.30	4.46
AL1022		2x2				19.60	88.50	107.10	2.37
AL1044	31.750	4x4	25.60	4.00	9.53	35.90	177.00	203.60	4.68
AL1066		6x6				52.30	265.00	315.30	7.00
AL1222		2x2				24.30	127.00	151.10	3.65
AL1244	38.100	4x4	30.50	4.80	11.10	43.80	254.00	299.70	7.05
AL1266		6x6				63.00	381.00	426.30	10.44
AL1444	44.450	4x4	36.40	5.60	12.64	51.30	372.70	413.60	10.34
AL1466		6x6				74.56	559.00	620.40	15.16
AL1644	50.800	4x4	41.60	6.40	14.21	58.06	471.00	522.80	12.98
AL1666		6x6				84.46	706.00	783.60	19.41

Available on reels.



# Leaf Chain

## FLC Series Leaf Chain

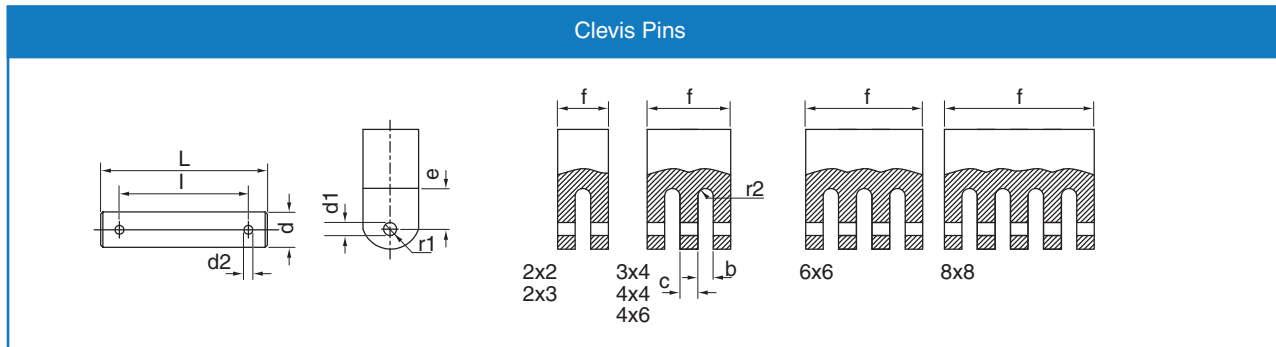


Chain number	Pitch	Chain lacing	Plate height	Plate thickness	Pin diameter	Pin length	Minimum tensile strength	Average tensile strength	Weight
	P		F	G	C	D	kN	kN	kg/m
FL644	19.050	4x4	4.70	0.60	1.85	6.60	6.50	7.80	0.13
FL666	19.050	6x6	4.70	0.60	1.85	9.30	9.75	11.80	0.20
FL688	19.050	8x8	4.70	0.60	1.85	12.00	13.00	15.60	0.25
FL844	25.400	4x4	6.90	0.73	2.31	7.90	10.00	12.10	0.25
FL944	9.525	4x4	8.70	1.04	3.28	10.40	21.00	24.70	0.43
FL966	9.525	6x6	8.70	1.00	3.28	14.90	31.00	36.80	0.65
F1222	38.100	2x2	8.20	1.00	3.58	7.00	11.43	13.60	0.19
F1223	38.100	2x3	10.20	2.03	4.45	12.80	20.00	23.80	0.61
F1244	38.100	4x4	10.20	1.70	4.45	16.70	44.00	52.30	0.83

Available on reels.

# Leaf Chain

## Clevis Pins



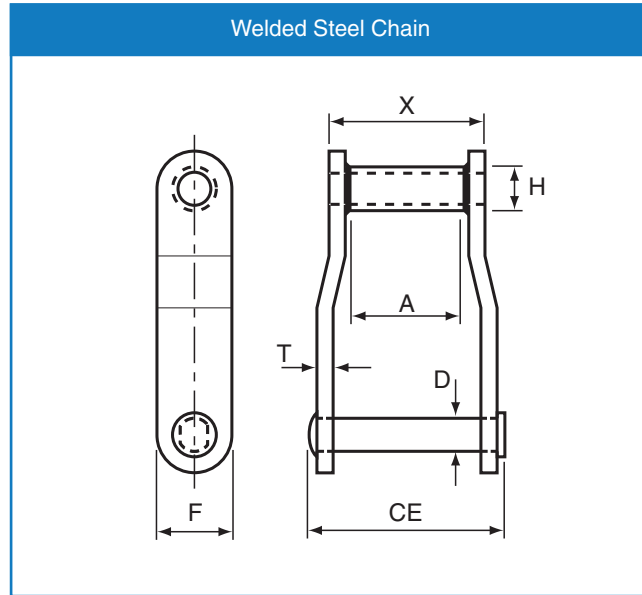
Type	l min.	L max	d max	d2	f max	b min	c max	d1	e min	r1 max	r2 max
BL422/AL522	10.8	17.0			10.7	4.2	-				2
BL423	12.7	18.9			12.6	6.4	-				3
BL434	17.0	23.2	5.80	1.6	16.9	4.2	2.0	5.15	9.0	6.5	2
BL444/AL544	19.0	25.2			18.9	4.2	4.0				2
BL446	23.0	29.2			22.9	6.4	4.0				3
BL466/AL566	27.0	33.3			26.9	4.2	4.0				2
BL488/AL588	35.5	41.8			35.4	4.2	4.0				2
BL522	12.8	19.4			12.7	5.0	-				2
BL523	15.0	21.6			14.9	7.5	-				3
BL534	20.0	26.6			19.9	5.0	2.4				2
BL544/AL644	22.5	29.1	5.95	2.0	22.4	5.0	4.8	6.00	11.0	8.0	2
BL546	27.0	33.7			26.9	7.5	4.8				3
BL566/AL666	32.0	38.7			31.9	5.0	4.8				2
BL588/AL688	42.5	49.3			42.4	5.0	4.8				2
BL623	20.0	30.7			19.9	10.3	-				5
BL634	27.0	37.7			26.9	6.8	3.2				3
BL644/AL844	30.0	40.7	7.93	3.2	29.9	6.8	6.4	8.00	14.0	9.5	3
BL646	37.0	47.7			36.9	10.3	6.4				5
BL666/AL866	43.0	53.7			42.9	6.8	6.4				3
BL688	56.5	67.2			56.4	6.8	6.4				3
BL823	25.0	35.7			24.9	12.8	-				6
BL834	33.0	43.7			32.9	8.5	4.0				4
BL844/AL1044	37.0	47.7	9.52	3.2	36.9	8.5	8.0	9.60	18.0	12.5	4
BL846	46.0	56.7			45.9	12.8	8.0				6
BL866/AL1066	53.0	63.7			52.9	8.5	8.0				4
BL888/AL1088	69.5	80.3			69.4	8.5	8.0				4
BL1023	30.0	42.4			29.8	15.1	-				7
BL1034	39.2	51.6			39.0	10.0	4.7				5
BL1044/AL1244	44.2	56.6	11.09	4.0	44.0	10.0	9.4	11.20	22.0	15.0	5
BL1046	54.2	66.6			54.0	15.1	9.4				7
BL1066/AL1266	63.2	75.6			63.0	10.0	9.4				5
BL1088/AL1288	79.9	92.4			79.7	10.0	9.4				5
BL1223	34.5	46.9			34.3	17.7	-				8
BL1234	46.2	58.6			46.0	11.8	5.5				5
BL1244/AL1444	50.0	64.4	12.70	4.0	49.0	11.8	11.0	12.80	26.0	19.0	5
BL1246	63.5	76.0			63.3	17.7	11.0				8
BL1266/AL1466	75.3	87.8			75.1	11.8	11.0				5
BL1288/AL1488	98.6	111.1			98.4	11.8	11.0				5
BL1423	38.7	51.1			38.5	20.1	-				10
BL1434	52.2	64.6			52.0	13.4	6.3				6
BL1444	58.6	71.1	14.27	4.0	58.4	13.4	12.6	14.35	31.0	22.0	10
BL1446	71.7	84.2			71.5	20.1	12.6				10
BL1466	85.1	97.7			84.9	13.4	12.6				10
BL1623	43.1	60.6			42.8	22.5	-				10
BL1634	58.0	75.5			57.7	15.0	7.1				7
BL1644	65.7	82.9	17.46	5.0	65.4	15.0	14.2	17.50	34.0	25.0	7
BL1646	79.9	97.4			79.6	22.5	14.2				10
BL1666	94.6	112.2			94.3	15.0	14.2				7
BL1688	124.0	141.6			123.7	15.0	14.2				7

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.



# Timber Chain

## Welded Steel Mill Chain



Chain number	Pitch		Average Ultimate Strength lbf	Max. Working Load lbf	Links Per Foot	Average Weight lb/ft	Dimensions						
	mm	Inches					CE	X	D	T	F	H	A
WR78	66.27	2.609	20000	3000	46	4.0	76.20	50.80	12.70	6.35	28.58	22.23	28.58
WH78	66.27	2.609	30000	3500	46	4.0	76.20	50.80	12.70	6.35	28.58	22.23	28.58
WR82	78.11	3.075	25000	3800	39	4.8	82.55	57.15	14.29	6.35	31.75	26.99	9.00
WH82	78.11	3.075	36000	4400	39	4.8	82.55	57.15	14.29	6.35	31.75	26.99	8.50
WR124	101.60	4.000	45500	6200	30	8.3	107.95	69.85	19.05	9.53	38.1	34.93	38.10
WH124	101.60	4.000	67000	7200	30	8.3	107.95	69.85	19.05	9.53	38.1	34.93	38.10
WH124HD Spc	103.20	4.063	119000	10500	30	14.7	120.65	76.20	25.40	12.7	50.8	44.45	41.28
WR111PLUS	120.90	4.760	52000	7500	26	9.5	123.83	85.73	19.05	9.53	44.45	34.93	60.33
WH111PLUS	120.90	4.760	77000	8850	26	9.5	123.83	85.73	19.05	9.53	44.45	34.93	60.33
WR110	152.40	6.000	45500	6750	20	7.2	117.48	76.20	19.05	9.53	38.1	34.93	47.63
WH110	152.40	6.000	67000	7875	20	7.2	117.48	76.20	19.05	9.53	38.1	34.93	47.63
WR106	152.40	6.000	45500	6200	20	7.0	107.95	69.85	19.05	9.53	38.1	34.93	41.28
WH106	152.40	6.000	67000	7200	20	7.0	107.95	69.85	19.05	9.53	38.1	34.93	41.28
WR132	153.67	6.050	78000	13000	20	14.2	158.75	111.13	25.40	12.7	50.8	44.45	73.03
WH132	153.67	6.050	111000	15300	20	14.2	158.75	111.13	25.40	12.7	50.8	44.45	73.03
WH132D	153.67	6.050	139500	16700	20	16.4	171.45	117.48	25.40	15.88	50.8	44.45	73.03
WR150	153.67	6.050	78000	13000	20	16.8	158.75	111.13	25.40	12.7	63.5	44.45	73.03
WH150	153.67	6.050	112000	15300	20	16.8	158.75	111.13	25.40	12.7	63.5	44.45	73.03
WH150XHD	153.67	6.050	151000	18200	20	19.7	171.45	117.48	28.58	15.88	63.5	44.45	73.03
WH155	153.67	6.050	145000	17750	20	20.0	168.28	114.30	28.58	14.29	63.5	44.45	73.03
WH159	155.58	6.125	230000	20250	20	26.5	168.28	117.48	31.75	15.88	76.2	50.8	73.03

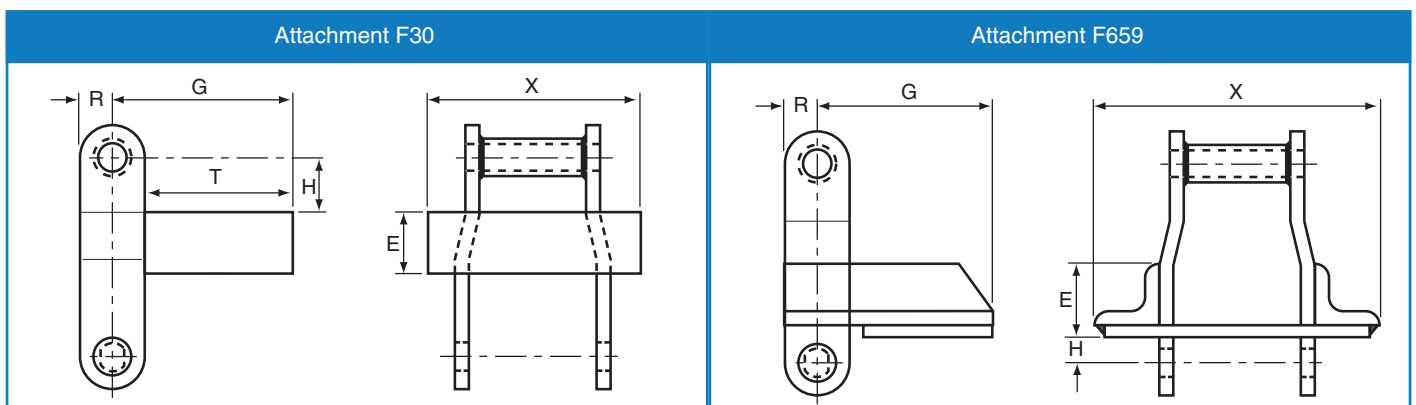
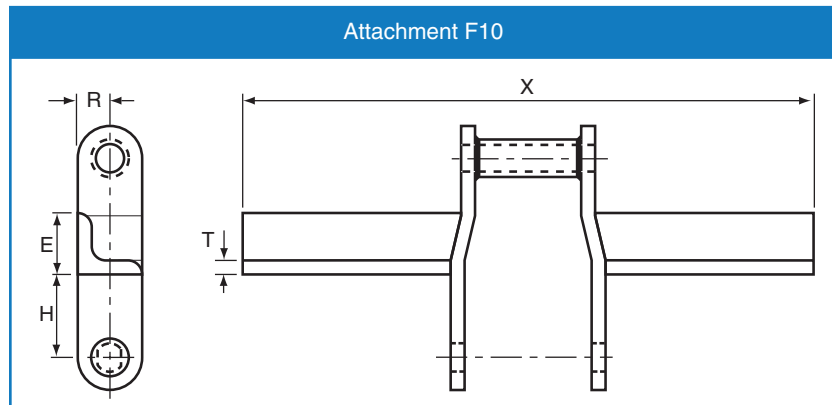
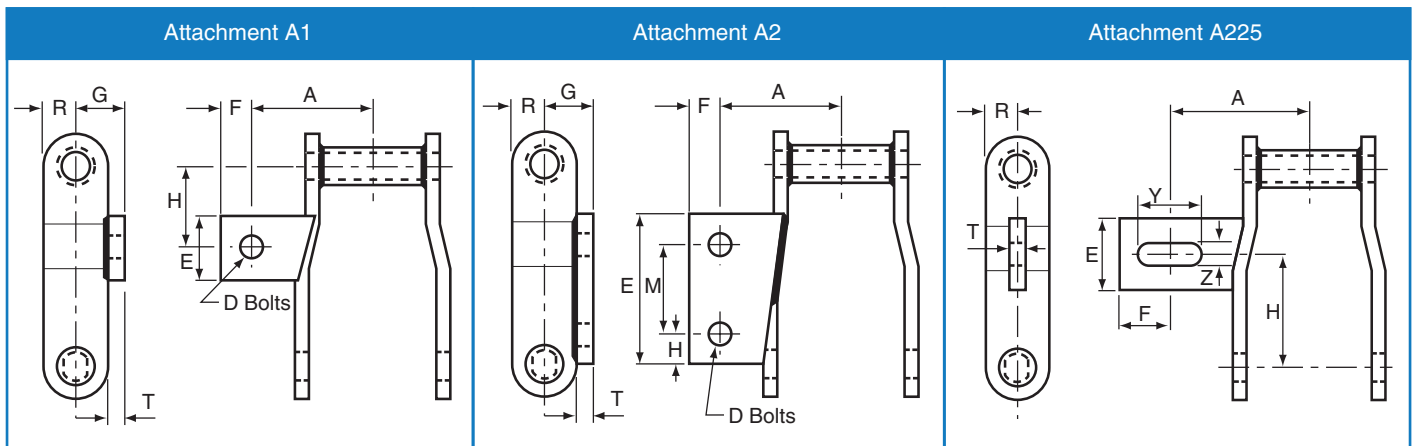
WR - Welded steel chain - through hardened pins and case hardened bushes

WH - Weld steel chain - all components fully heat treated

# Timber Chain

## Welded Steel Chain Attachments (Offset Side Bar)

Attachment number	Chain number	Weight lb/ft	Dimensions												
			A	D	E	F	G	H	K	M	R	T	X	Y	Z
A1	WR/WH78	4.97	50.80	9.58	31.75	12.70	20.57	31.75	-	-	14.27	6.35	-	-	-
A1	WR/WH82	6.50	54.10	9.58	44.45	15.88	23.88	38.10	-	-	15.88	6.35	-	-	-
A1	WR/WH124	8.40	66.68	15.88	50.80	15.88	28.70	45.97	-	-	19.05	9.53	-	-	-
A2	WR/WH78	4.50	50.80	9.58	54.10	12.70	19.81	10.41	-	28.70	14.27	6.35	-	-	-
A2	WR/WH82	6.00	54.10	9.53	57.15	15.80	23.88	12.70	-	31.75	15.88	7.92	-	-	-
A2	WR/WH124	10.00	66.68	9.58	76.20	22.23	28.70	22.23	-	49.28	19.05	9.53	-	-	-
A2	WR/WH132	17.00	95.25	12.70	101.60	19.05	38.10	41.28	-	69.85	25.40	12.70	-	-	-
A225	WR/WH124	8.90	101.60	-	50.80	49.28	-	50.80	-	-	19.05	12.70	-	57.15	22.23
F10	WR/WH82	4.80	-	-	31.75	-	-	23.80	-	-	15.88	6.35	260.35	-	-
F30	WR/WH78	9.90	-	-	25.40	-	68.33	20.57	-	-	14.27	54.10	76.20	-	-
F659	WR/WH124	13.10	-	-	44.45	-	120.65	12.70	-	-	19.05	-	167.39	-	-

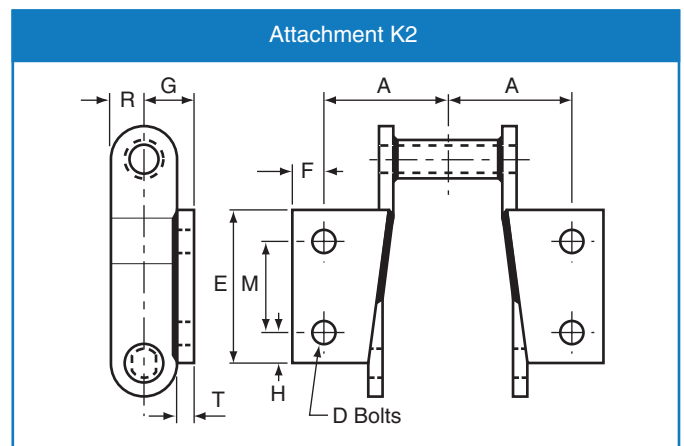
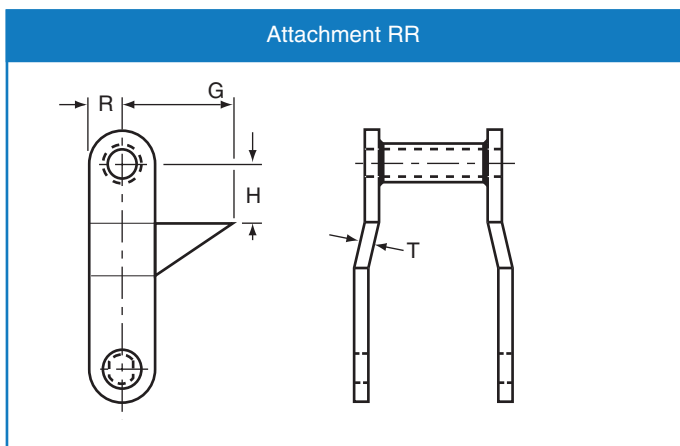
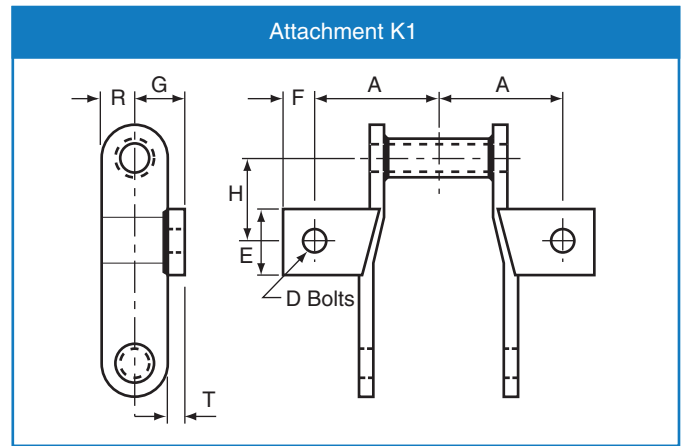
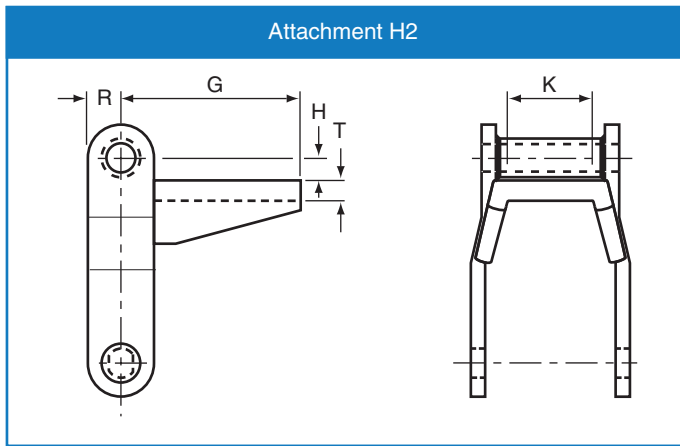


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# Timber Chain

## Welded Steel Chain Attachments (Offset Side Bar)

Attachment number	Chain number	Weight lb/ft	Dimensions												
			A	D	E	F	G	H	K	M	R	T	X	Y	Z
H2	WR/WH78	4.75	-	-	-	-	90.42	7.87	25.40	-	14.22	6.35	-	-	-
H2	WR/WH82	9.00	-	-	-	-	91.95	15.75	28.70	-	15.75	4.83	-	-	-
K1	WR/WH78	4.97	50.80	9.65	31.75	12.70	20.57	31.75	-	-	14.22	6.35	-	-	-
K1	WR/WH82	6.50	54.10	9.65	44.45	15.75	23.88	38.10	-	-	15.75	6.35	-	-	-
K1	WR/WH124	11.70	66.55	15.75	50.80	15.75	28.70	45.97	-	-	19.05	9.65	-	-	-
K2	WR/WH78	5.00	50.80	9.65	54.10	12.70	19.81	10.41	-	28.70	14.22	6.35	-	-	-
K2	WR/WH82	8.00	54.10	9.65	57.15	15.75	23.88	12.70	-	31.75	15.75	7.87	-	-	-
K2	WR/WH124	12.00	66.55	9.65	76.20	22.35	28.70	22.35	-	49.28	19.05	9.65	-	-	-
K2	WR/WH132	19.00	95.25	12.70	101.60	19.05	38.10	41.15	-	69.85	25.40	12.70	-	-	-
RR	WR/WH78	4.70	-	-	-	-	38.10	19.05	-	-	14.22	6.35	-	-	-
RR	WR/WH82	7.00	-	-	-	-	44.45	20.57	-	-	15.75	6.35	-	-	-
RR	WR/WH124	10.00	-	-	-	-	47.75	38.10	-	-	19.05	9.65	-	-	-





# Timber Chain

## Offset Side Bar Roller Chain

Offset Side Bar Roller Chain

Material Spec.				
	Side Bar	Pin	Bushing	Roller
S0-578	CH	CH	CC	CC
M0-88	C	CH	CC	CC
LXS-882	CH	AH	AC	CH
M0H-578	CH	CH	CC	CH

Chain number	Pitch		Average Ultimate Strength lbf	Max. Working Load lbf	Links Per Foot	Average Weight lb/ft	Dimensions						
	inch	mm					A	B	C	D	F	G	K
S0-578	2.609	66.269	19,000	2,200	4.6	2.7	22.23	26.99	9.53	52.78	25.40	3.97	36.51
M0-88	2.609	66.269	20,000	2,400	4.6	3.8	22.23	26.99	11.11	59.53	28.58	6.35	41.28
LXS-882	2.609	66.269	29,000	2,800	4.6	3.9	22.23	28.58	11.11	59.53	28.58	6.35	42.86
M0H-578	2.609	66.269	19,000	2,200	4.6	2.7	22.23	26.99	9.53	52.78	25.40	5.56	36.12

## Straight Side Bar Roller Chain

Straight Side Bar Roller Chain

Material Spec.				
	Side Bar	Pin	Bushing	Roller
MS-88	C	CH	CC	CC
81-X	CH	AC	AC	CH
81-XH	CH	AC	AC	CH
81-XHS	CH	AC	AC	CH
SS-188	CH	AC	CC	CC

Chain number	Pitch		Average Ultimate Strength lbf	Max. Working Load lbf	Links Per Foot	Average Weight lb/ft	Dimensions							Side Plate Thickness (G)	
	inch	mm					A	B	C	D	F	K	Chain	Conn	
MS-88	2.609	66.269	26,000	2,500	4.6	3.8	22.23	26.99	11.11	59.53	28.58	41.28	6.35	6.35	
81-X	2.609	66.269	22,000	2,200	4.6	2.6	23.02	26.99	11.11	47.23	28.58	34.93	3.97	3.97	
81-XH	2.609	66.269	41,800	5,000	4.6	3.9	23.02	26.99	11.11	59.18	31.75	42.86	7.94	5.56	
81-XHS	2.609	66.269	41,800	5,000	4.6	4.2	23.02	26.99	11.11	63.50	32.94	42.86	7.94	7.94	
SS-188	2.609	66.269	26,000	2,500	4.6	3.8	22.23	26.99	11.11	59.53	28.58	41.28	6.35	6.35	

C: Carbon Steel  
CC: Carbon Steel Case Hardened

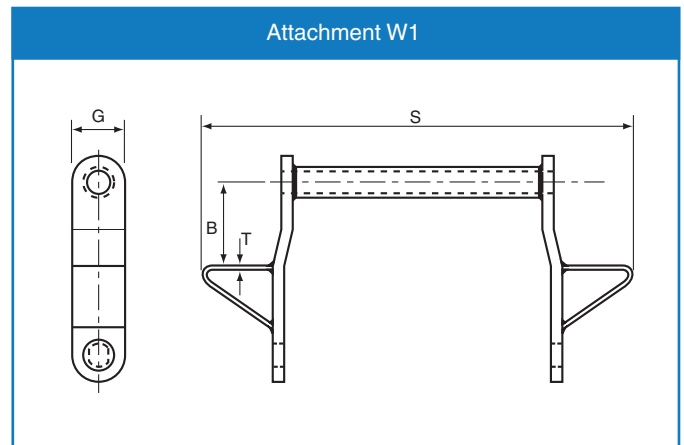
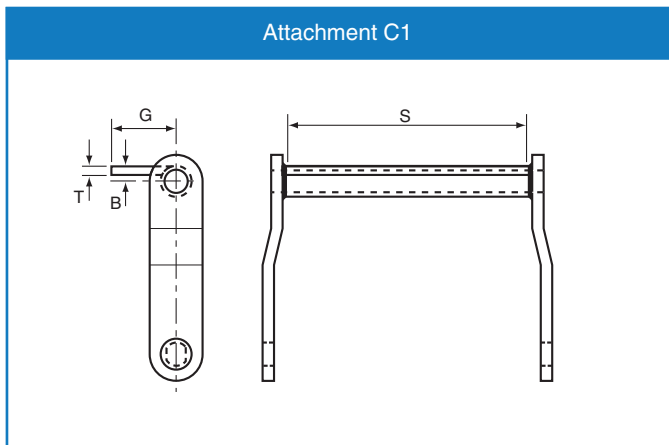
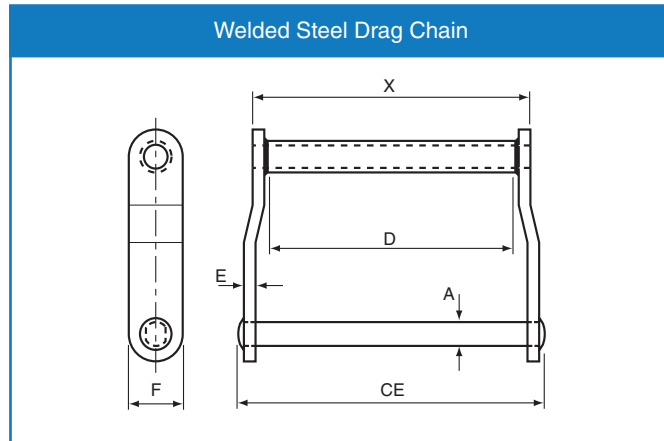
AC: Alloy Steel Case Hardened  
CH: Carbon Steel Heat Treated

AH: Alloy Steel Heat Treated

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# Timber Chain

## Welded Steel Drag Chain



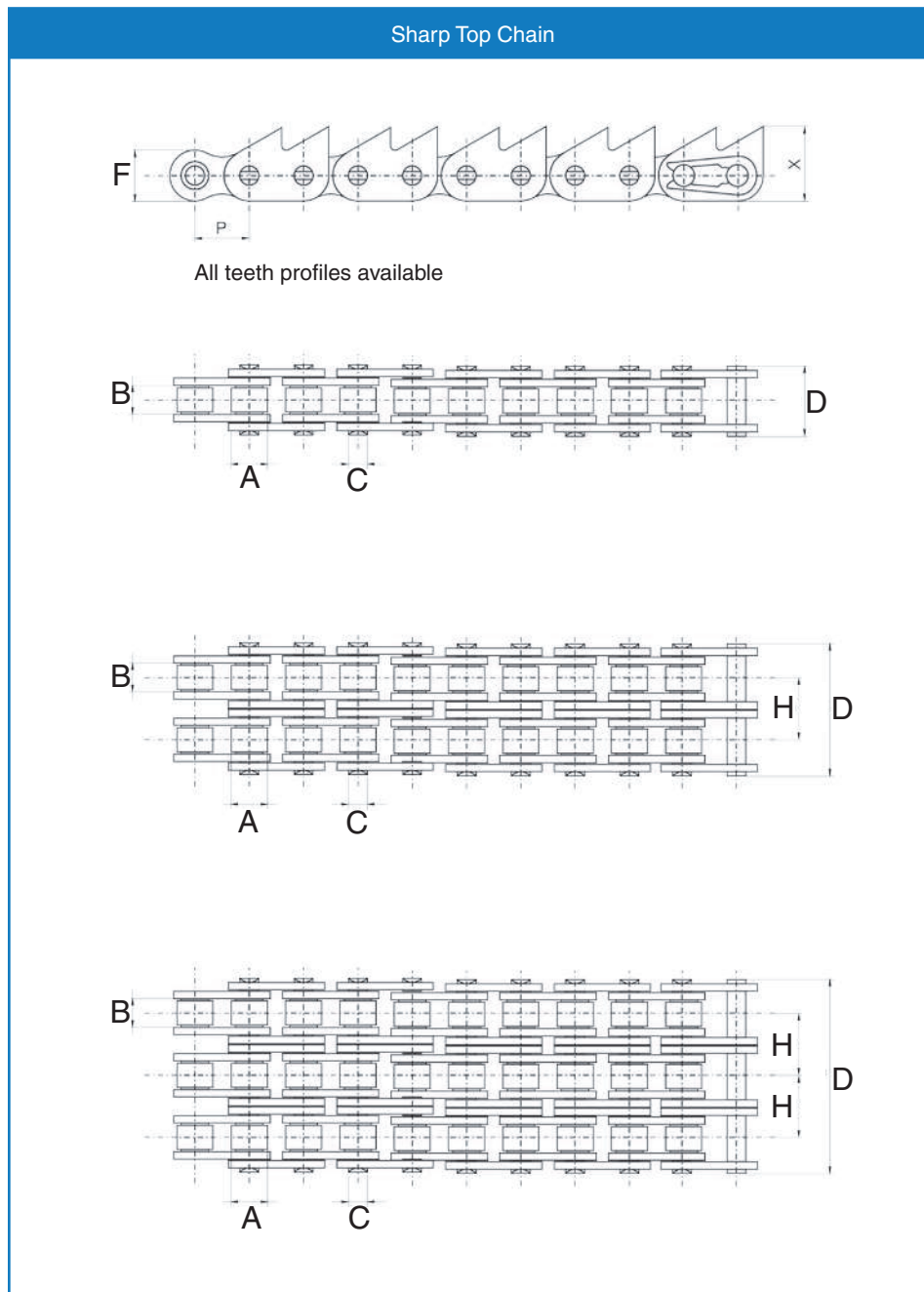
Chain number	Pitch		Average Ultimate Strength lbf	Max. Working Load lbf	Links Per Foot	Average Weight lb/ft	Dimensions						
	mm	Inches					CE	X	D	T	F	H	A
WDH102	127.00	5.000	60000	10000	24	11.8	234.95	196.85	19.05	9.53	38.1	/	161.93
WDH104	152.40	6.000	60000	10000	20	8.7	174.63	136.53	19.05	9.53	38.1	/	104.78
WD110	152.40	6.000	51000	8500	20	12.0	301.63	263.53	19.05	9.53	38.1	/	228.60
WDH110	152.40	6.000	60000	10000	20	12.0	301.63	263.53	19.05	9.53	38.1	/	228.60
WD113	152.40	6.000	55000	9200	20	15.0	317.50	269.88	22.23	12.7	38.1	/	228.60
WDH113	152.40	6.000	70000	11700	20	15.0	317.50	269.88	22.23	12.7	38.1	/	228.60
WD120	152.40	6.000	70000	11700	20	19.4	304.80	257.18	22.23	12.7	50.8	/	215.90
WDH120	152.40	6.000	90000	15000	20	19.4	304.80	257.18	22.23	12.7	50.8	/	215.90
WD112	203.20	8.000	51000	8500	15	9.8	301.63	263.53	19.05	9.53	38.1	/	228.60
WDH112	203.20	8.000	60000	10000	15	9.8	301.63	263.53	19.05	9.53	38.1	/	228.60
WD116	203.20	8.000	55000	9200	15	14.5	390.53	358.78	19.05	9.53	44.45	/	323.85
WDH116	203.20	8.000	69000	11500	15	14.5	390.53	358.78	19.05	9.53	44.45	/	323.85
WD118	203.20	8.000	70000	11700	15	19.8	425.45	377.83	22.23	12.7	50.8	/	336.55
WDH118	203.20	8.000	90000	15000	15	19.8	425.45	377.83	22.23	12.7	50.8	/	336.55
WD122	203.20	8.000	70000	11700	15	16.0	304.80	257.18	22.23	12.7	50.8	/	215.90
WDH122	203.20	8.000	90000	15000	15	16.0	304.80	257.18	22.23	12.7	50.8	/	215.90
WD480	203.20	8.000	70000	11700	15	18.1	371.48	323.85	22.23	12.7	50.8	/	279.40
WDH480	203.20	8.000	90000	15000	15	18.1	371.48	323.85	22.23	12.7	50.8	/	279.40
WDH580	203.20	8.000	123000	20500	15	19.4	371.48	323.85	25.40	12.7	50.8	/	279.40
WDH680	203.20	8.000	134000	22300	15	21.4	384.18	330.20	25.40	15.88	50.8	/	279.40

WD - Welded steel chain with rough-hardened pins and case hardened bushes

WDH - Welded steel chain - all components fully heat treated

# Timber Chain

## Sharp Top Chain

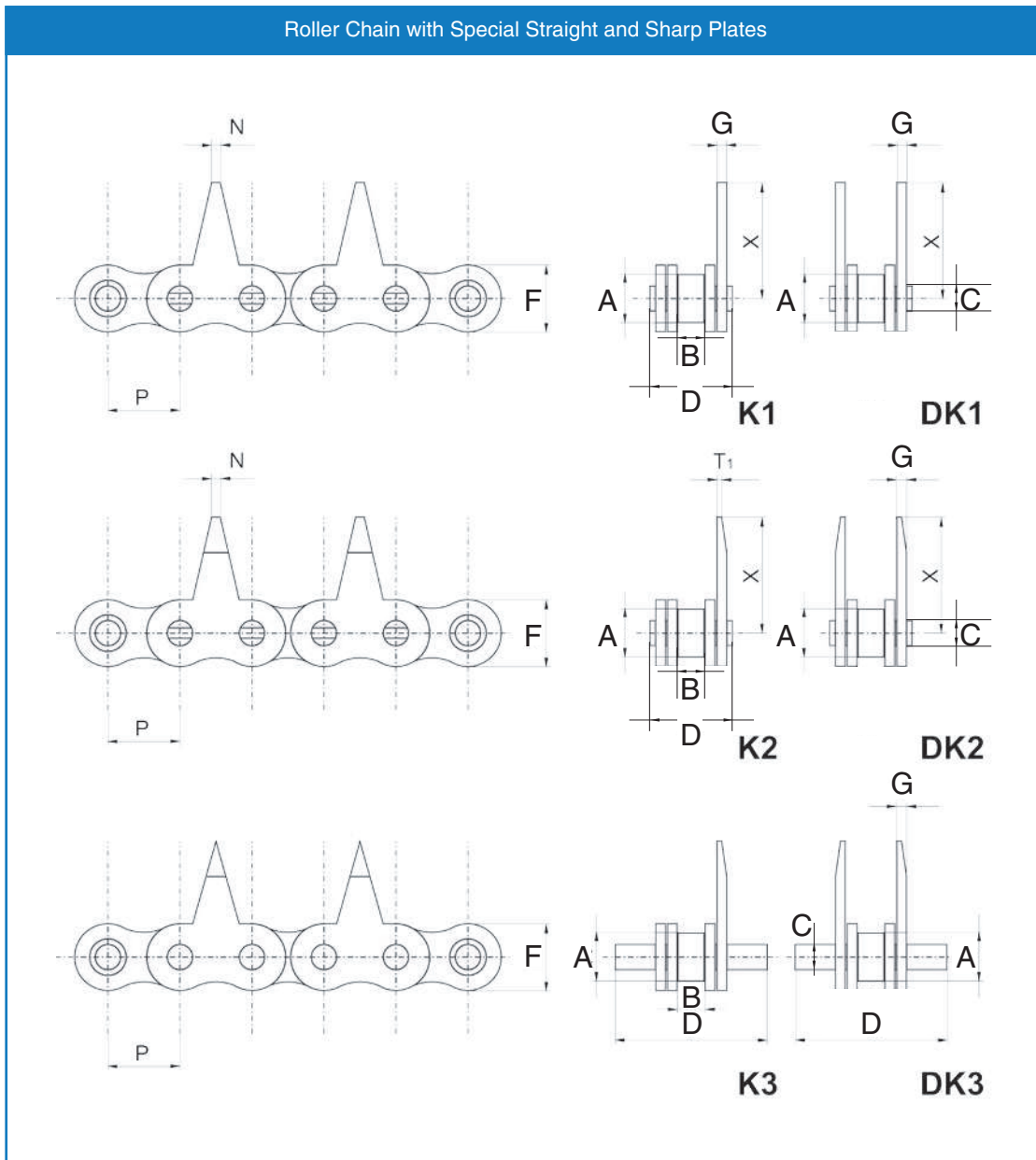


Chain number	Pitch P	Roller diameter A	With between inner plates B	Pin diameter C	Pin length D	Side Plate Height F	Transverse pitch H	Tooth height X	Tensile strength kN
16B-1Z	25.4	15.88	17.02	8.28	36.1	21.0	-	28	58
16B-2Z	25.4	15.88	17.02	8.28	68.0	21.0	31.88	28	110
16B-3Z	25.4	15.88	17.02	8.28	99.9	21.0	31.88	28	165

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.

# Timber Chain

## Sharp Top Chain



Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Side plate height	Plate thickness	Pin length	Attachment height	Tensile strength		
	P	A	B	C	F	G	L	T1	X	N	kN
08 B/K1	12.70	8.51	7.75	4.45	10.80	1.60	16.70	-	14.5	1.2	18.2
08 B/K2	12.70	8.51	7.75	4.45	10.80	1.60	16.70	0.3	14.5	1.2	18.2
12 B/K3	19.05	12.07	11.68	5.71	16.13	1.85	29.35	-	14.5	-	29.5

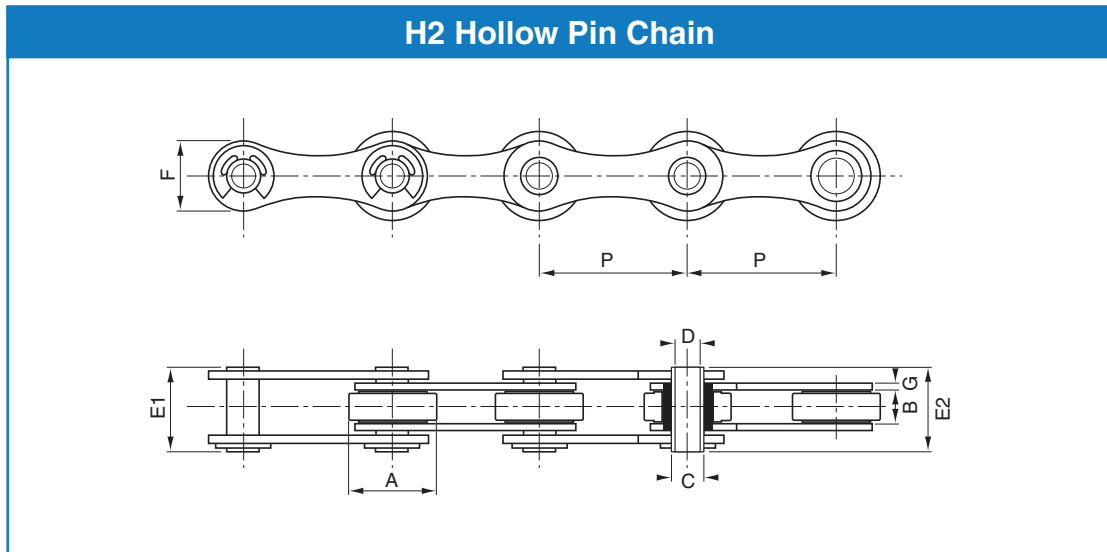
# Note

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# Food Industry Chain

## H2 Series



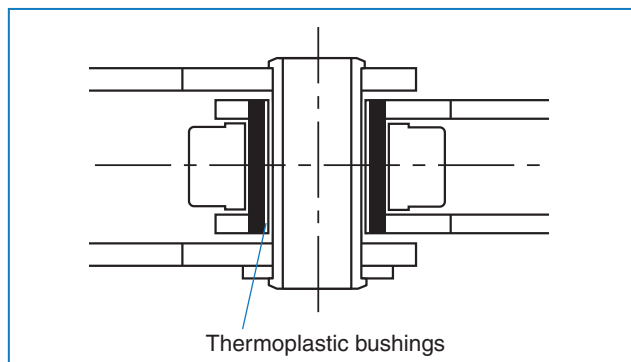
Challenge chain number	FK chain number	Pitch	Pitch	Roller diameter	Width	Pin outside diameter	Pin inside diameter	Pin Length		Side plate height	Plate thickness	Tensile strength	Weight (Type C3)
		inches	mm		between inner plates			E1	E2				
		P	P	A	B	C	D			F	G		
<b>Steel</b>													
CH2-HP	FK1650HP	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	55	2.15
CH2-HP-D	FK1650HP-D	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	55	1.55
<b>Zinc Plated</b>													
CH2-HP-ZP	FK1650HPZP	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	55	2.15
CH2-HP-ZP-D	FK1650HPZP-D	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	55	1.55
<b>Zinc Plated and Stainless</b>													
CH2-HP-ZPSS	FK1650HPZS400	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	55	2.15
CH2-HP-ZPSS-D	FK1650HPZS400-D	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	55	1.55
<b>Stainless</b>													
CH2-HP-SS	FK1650HPSS	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	32	2.15
CH2-HP-SS-D	FK1650HPSS-D	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	32	1.55
CH2-HP-SS400	FK1650HPSS400	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	42	2.15
CH2-HP-SS400-D	FK1650HPSS400-D	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	42	1.55
<b>Low Maintenance</b>													
CH2-HP-ZP-TPB	FK1650HPZPK	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	55	2.15
CH2-HP-ZP-TPB-D	FK1650HPZPK-D	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	55	1.55
CH2-HP-SS-TPB	FK1650HPSSK	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	32	2.15
CH2-HP-SS-TPB-D	FK1650HPSSK-D	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	32	1.55
CH2-HP-SS400-TPB	FK1650HPSSK400	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	42	2.15
CH2-HP-SS400-TPB-D	FK1650HPSSK400-D	2.0	50.8	30	10.5	11.4	8.2	27.5	28.8	26	3.1	42	1.55

## Food Industry Chain

H2 Hollow pin chains are widely used in many conveyor applications such as agriculture, food and packaging. H2 chain is manufactured to the highest standard for maximum performance. The chain-lengths are matched (paired) and clearly labeled.



**Low maintenance  
CH2 Series**  
with Thermoplastic  
bushings



**Versions:**

- Steel
- Zinc
- Stainless
- Stainless 400
- PA6 roller
- Low maintenance

Challenge chain number	Description	Material Requirement				
		Hollow pin	Bush	Liner bush	Roller	Plate
<b>Steel</b> CH2-HP CH2-HP-D	Steel steel roller Steel plastic roller	ST-CH ST-CH	ST-CH ST-CH		ST-CH PA6	ST-HT ST-HT
<b>Zinc Plated</b> CH2-HP-ZP CH2-HP-ZP-D	Steel steel roller Zinc Plated Steel plastic roller Zinc Plated	ST-CH-ZP ST-CH-ZP	ST-CH-ZP ST-CH-ZP		ST-CH-ZP PA6	ST-HT-ZP ST-HT-ZP
<b>Zinc Plated and SS</b> CH2-HP-ZPSS CH2-HP-ZPSS-D	Stainless steel Stainless steel plastic roller	SS-400-HT SS-400-HT	SS-400-HT SS-400-HT		ST-CH-ZP PA6	ST-HT-ZP ST-HT-ZP
<b>Stainless</b> CH2-HP-SS CH2-HP-SS-D CH2-HP-SS400 CH2-HP-SS400-D	Stainless steel 400 series Stainless steel 400 series plastic roller Stainless steel 400 series Stainless steel 400 series plastic roller	SS-304 SS-304 SS-400-HT SS-400-HT	SS-304 SS-304 SS-400-HT SS-400-HT		SS-304 PA6 SS-304 PA6	SS-304 SS-304 SS-304 SS-304
<b>Low Maintenance</b> CH2-HP-ZP-TPB CH2-HP-ZP-TPB-D CH2-HP-SS-TPB CH2-HP-SS-TPB-D CH2-HP-SS400-TPB CH2-HP-SS400-TPB-D	Steel steel roller TPB Zinc Plated Steel plastic roller TPB Zinc Plated Stainless steel TPB Zinc Plated Stainless steel plastic roller TPB Zinc Plated Stainless steel 400 series TPB Zinc Plated Stainless steel 400 series plastic roller TPB Zinc Plated	ST-CH-ZP ST-CH-ZP SS-304 SS-304 SS-400-HT SS-400-HT	ST-CH-ZP ST-CH-ZP SS-304 SS-304 SS-400-HT SS-400-HT	TPB TPB TPB TPB TPB TPB	ST-CH-ZP PA6 SS-304 PA6 SS-304 PA6	ST-HT-ZP ST-HT-ZP SS-304 SS-304 SS-304 SS-304

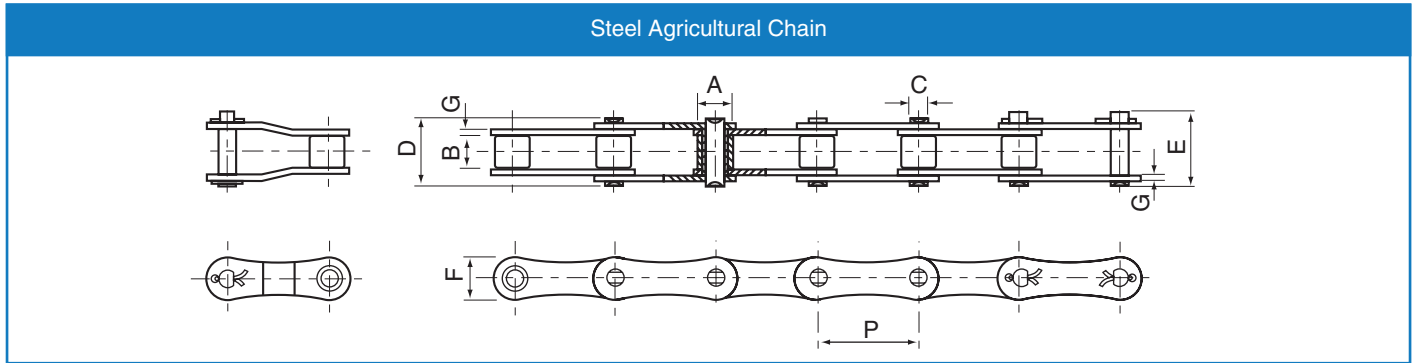
<b>Key</b>	<b>ST-CH</b> - Steel, case hardened	<b>SS-304</b> - Stainless steel 304
	<b>ST-CH-ZP</b> - Steel, case hardened, zinc plated	<b>SS-400-HT</b> - Stainless steel 400 series, through hardened
	<b>ST-HT</b> - Steel, through hardened	<b>PA6</b> - Nylon PA6
	<b>ST-HT-ZP</b> - Steel, through hardened, zinc plated	<b>TPB</b> - Thermoplastic bushing

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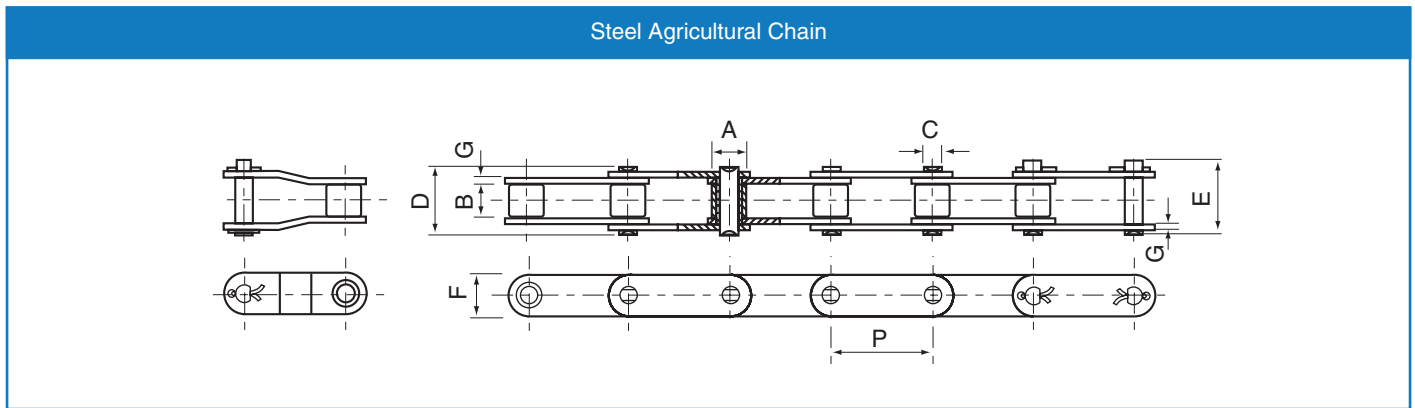
# Agricultural Chain

## Steel Agricultural Chain



Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Side plate height	Plate thickness	Minimum tensile strength	Average tensile strength	Weight
	P	A	B	C	D	E	F	G	kN	kN	kg/m
S32	29.21	11.43	15.88	4.45	26.70	28.80	13.20	1.80	8.00	21.60	0.86
S42	34.93	14.27	19.05	7.00	34.30	37.00	19.80	2.80	27.00	50.80	1.60
S45	41.40	15.24	22.23	5.72	37.70	40.40	17.30	2.80	18.00	36.10	1.66
S52	38.10	15.24	22.23	5.72	37.70	40.40	17.30	2.80	18.00	36.10	1.68
S55	41.40	17.78	22.23	5.72	37.70	40.40	17.30	2.80	18.00	36.10	1.80
S55X	41.40	15.88	20.00	8.28	38.00	40.70	20.00	3.00	50.00	55.00	2.20
S55R	41.40	17.78	22.23	8.90	41.00	44.00	22.40	3.50	45.00	73.10	2.49
S62	41.91	19.05	25.40	5.72	40.30	43.00	17.30	2.50	27.00	36.10	1.87
S77	58.34	18.26	22.23	8.90	43.20	46.40	26.20	4.00	45.00	73.10	2.65
S88	66.27	22.86	28.58	8.90	49.80	53.00	26.20	4.00	45.00	73.10	3.25

## Steel Agricultural Chain



Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Side plate height	Plate thickness	Minimum tensile strength	Average tensile strength	Weight
	P	A	B	C	D	E	F	G	kN	kN	kg/m
38.4	38.400	15.88	19.05	6.92	33.80	37.00	17.30	2.50	25.00	33.00	1.65
38.4-V	38.400	15.88	18.00	6.92	33.80	37.00	17.30	3.00	31.50	40.00	1.74
38.4-VB	38.400	15.88	19.05	8.27	36.20	39.40	20.50	3.00	45.00	50.00	2.12
CA550	41.400	16.87	19.81	7.19	35.00	38.00	19.30	2.80	39.10	51.20	1.94
CA555	41.400	16.87	12.70	7.19	29.70	33.10	19.30	3.10	39.10	56.00	1.83
CA557	41.400	17.78	20.24	8.00	37.40	40.60	23.10	3.10	55.61	74.30	2.20
CA620	42.010	17.91	24.51	7.19	41.80	45.20	20.20	3.25	39.10	55.10	2.35
CA650	50.800	25.00	27.80	9.53	40.40	44.70	25.00	4.00	80.00	95.50	3.49
CA2060H	38.100	11.91	12.70	5.94	29.74	31.72	17.45	3.25	31.28	40.50	1.50
CA2063H	38.100	11.89	12.70	5.94	29.40	34.20	19.30	3.25	31.28	40.50	1.65

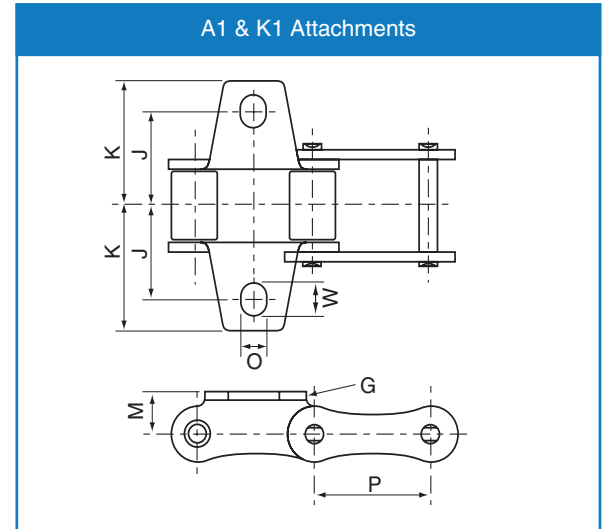
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# Agricultural Chain Attachments

## S Series A1 & K1 Attachments

Chain number	P	G	J	K	M	O	W
S32	29.21	1.80	21.50	30.50	8.60	5.30	6.90
S42	34.93	2.80	27.00	37.45	14.00	8.30	11.50
S45	41.40	2.80	27.00	37.50	11.40	8.50	11.70
S52	38.10	2.80	29.40	39.00	11.40	8.30	9.90
S55	41.40	2.80	27.00	37.50	11.40	8.50	11.70
S62	41.91	2.50	33.40	47.70	11.40	6.50	13.00
S77	58.34	4.00	38.10	50.80	20.80	8.40	11.70
S88	66.27	4.00	48.50	59.70	20.80	8.40	10.00

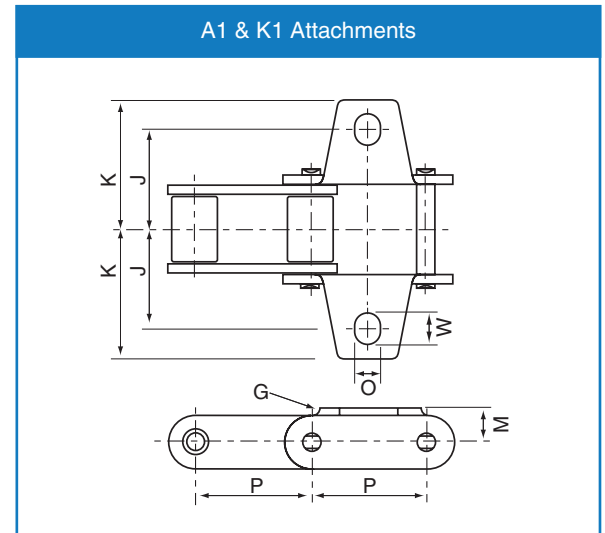
**A1 = Attachment one side only**  
**K1 = Attachment both sides**



## 38.4 & CA Series A1 & K1 Attachments

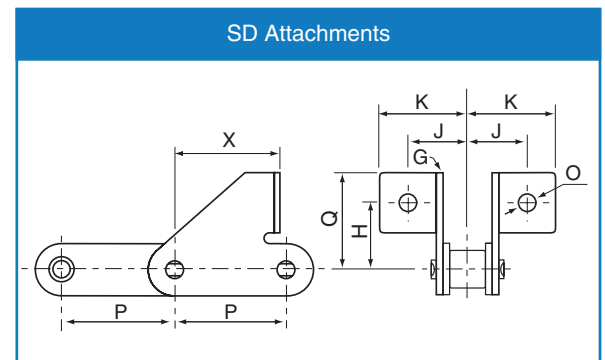
Chain number	P	G	J	K	M	O	W
38.4	38.40	2.50	29.00	41.50	15.40	9.00	
38.4-V	38.40	3.00	28.75	41.00	15.40	9.00	
38.4-VB	38.40	3.00	29.00	43.50	14.00	10.50	
CA550	41.40	2.80	26.25	38.10	12.70	8.30	10.00
CA557	41.40	3.10	25.40	36.00	15.90	8.70	

**A1 = Attachment one side only**  
**K1 = Attachment both sides**



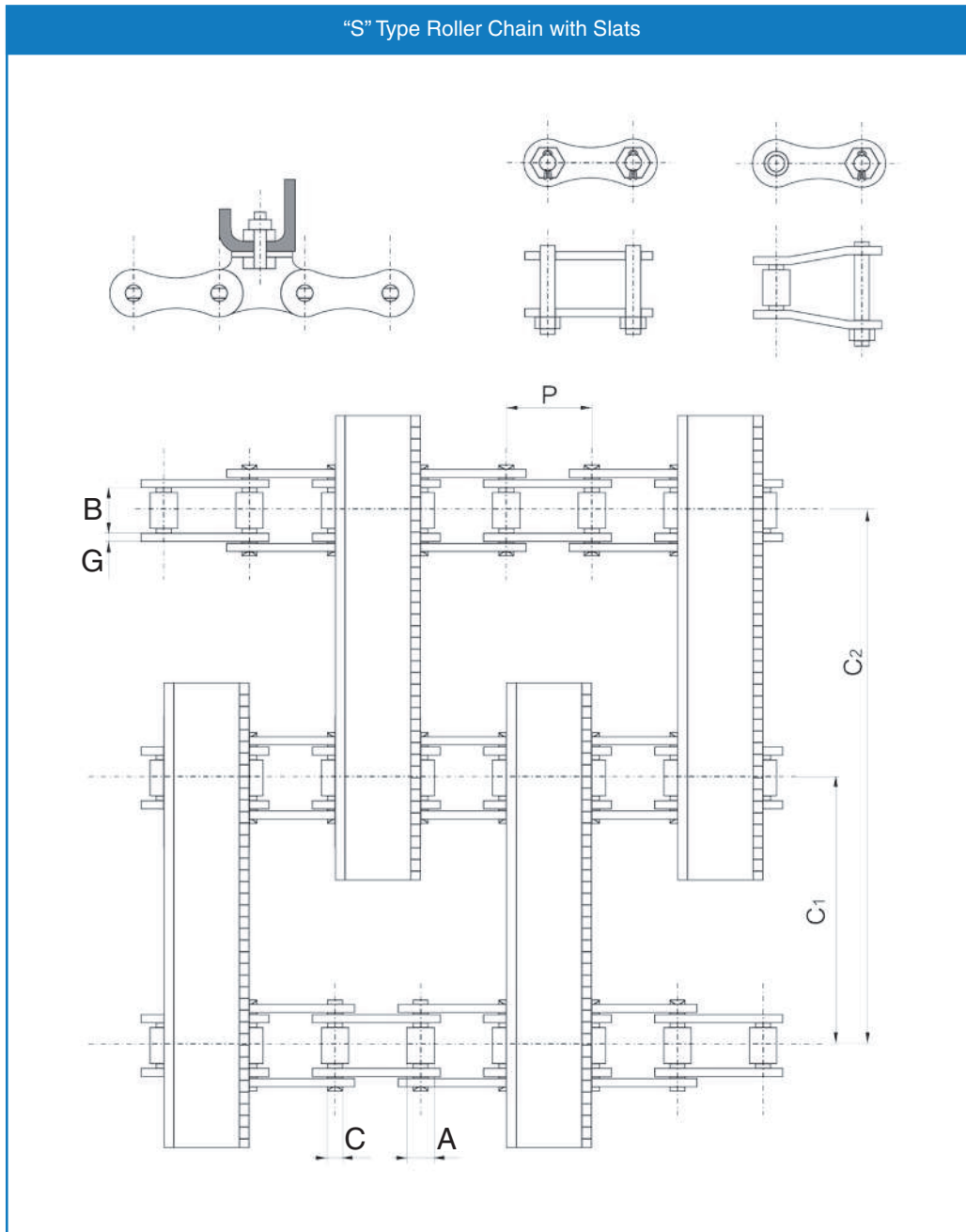
## S, 38.4 & CA Series SD Attachments

Chain number	P	G	Q	J	K	H	X	O
S45	41.40	2.80	26.00	29.00	44.25	16.00	24.00	6.40
S55	41.40	2.80	26.00	29.00	44.25	16.00	24.00	6.40
38.4	38.40	2.50	37.00	26.00	35.50	24.00	38.40	8.40
38.4-VB	38.40	3.00	34.00	26.00	35.50	25.00	32.40	6.50
CA550	41.40	2.80	42.90	23.80	34.10	31.00	36.90	8.70



# Agricultural Chain Attachments

## “S” Type Roller Chain with Slats

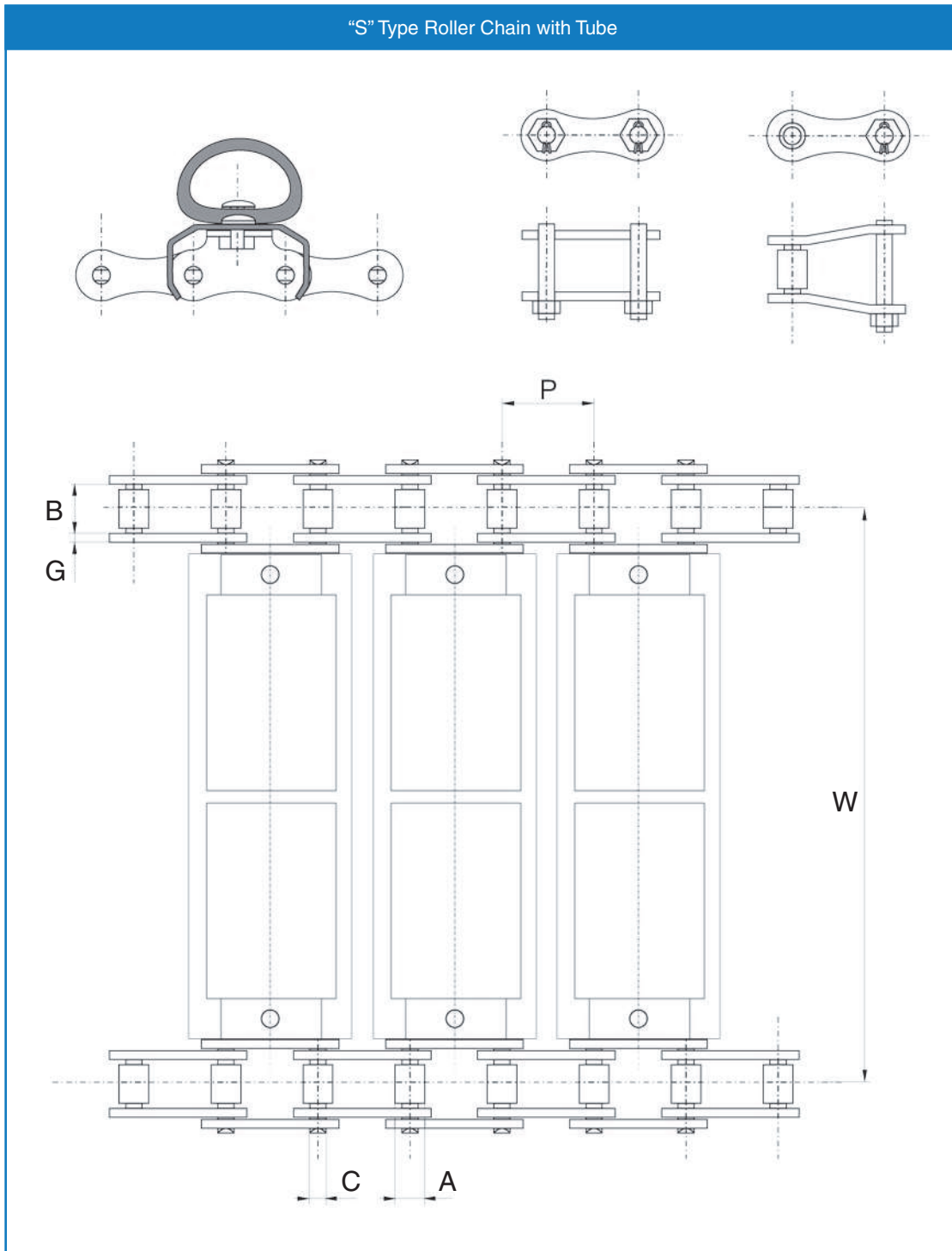


Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Side plate thickness			Weight
	P	A	B	C	G	C1	C2	kg/m
S55X/TM	41.40	15.88	20.00	8.28	3	500	1000	24

**Note:** Attachment slat dimensions can vary according to customer requirements - Please provide required dimensions on enquiry

# Agricultural Chain Attachments

## “S” Type Roller Chain with Tube

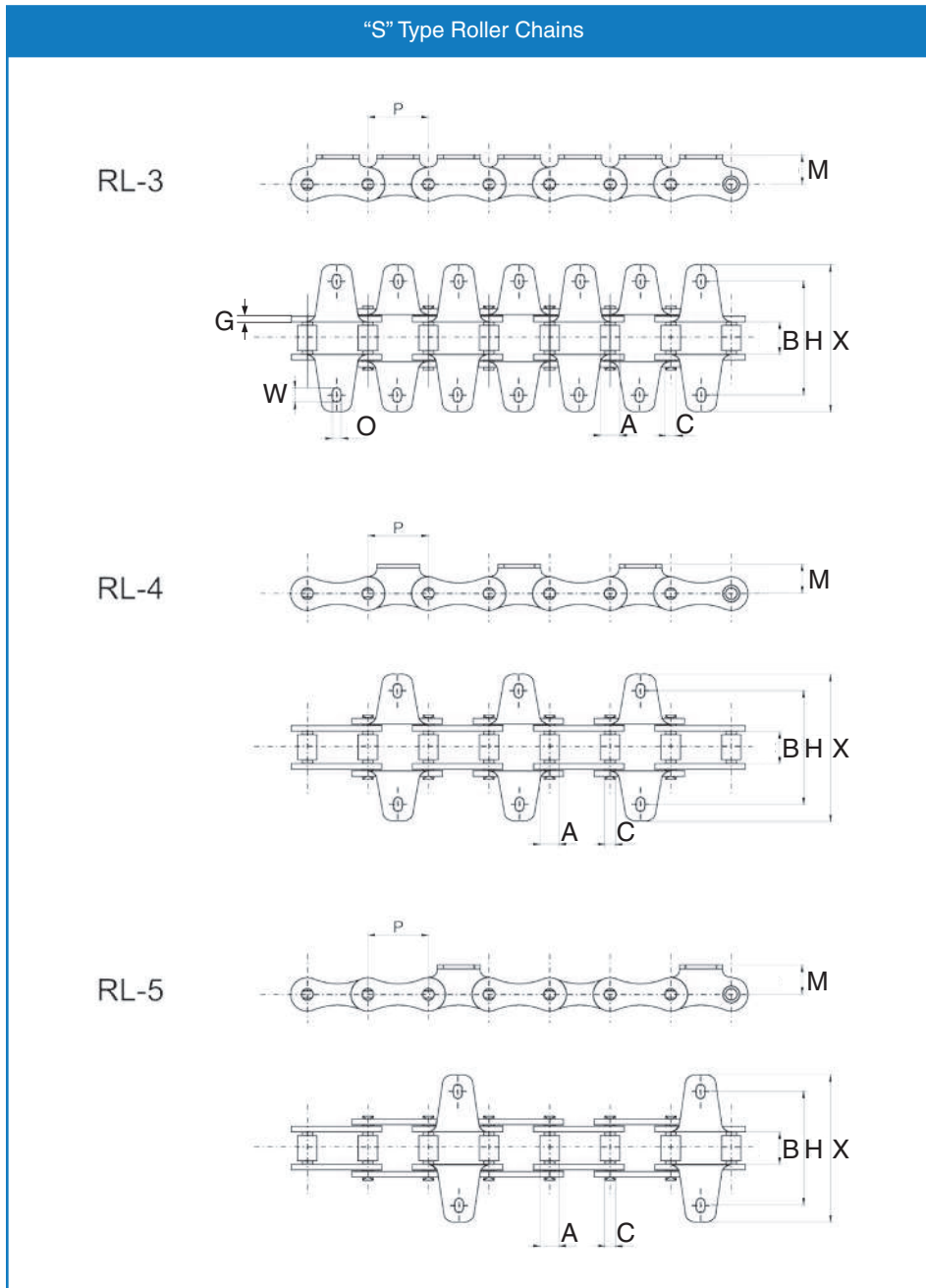


Chain Number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Side plate thickness	
	P	A	B	C	G	W
S55X/TK-1	41.40	15.88	15.88	8.28	3.0	1372

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# Agricultural Chain Attachments

## “S” Type Roller Chains

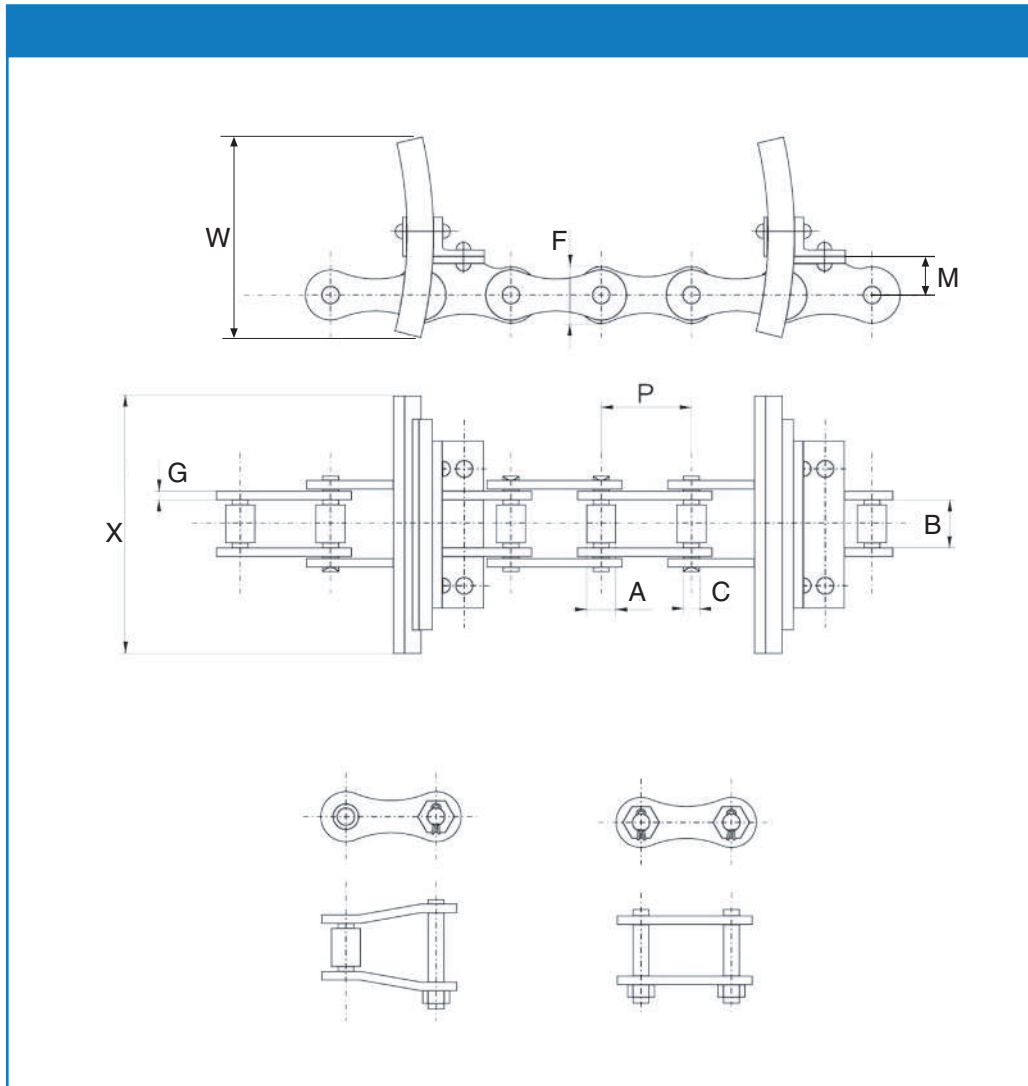


Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Side plate thickness	Attachment height					Average tensile strength
	P	A	B	C	G	H	X	M	O	W	kN
S55X/RL-3	41.40	15.88	20.00	8.28	3.00	52.00	79.40	17.00	8.30	10.00	55.00
S55X/RL-4	41.40	15.88	20.00	8.28	3.00	52.00	79.40	17.00	8.30	10.00	55.00
S55X/RL-5	41.40	15.88	20.00	8.28	3.00	52.00	79.40	17.00	8.30	10.00	55.00

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# Agricultural Chain Attachments

## “S” Type Roller Chains with Rubber Paddles

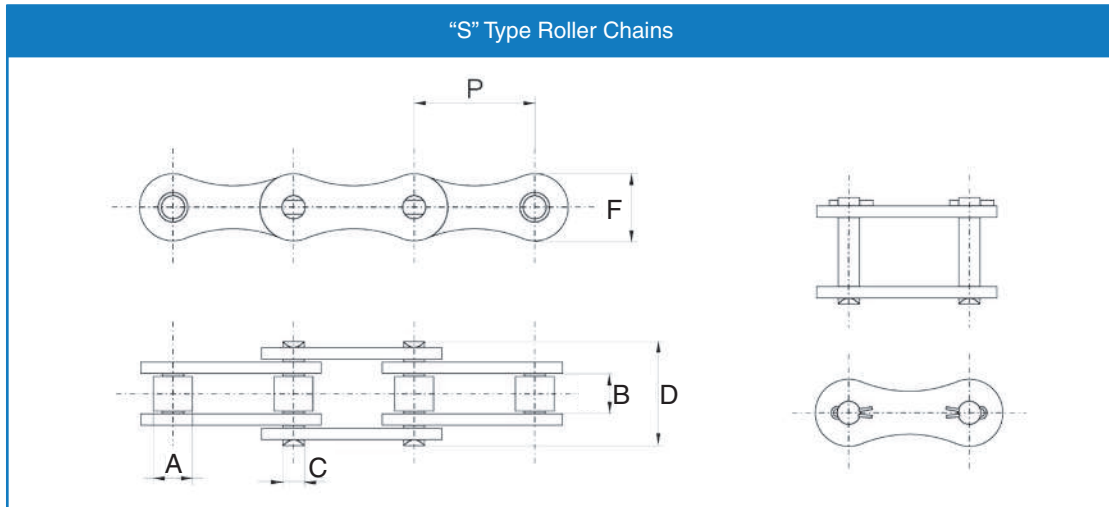


Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Side plate height	Side plate thickness	Attachment height	Paddle width	Paddle height	Tensile strength	Weight
	P	A	B	C	F	G	M	X	W	kN	kg/m
S55X/TM -1	41.40	15.88	20.00	8.28	20.00	3.00	17.00	110.00	52.00	50.00	3.80
S55X/TM -2	41.40	15.88	20.00	8.28	20.00	3.00	17.00	136.00	52.00	50.00	3.93
S55X/TM -3	41.40	15.88	20.00	8.28	20.00	3.00	17.00	166.00	52.00	50.00	5.30

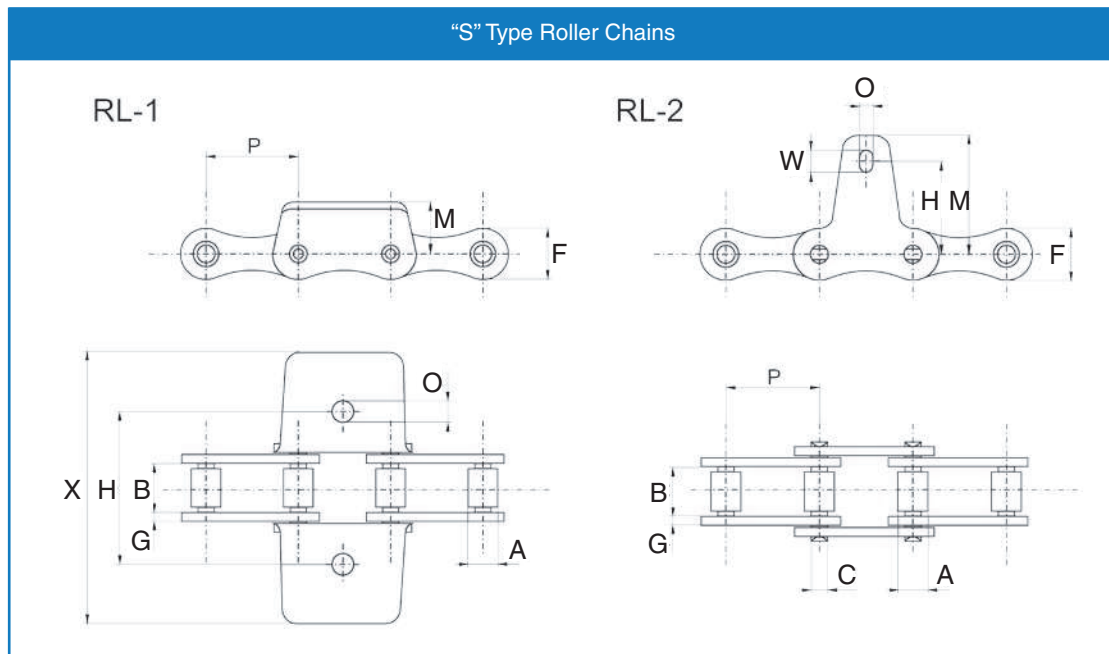
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# Agricultural Chain Attachments

## “S” Type Roller Chains



Chain	Pitch	Roller diameter	Width between inner plates	Pin diameter	Side plate height	Pin length	Average tensile strength
	P	A	B	C	F	D	kN
S55X/TM-1	41.40	15.88	20.00	8.28	20.00	38.00	55.00



Chain	Pitch	Roller diameter	Width between inner plates	Pin diameter	Side plate height	Side plate thickness	Attachment height	Average tensile strength				
	P	A	B	C	F	G	H	X	M	O	W	kN
S55X RL-1	41.40	15.88	20.00	8.28	20.00	3.00	52.00	90.00	17.00	8.30	-	55.00
S55X RL-2	41.40	15.88	20.00	8.28	20.00	3.00	23.70	-	34.40	8.30	10.00	55.00

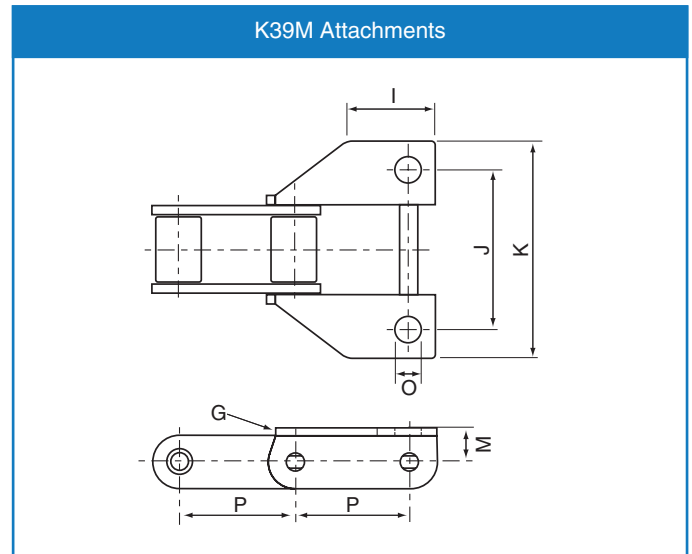
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# Agricultural Chain Attachments

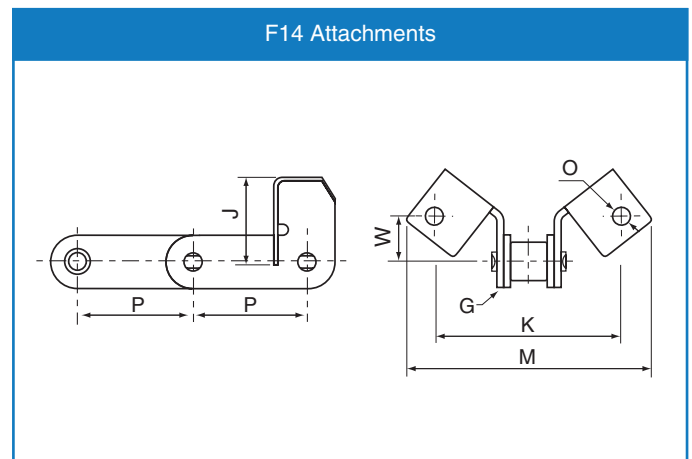
## CA Series K39M Attachments

Chain number	P	G	I	J	K	M	O
CA550	41.40	2.80	30.0	50.80	72.00	12.70	9.50
CA557	41.40	3.10	38.1	53.94	76.20	14.60	9.90



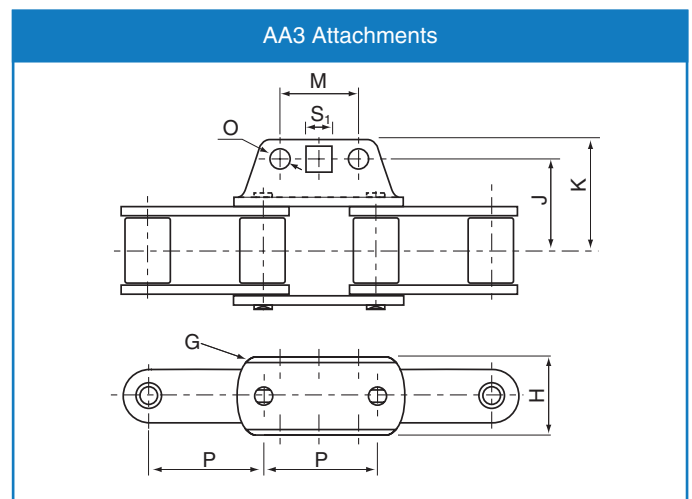
## CA Series F14 Attachments

Chain number	P	G	J	K	M	O	W
CA550	41.40	2.80	31.75	79.40	101.60	8.33	15.90
CA557	41.40	3.10	31.75	79.40	101.60	8.33	15.90



## CA Series AA3 Attachments

Chain number	P	G	J	K	M	H	O	S <sub>1</sub>
CA557	41.40	3.10	31.90	43.29	30.20	31.06	8.20	9.73

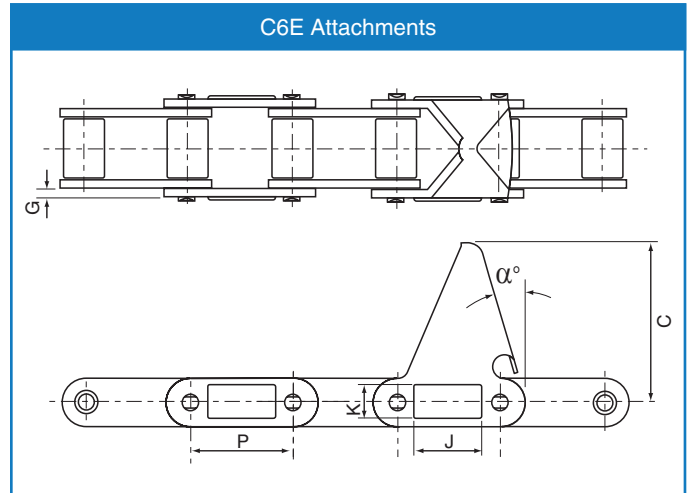


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# Agricultural Chain Attachments

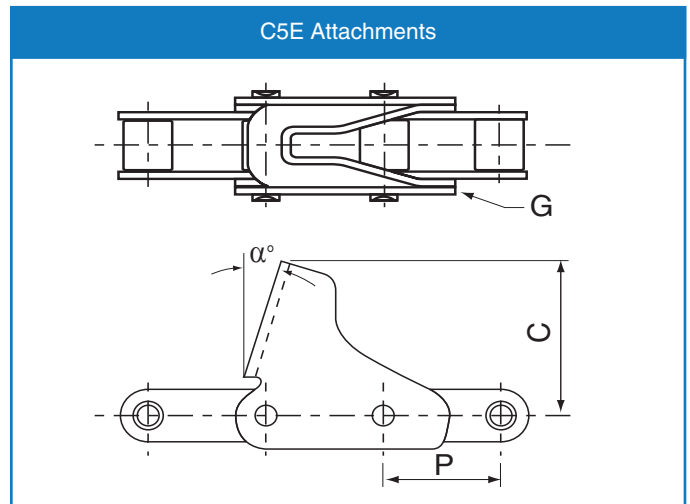
## CA Series C6E Attachments

Chain number	P	G	C	J	K	$\alpha^\circ$
CA550	41.40	2.80	55.60	23.60	13.50	20.00
CA555	41.40	3.10	63.50	23.60	13.50	15.00
C2060H	38.10	3.25	63.50	-	-	22.50



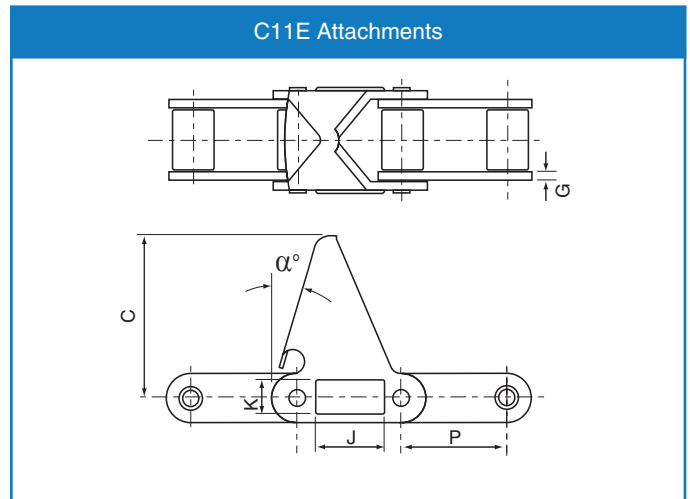
## CA Series C5E Attachments

Chain number	P	G	C	$\alpha^\circ$
CA550	41.40	2.80	59.00	15.00
CA555	41.40	3.10	57.15	15.00



## CA Series C11E Attachments

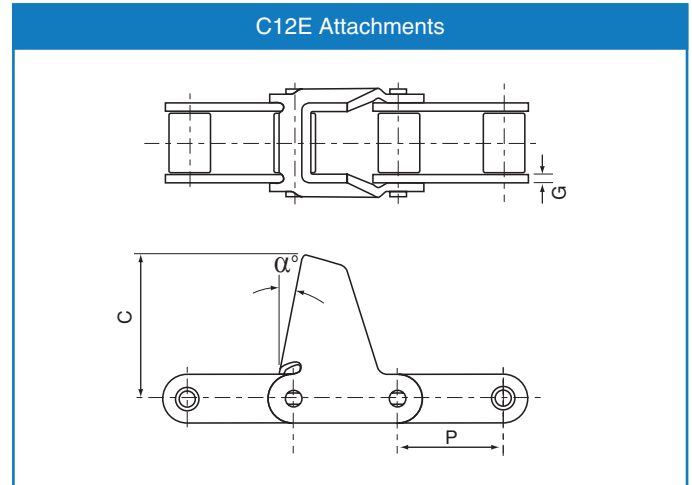
Chain number	P	G	C	J	K	$\alpha^\circ$
CA550	41.40	2.80	59.00	23.60	13.50	15.00



# Agricultural Chain Attachments

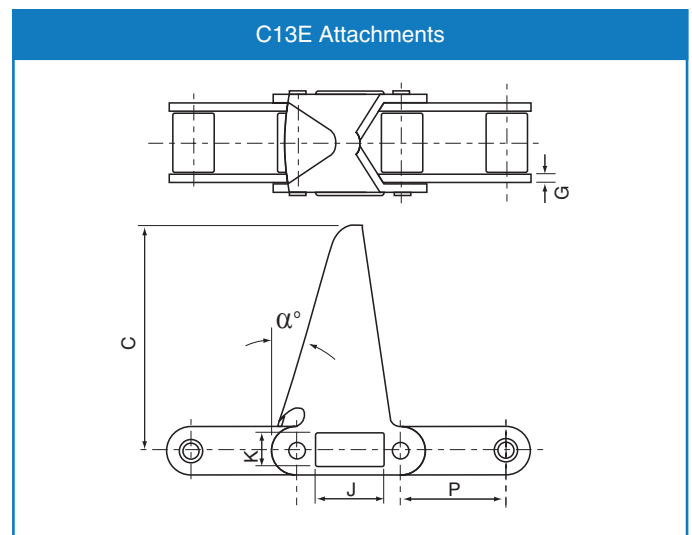
## CA Series C12E Attachments

Chain number	P	G	C	$\alpha^\circ$
CA550	41.40	2.80	59.00	9.00



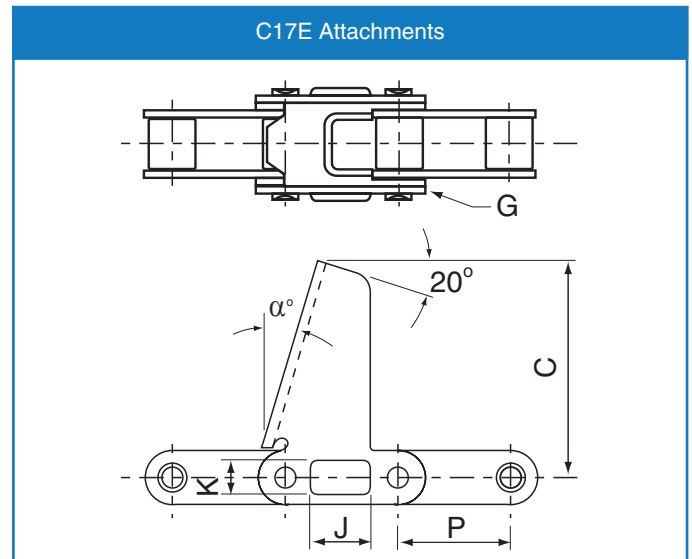
## CA Series C13E Attachments

Chain number	P	G	C	J	K	$\alpha^\circ$
CA550	41.40	2.80	92.10	23.60	13.50	15.00



## CA Series C17E Attachments

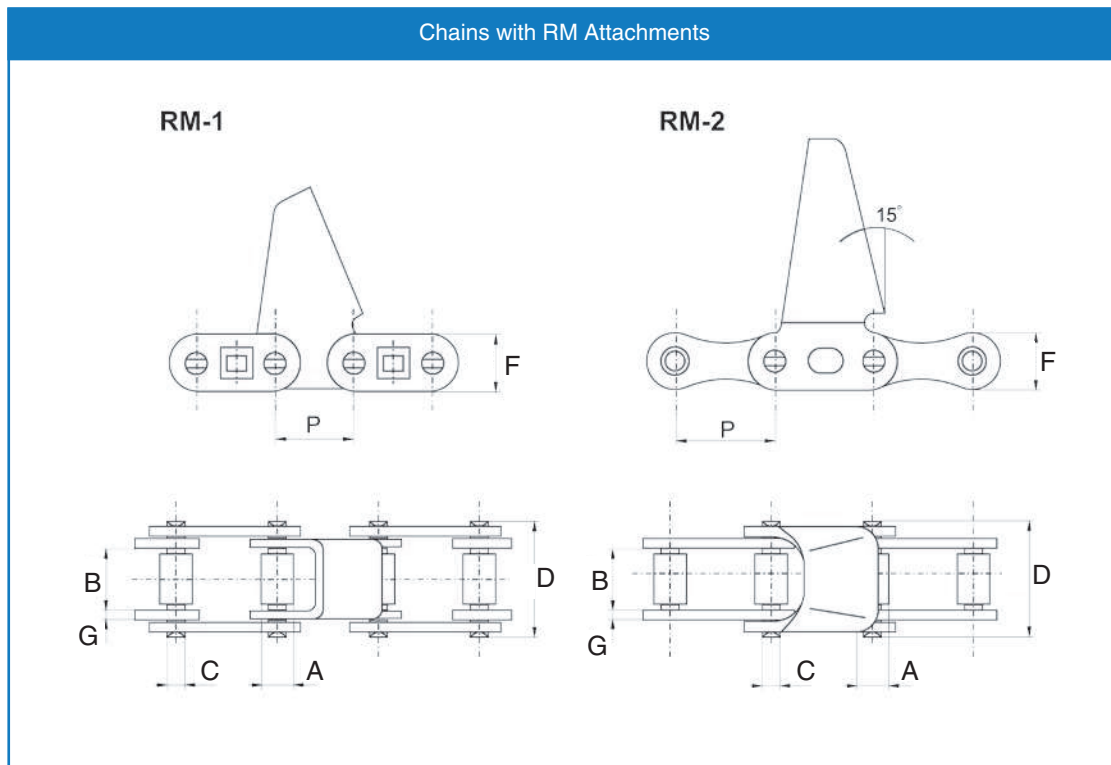
Chain number	P	G	C	J	K	$\alpha^\circ$
CA550	41.40	2.80	76.20	23.60	13.50	15.00



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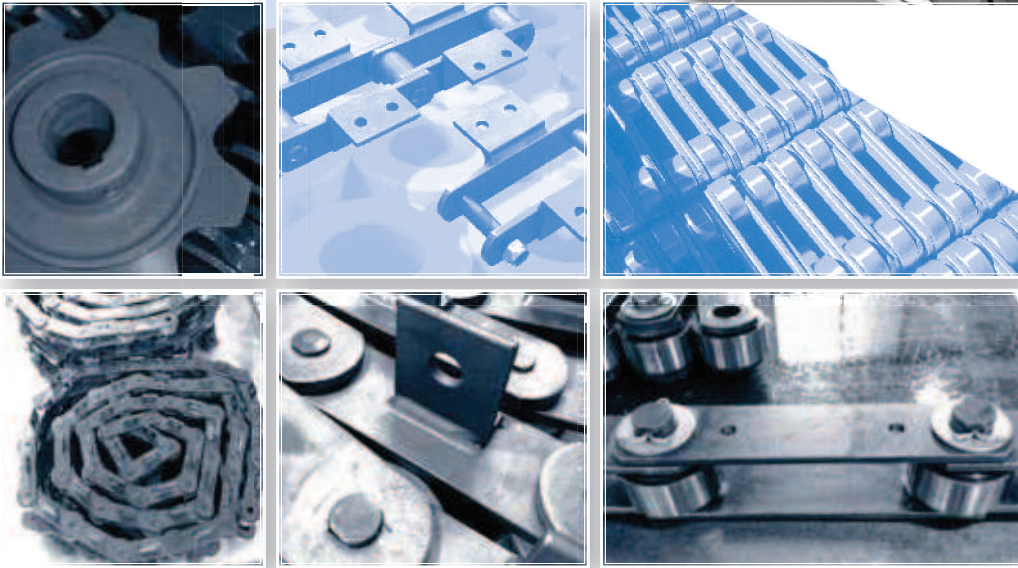
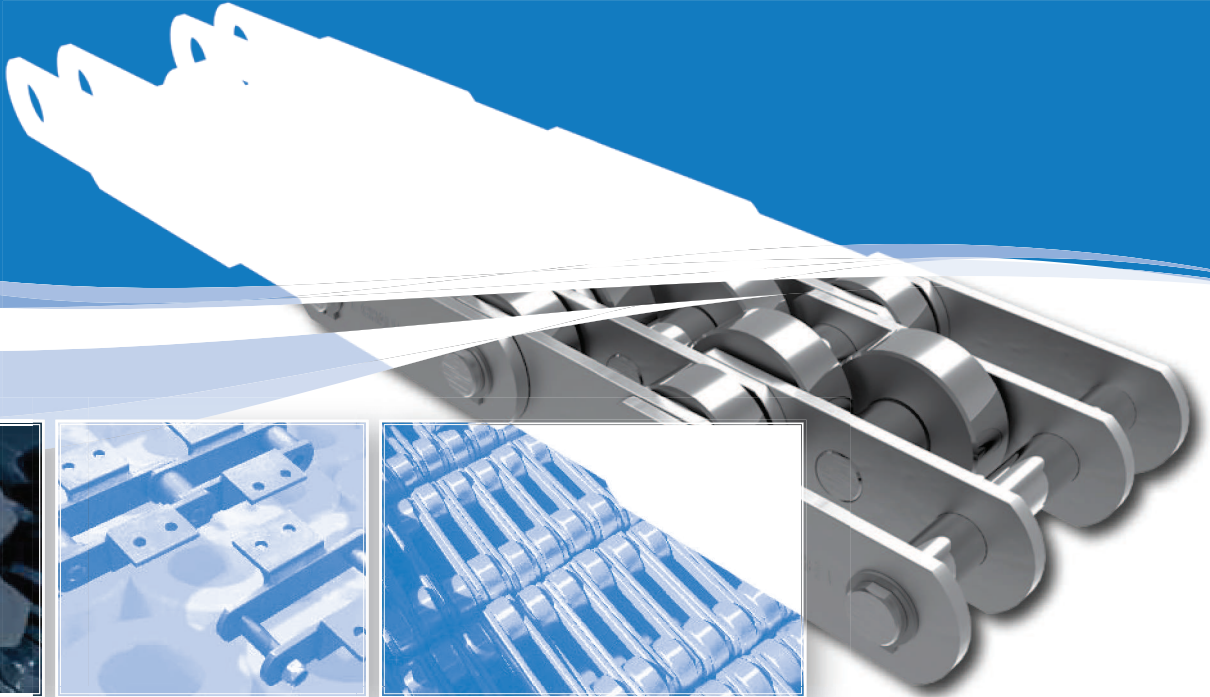
# Agricultural Chain Attachments

## Chains with RM Attachments



Model	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length	Side plate height	Plate thickness	Minimum tensile strength
	P	A	B	C	D	F	G	kN
RM1	30.00	15.88	20.00	8.28	35.80	20.70	3.00	40.00
RM2	30.00	15.88	20.00	8.28	38.00	20.00	3.00	40.00

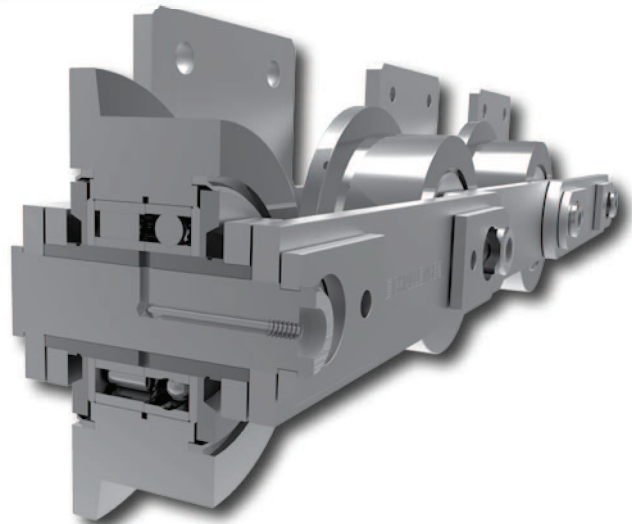
# Conveyor Chains



## Here's a Challenge:

**European-quality Conveyor chains manufactured in our dedicated plant in the industrialised east coast of China supplying a global market.**

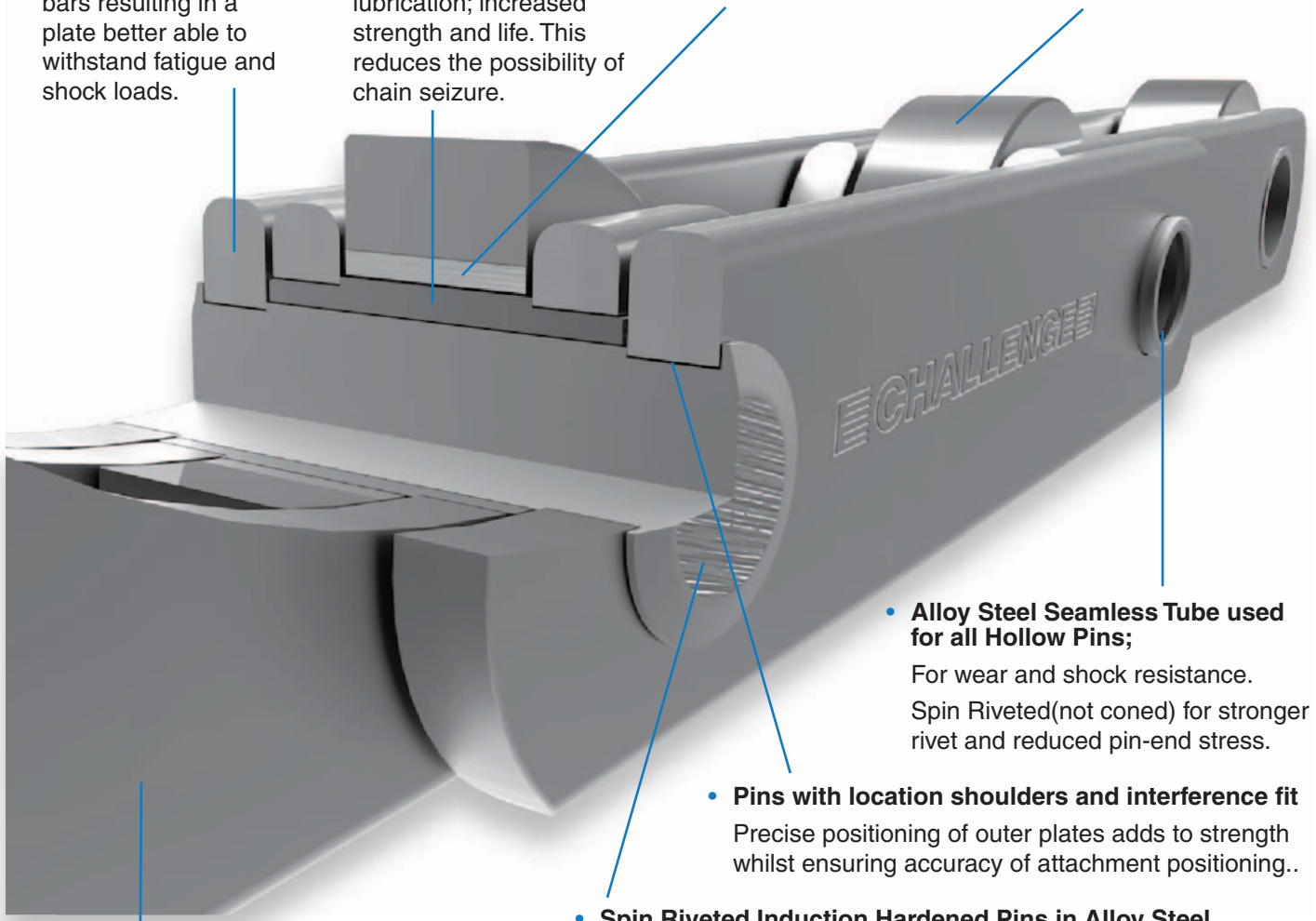
- Specialists in the production of spin-riveted chains
- High-grade induction hardened alloy steel pins
- State-of-the-art European machines giving the best rivet on any standard chain



# Conveyor Chain

## The Benefits of Challenge Spin Riveted Conveyor Chain

- **Material** – High quality steels used throughout
- **Link plates cropped from high carbon cold drawn steel**  
To avoid internal stresses associated with guillotined steel, Challenge produces all plates from high tolerance, on size, cold drawn steel bars resulting in a plate better able to withstand fatigue and shock loads.
- **Bushes with location shoulders and interference fit**  
For precise assembly; control on inner width and prevention of bush rotation. Bush shoulder length extended to form clearance between inner and outer plates and provide uniform lubrication; increased strength and life. This reduces the possibility of chain seizure.
- **Case Hardened Alloy steel bushes precision machined from seamless tube**  
Ensuring minimum distortion and superior concentricity.
- **Optional Stainless Steel or Nitride treated liner bushes**
- **Hardened Rollers with grinding**  
Grinding the outer diameter gives excellent wear resistance and good load carrying qualities plus reduced wear on sprockets and better visual result.
- **Alloy Steel Seamless Tube used for all Hollow Pins;**  
For wear and shock resistance. Spin Riveted(not coned) for stronger rivet and reduced pin-end stress.
- **Pins with location shoulders and interference fit**  
Precise positioning of outer plates adds to strength whilst ensuring accuracy of attachment positioning..
- **Spin Riveted Induction Hardened Pins in Alloy Steel**  
For optimum life and the strongest rivet in any standard chain..
- **Holes precision punched on dedicated progression tooling**  
Guarantees consistently high tolerance pitch control and strong, fatigue resistant chain.
- **Attachment and options**  
CNC welded and integral attachments, special bushes, bearings. Zinc and Nickel plated parts, molykoted pins, bushes, and rollers. Plastic rollers, flanged rollers, hardened plates, stainless parts, liner bushes etc. All specials produced in highest quality - fast turnaround.
- **Shot peened to produce a strong surface and reduce fatigue**
- **Challenge has invested heavily in CNC controlled machinery for optimum batch component conformity.**
- **Attachment plates jig assembled maintains position and squareness.**

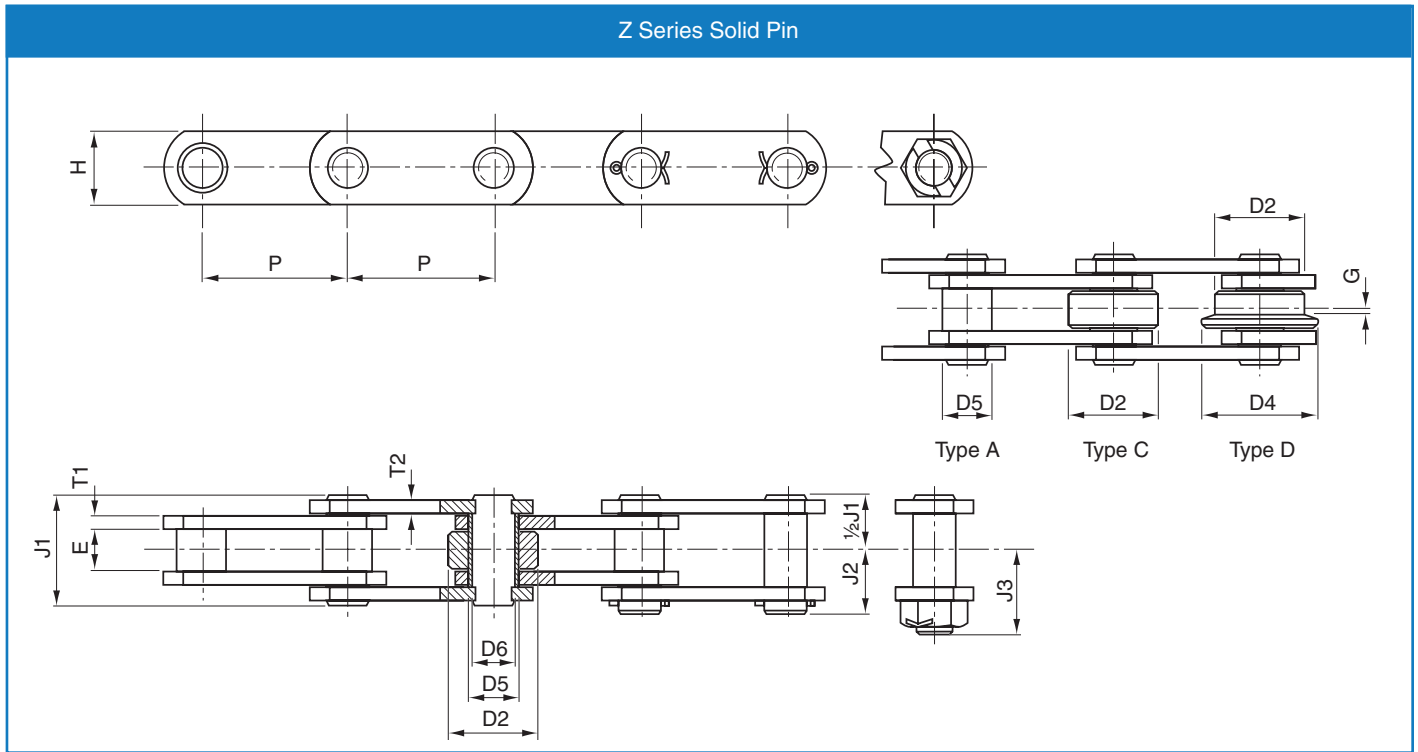




# Conveyor Chain

Z Series

BS Conveyor Chain (BS 4116 Part 4)



Solid Pin

Chain number	Minimum Breaking Load, lbf	Pitch Inches P	Pitch mm P	E	H	T1	T2	J1	J2	J3	D2	D4	D5	D6	G	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
Z40	7500	2.0	50.8	15.2	25.4	3.8	3.8	39.5	22	29	31.75	40	19	14	2.5	40	50	4
"	"	2.5	63.5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.5
"	"	3.0	76.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.2
"	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3
"	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.8
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.6
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.4
Z100	15000	3.0	76.2	19	38.1	5.1	3.8	46	28	38	47.63	60	25.4	19	3.5	100	130	7.7
"	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7
"	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.5
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.8
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.3
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.7
Z160	30000	4.0	101.6	25.4	50.8	7.1	5.1	59	34.5	49	66.7	82	34.9	26.97	3.5	156	200	14.3
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	12.5
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.3
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	10.5
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.8
"	"	9.0	228.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.3
"	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9
Z300	45000	6.0	152.4	38	65	10	8	82.5	47	65	88.9	107.9	41.3	31.75	8.5	300	380	24.3
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	22
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	21
"	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	18
"	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	16.5

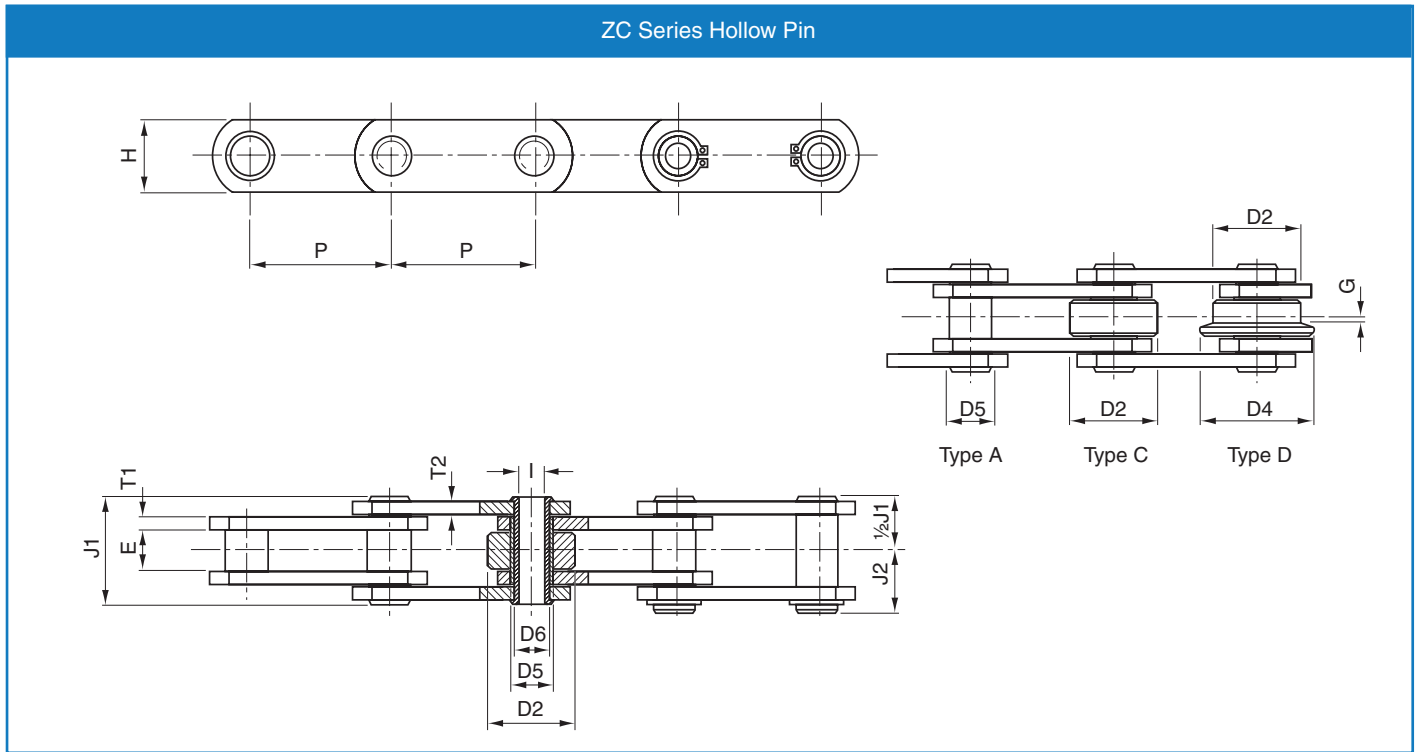
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.



# Conveyor Chain

ZC Series

BS Conveyor Chain (BS 4116 Part 4)



Hollow Pin

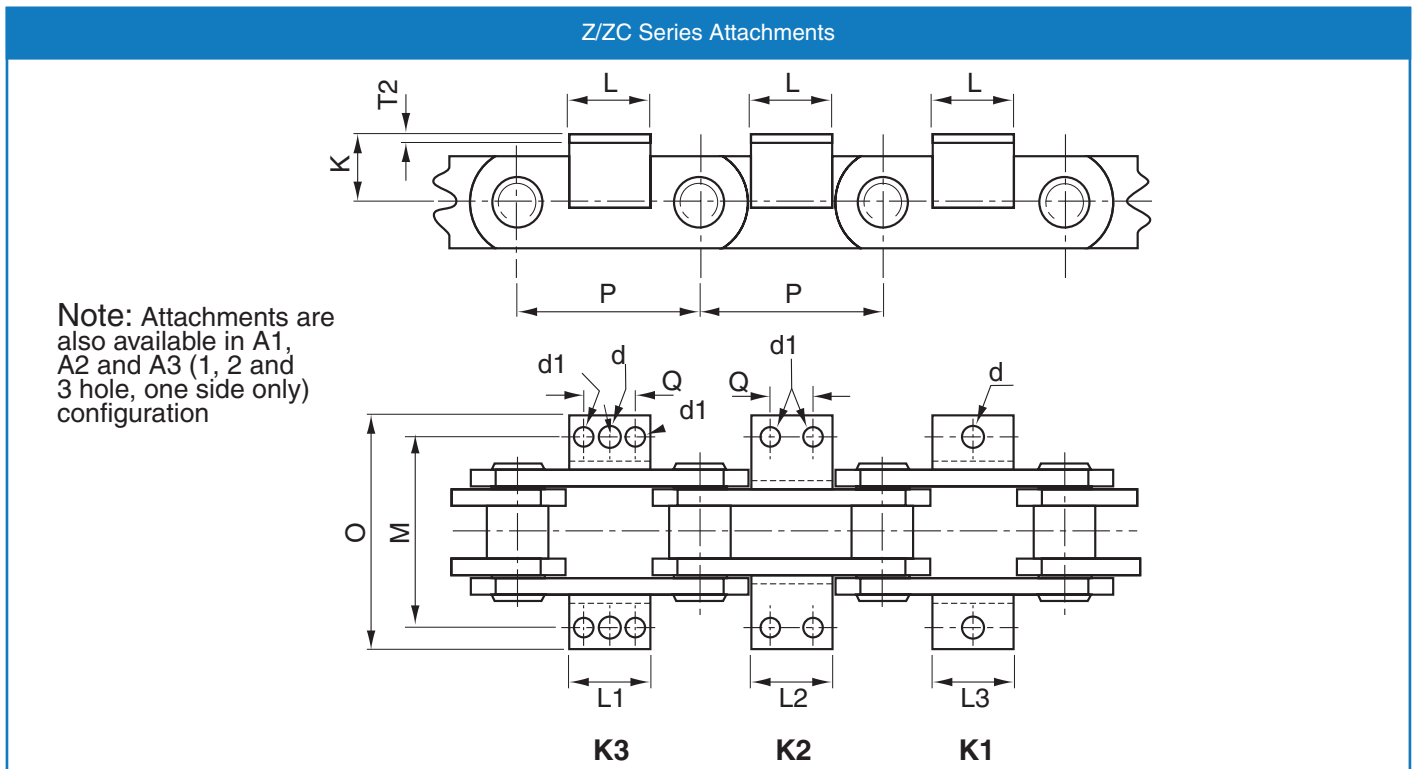
Chain number	Minimum Breaking Load, lbf	Pitch Inches P	Pitch mm P	E	I	H	T1	T2	J1	J2	D2	D4	D5	D6	G	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
Z21	4500	1.5	38.1	12.7	6.5	18	2.5	2.5	26	14.5	31.75	/	11	9	/	21	/	2.2
"	"	2.0	50.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1.7
"	"	2.5	63.5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1.6
"	"	3.0	76.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1.4
Z40	6000	2.0	50.8	15.2	10.3	25.4	3.8	3.8	37.2	21.5	31.75	40	19	14	2.5	40	50	3.6
"	"	2.5	63.5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.2
"	"	3.0	76.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.0
"	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.8
"	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.6
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.4
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.3
Z60	12000	3.0	76.2	19	13.2	38.1	5.1	3.8	44	24.5	47.63	60	25.4	19	3.5	60	120	7.0
"	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.4
"	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.0
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.3
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.9
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.6
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.4
Z150	24000	4.0	101.6	25.4	19.6	50.8	7.1	5.1	57	32	66.7	82	34.9	26.97	3.5	150	190	12.8
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.3
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.0
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.5
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.0
"	"	9.0	228.6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.6
"	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.2
Z300	36000	6.0	152.4	38	23	65	10	8	83	44	88.9	107.9	41.3	31.75	8.5	300	380	22.3
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	20.2
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	18.8
"	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	16.4
"	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	15.2

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# Conveyor Chain Attachments

Z/ZC Series Attachments

BS Conveyor Chain (BS 4116 Part 4)



## Conveyor Attachments

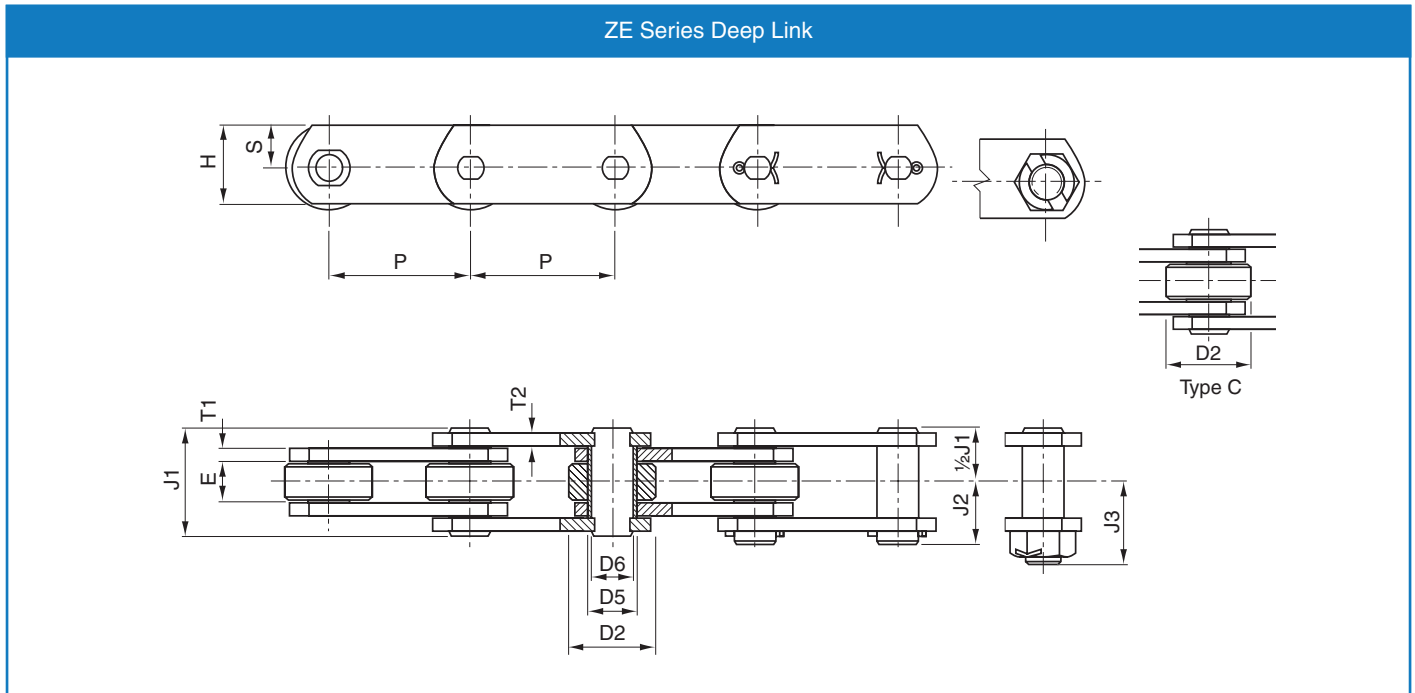
Chain Number	Minimum Breaking Load lbf	Pitch Inches P	Pitch mm P	Attachment Type	K	M	L1	L2	L3	d	d1	O	Q	Average Weight (Each) kg
ZC40/Z40	6000/7500	2.0	50.8	K1	19	76.2	19.0	-	-	10.6	-	129	-	0.10
"	"	2.5	63.5	"	"	"	19.0	-	-	"	-	112	-	0.10
"	"	3.0	76.2	"	"	"	28.0	-	-	"	-	136	-	0.10
"	"	3.5	88.9	"	"	"	28.0	-	-	"	-	112	-	0.10
"	"	4.0	101.6	K1,K2,K3	"	"	56.0	56.0	64.0	"	9.2	110	31.8	0.10
"	"	5.0	127.0	"	"	"	56.0	56.0	85.0	"	"	112	31.8	0.20
"	"	6.0	152.4	"	"	"	83.8	83.8	88.0	"	"	112	57.2	0.20
ZC100/Z100	12000/15000	3.0	76.2	K1	31.8	88.9	35.0	-	-	14	-	130	-	0.12
"	"	3.5	88.9	"	"	"	35.0	-	-	"	-	"	-	0.12
"	"	4.0	101.6	K1,K2,K3	"	"	35.0	56.0	64.0	"	11	"	31.8	0.10
"	"	5.0	127.0	"	"	"	56.0	56.0	64.0	"	"	"	31.8	0.30
"	"	6.0	152.4	"	"	"	56.0	84.0	90.0	"	"	"	57.2	0.32
"	"	7.0	177.8	"	"	"	56.0	127.0	130.0	"	"	"	89	0.40
"	"	8.0	203.2	"	"	"	56.0	127.0	130.0	"	"	"	89	0.40
ZC160/Z160	24000/30000	5.0	127.0	K1,K2	38.1	108	56.0	56.0	-	-	12.7	-	31.7	0.30
"	"	6.0	152.4	"	"	7.1	"	84.0	-	-	"	154	57.2	0.38
"	"	7.0	177.8	"	"	7.1	"	108.0	-	-	"	"	69.85	0.38
"	"	8.0	203.2	"	"	7.1	"	127.0	-	-	"	"	88.9	0.60
"	"	9.0	228.6	"	"	7.1	"	168.0	-	-	"	"	133.35	0.69
"	"	10.0	254.0	"	"	7.1	"	168.0	-	-	"	"	133.35	0.75
ZC300/Z300	36000/45000	6.0	152.4	K1	65	10	70.0			17.0	/	200	38.1	0.50
"	"	7.0	177.8	"	"	"	70.0			"	/	"	38.1	0.50
"	"	8.0	203.2	K1,K2	"	"	100.0			"	14	"	76.2	0.70
"	"	10.0	254.0	"	"	"	152.4			"	"	"	90	0.90
"	"	12.0	304.8	"	"	"	225.0			"	"	"	190	1.60
Z300/60	60000	6.0	152.4	K1	65	10	70.0			17.0	/	200	38.1	0.50
"	"	7.0	177.8	"	"	"	70.0			"	/	"	38.1	0.50
"	"	8.0	203.2	K1,K2	"	"	100.0			"	14	"	76.2	0.70
"	"	10.0	254.0	"	"	"	152.4			"	"	"	90	0.90
"	"	12.0	304.8	"	"	"	225.0			"	"	"	190	1.60

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# Conveyor Chain

**ZE Series**

**BS Conveyor Chain (BS 4116 Part 4)**



**Deep Link**

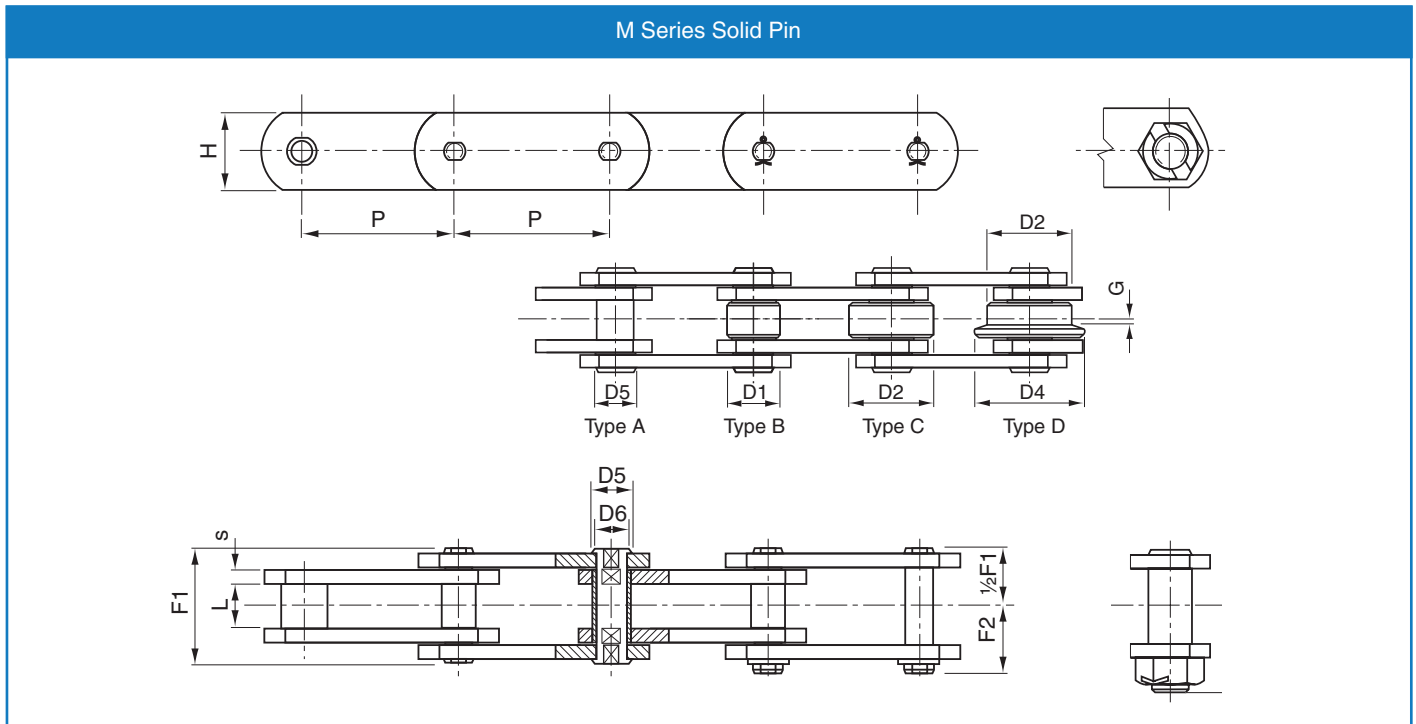
Chain Number	Minimum Breaking Load, lbf	Pitch Inches	Pitch mm	E	H	S	T1	T2	J1	J2	J3	D2	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
ZE40	7500	2.0	50.8	15.2	38.1	27	3.8	3.8	39.5	22	29	31.75	19	14	40	60	5.0
"	"	2.5	63.5	"	"	"	"	"	"	"	"	"	"	"	"	"	4.6
"	"	3.0	76.2	"	"	"	"	"	"	"	"	"	"	"	"	"	4.2
"	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	4.0
"	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	3.8
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	3.5
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	3.3
ZE100	15000	3.0	76.2	19	50.8	30	5.1	3.8	46	28	38	47.63	25.4	19	100	160	8.9
"	"	3.5	88.9	"	"	"	"	"	"	"	"	"	"	"	"	"	8.4
"	"	4.0	101.6	"	"	"	"	"	"	"	"	"	"	"	"	"	7.6
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	6.8
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	6.3
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	5.9
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	5.7
ZE160	30000	4.0	101.6	25.4	70	45	7.1	5.1	59	34.5	49	66.7	34.9	26.97	156	200	17.5
"	"	5.0	127.0	"	"	"	"	"	"	"	"	"	"	"	"	"	15.4
"	"	6.0	152.4	"	"	"	"	"	"	"	"	"	"	"	"	"	13.8
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	12.8
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	12.0
"	"	9.0	228.6	"	"	"	"	"	"	"	"	"	"	"	"	"	11.3
"	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	10.5
ZE300	45000	6.0	152.4	38	90	60	10	8	82.5	47	65	88.9	41.3	31.75	300	380	32.0
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	29.5
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	27.0
"	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	24.5
"	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	23.0
ZE300/60	60000	6.0	152.4	38	90	60	10	8	84	52	71	88.9	41.3	31.75	300	380	32.0
"	"	7.0	177.8	"	"	"	"	"	"	"	"	"	"	"	"	"	29.5
"	"	8.0	203.2	"	"	"	"	"	"	"	"	"	"	"	"	"	27.0
"	"	10.0	254.0	"	"	"	"	"	"	"	"	"	"	"	"	"	24.5
"	"	12.0	304.8	"	"	"	"	"	"	"	"	"	"	"	"	"	23.0

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# Conveyor Chain

M Series

Metric Conveyor Chain (DIN 8167)



Solid Pin

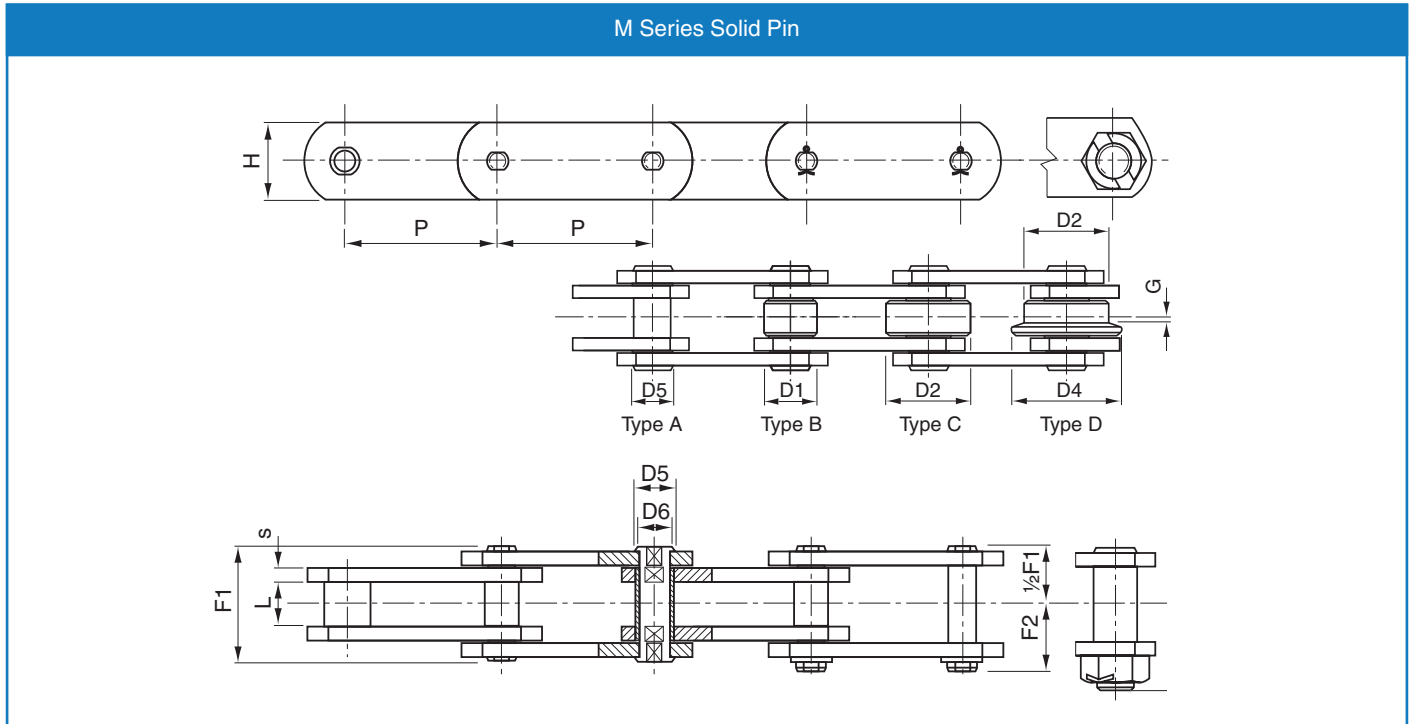
Chain number	Pitch P	L	G	H	S	F1	F2	D1	D2	D4	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
M 20	40	16	3.5	18	2.5	33.0	19.0	12.5	25	32	9	6	20	32	2.4
"	50	"	"	"	"	"	"	"	"	"	"	"	"	"	2.0
"	63	"	"	"	"	"	"	"	"	"	"	"	"	"	1.8
"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	1.6
M28	50	18	4.0	20	3	36.0	20.5	15.0	30	36	10	7	28	42	3.3
"	63	"	"	"	"	"	"	"	"	"	"	"	"	"	2.8
"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	2.5
"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	2.1
M 40	63	20	4.5	25	4	40.5	24.0	18.0	36	45	11	8	40	60	4.4
"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	3.7
"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	3.2
"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	2.9
M 56	63	24	7.0	30	4	45.0	26.0	21.0	42	50	15	10	56	85	6.8
"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	5.7
"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	5.0
"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	4.4
"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	3.9
M 80	80	28	7.0	35	5	54.5	30.5	25.0	50	60	18	12	80	125	9.2
"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	7.9
"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	6.9
"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	6.0
"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	5.3

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# Conveyor Chain

**M Series**

**Metric Conveyor Chain (DIN 8167)**



**Solid Pin**

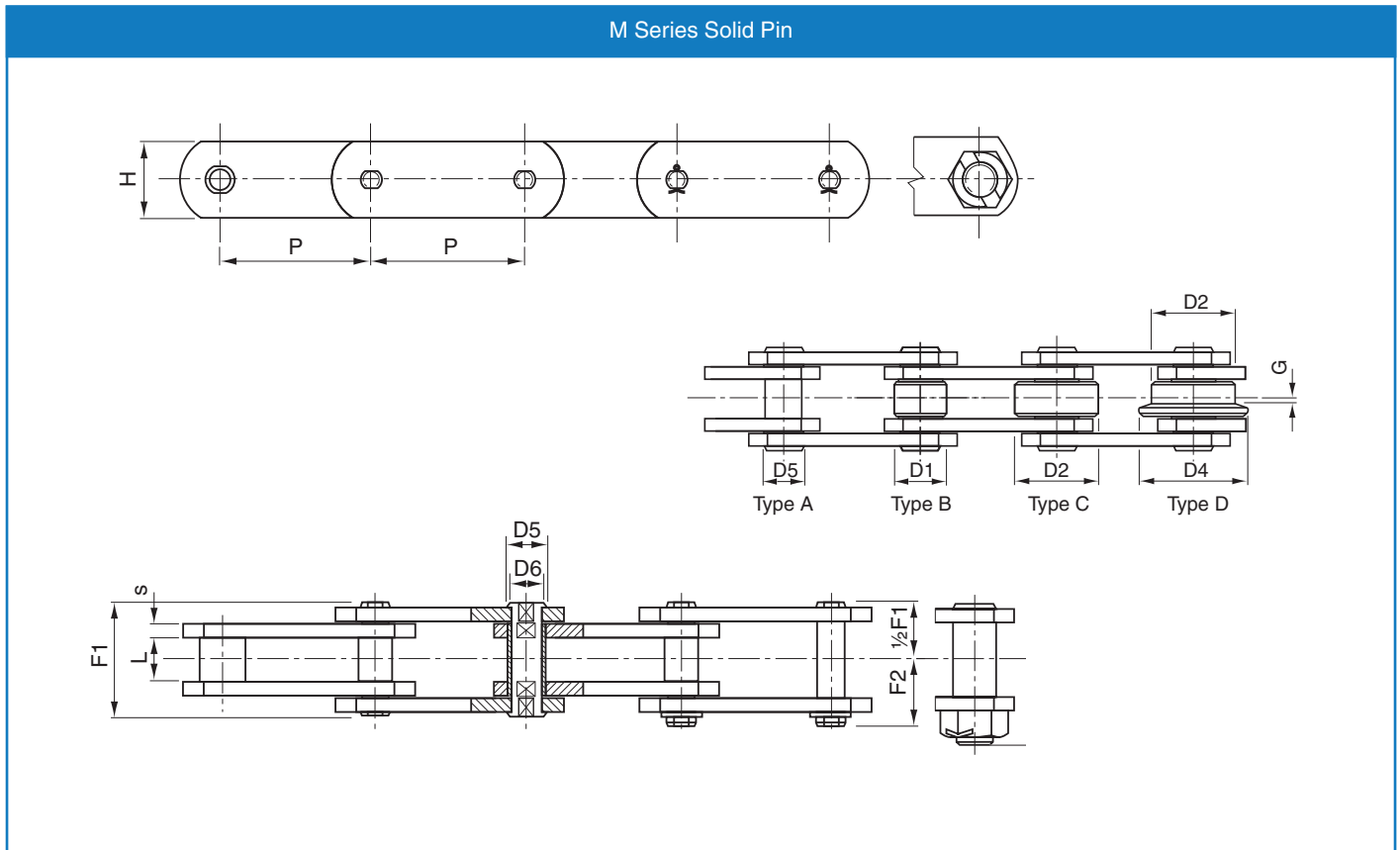
Chain number	Pitch P	L	G	H	S	F1	F2	D1	D2	D4	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
M 112	80	32	7.5	40	6	63	36.0	30	60	75	21	15	112	175	14.0
"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	12.0
"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	10.4
"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	9.0
"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	7.9
M 160	100	37	8.5	50	7	72	41.5	36	70	90	25	18	160	260	18.9
"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	16.3
"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	14.0
"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	12.2
"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	11.0
M 224	125	43	10.0	60	8	84	47.0	42	85	105	30	21	224	340	25.8
"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	22.0
"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	19.0
"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	16.7
"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	14.9
M 315	160	48	10.5	70	10	97	55.0	50	100	124	36	25	315	520	33.3
"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	28.7
"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	25.2
"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	22.3
"	400	"	"	"	"	"	"	"	"	"	"	"	"	"	20.0

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# Conveyor Chain

M Series

Metric Conveyor Chain (DIN 8167)



Solid Pin

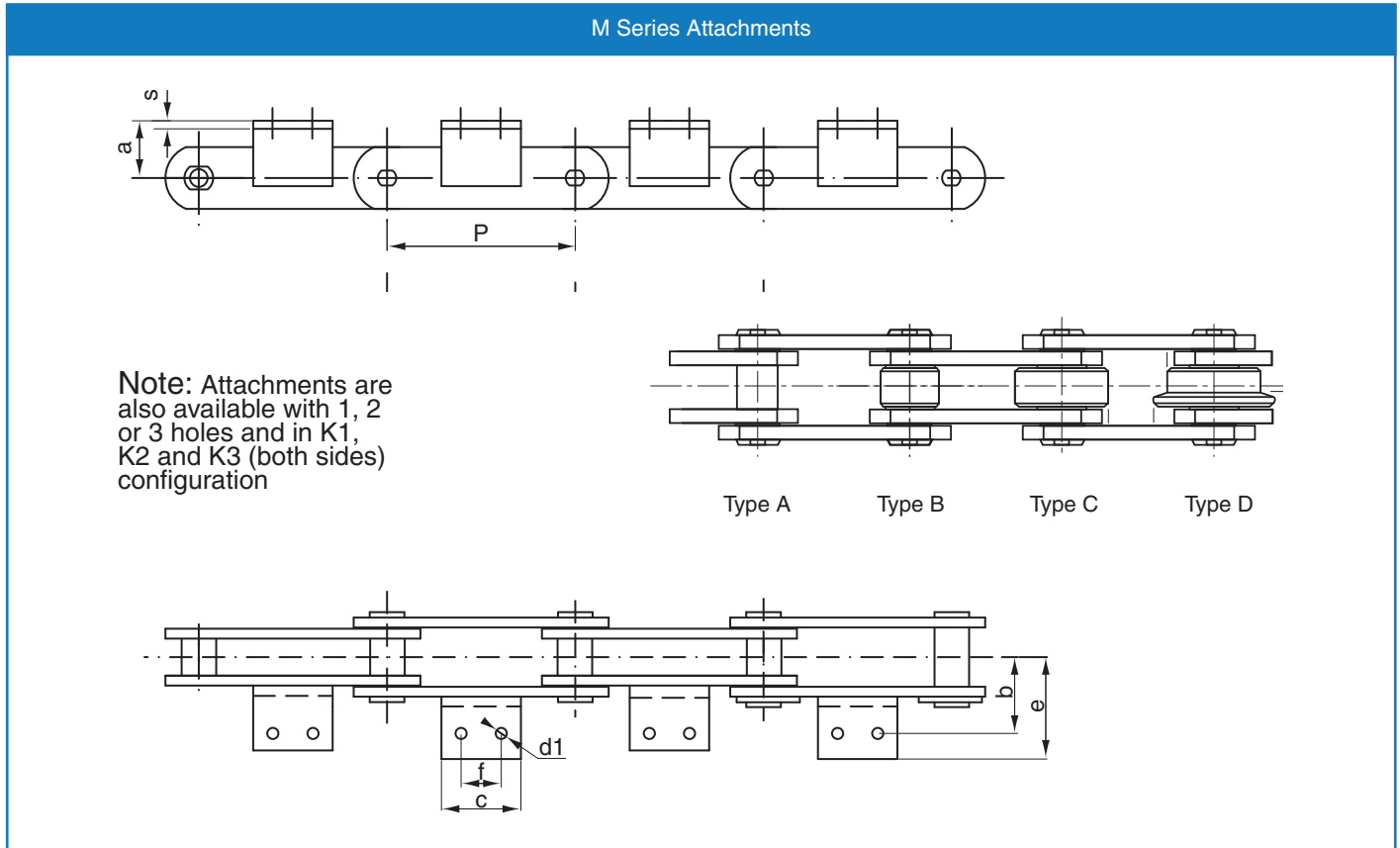
Chain number	Pitch P	L	G	H	S	F1	F2	D1	D2	D4	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
M 450	200	56	11.5	80	12	114	67.0	60	120	149	42	30	450	700	40.5
"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	39.5
"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	34.5
"	400	"	"	"	"	"	"	"	"	"	"	"	"	"	30.5
M 630	250	67	15.0	100	14	137	87.5	70	140	170	50	36	630	900	64.0
"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	55.5
"	400	"	"	"	"	"	"	"	"	"	"	"	"	"	49.0
"	500	"	"	"	"	"	"	"	"	"	"	"	"	"	43.6
M 900	250	78	17.0	120	16	153	95.0	85	170	210	60	44	900	1250	98.3
"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	84.2
"	400	"	"	"	"	"	"	"	"	"	"	"	"	"	72.5
"	500	"	"	"	"	"	"	"	"	"	"	"	"	"	63.8
"	600	"	"	"	"	"	"	"	"	"	"	"	"	"	56.6

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# Conveyor Chain Attachments

**M Series Attachments**

**Metric Conveyor Chain (DIN 8167)**



Chain Number	Pitch P	a	b	c	d1	e	f	Welded or Integral attachment	Chain Weight - Excluding Attachments kg/metre				Attachment Weight (A2) kg each
									Type A	Type B	Type C	Type D	
M 20	40	16	27	14	6.6	40	*		1.10	1.3	2.4	2.5	0.02
"	50	"	"	14	"	"	*		1.01	1.3	2.0	2.1	0.02
"	63	"	"	35	"	"	20	25x3	0.99	1.2	1.8	1.9	0.04
"	80	"	"	50	"	"	35	"	0.90	1.1	1.6	1.6	0.06
M 28	50	20	32	20	9	47	*	20x3	1.60	1.9	3.3	3.4	0.02
"	63	"	"	20	"	"	*	30x3	1.50	1.7	2.8	2.9	0.02
"	80	"	"	45	"	"	25	"	1.40	1.6	2.5	2.6	0.05
"	100	"	"	60	"	"	40	"	1.30	1.5	2.1	2.2	0.08
M 40	63	25	35	31	9	50	*	30x4	2.25	2.6	4.4	4.6	0.04
"	80	"	"	45	"	"	20	"	2.00	2.3	3.7	3.9	0.07
"	100	"	"	60	"	"	40	"	1.90	2.1	3.2	3.4	0.10
"	125	"	"	85	"	"	65	"	1.80	2.0	2.9	3.0	0.15
M 56	63	30	44	22	11	61	*	40x4	3.40	3.9	6.8	7.2	0.05
"	80	"	"	30	"	"	*	"	3.00	3.4	5.7	6.0	0.07
"	100	"	"	50	"	"	25	"	2.80	3.1	5.0	5.2	0.12
"	125	"	"	75	"	"	50	"	2.60	2.9	4.4	4.5	0.18
"	160	"	"	110	"	"	85	"	2.54	2.7	3.9	4.1	0.27
M 80	80	35	48	30	11	65	*	40x4	4.70	5.4	9.2	9.4	0.07
"	100	"	"	50	"	"	25	"	4.30	4.8	7.9	8.0	0.12
"	125	"	"	75	"	"	50	"	4.00	4.4	6.9	7.0	0.18
"	160	"	"	110	"	"	85	"	3.70	4.0	6.0	6.1	0.27
"	200	"	"	150	"	"	125	"	3.50	3.8	5.3	5.4	0.36

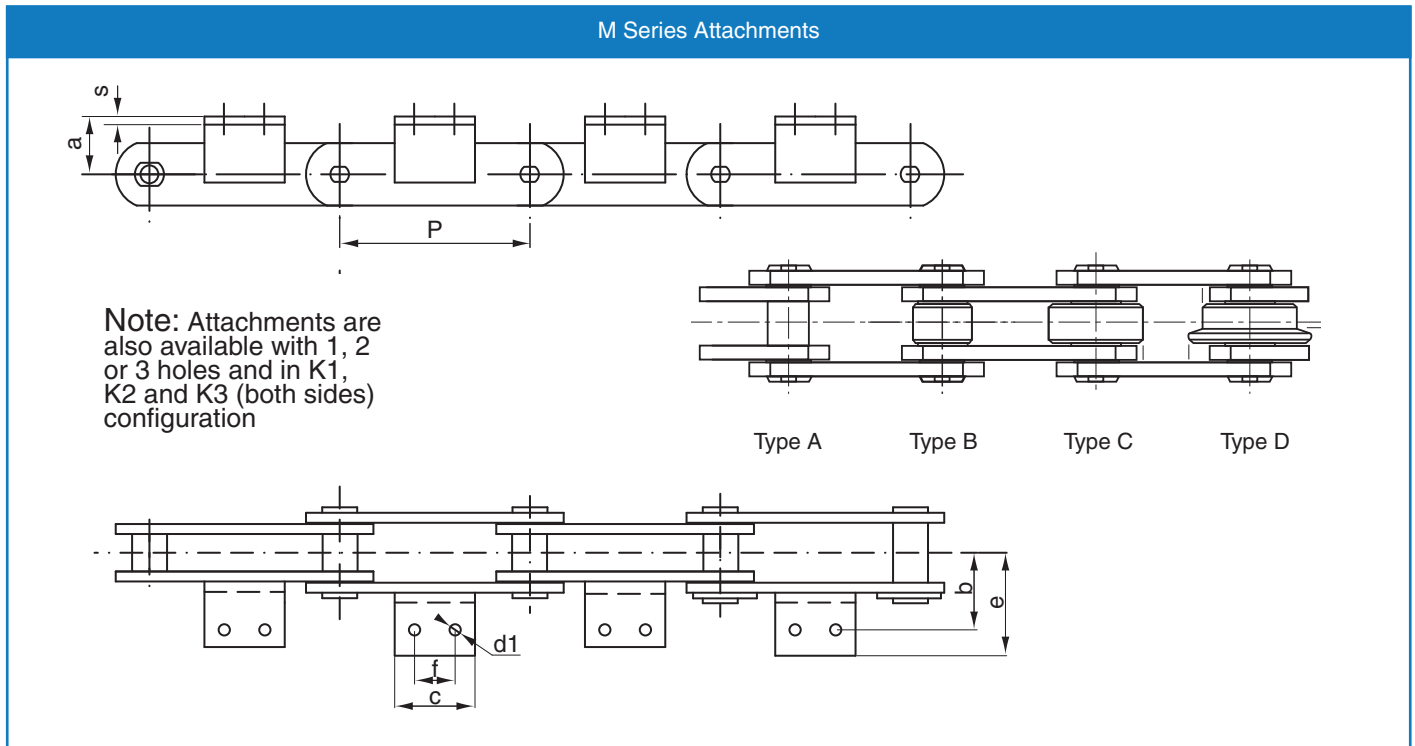
\* Attachment With One Hole



# Conveyor Chain Attachments

M Series Attachments

Metric Conveyor Chain (DIN 8167)



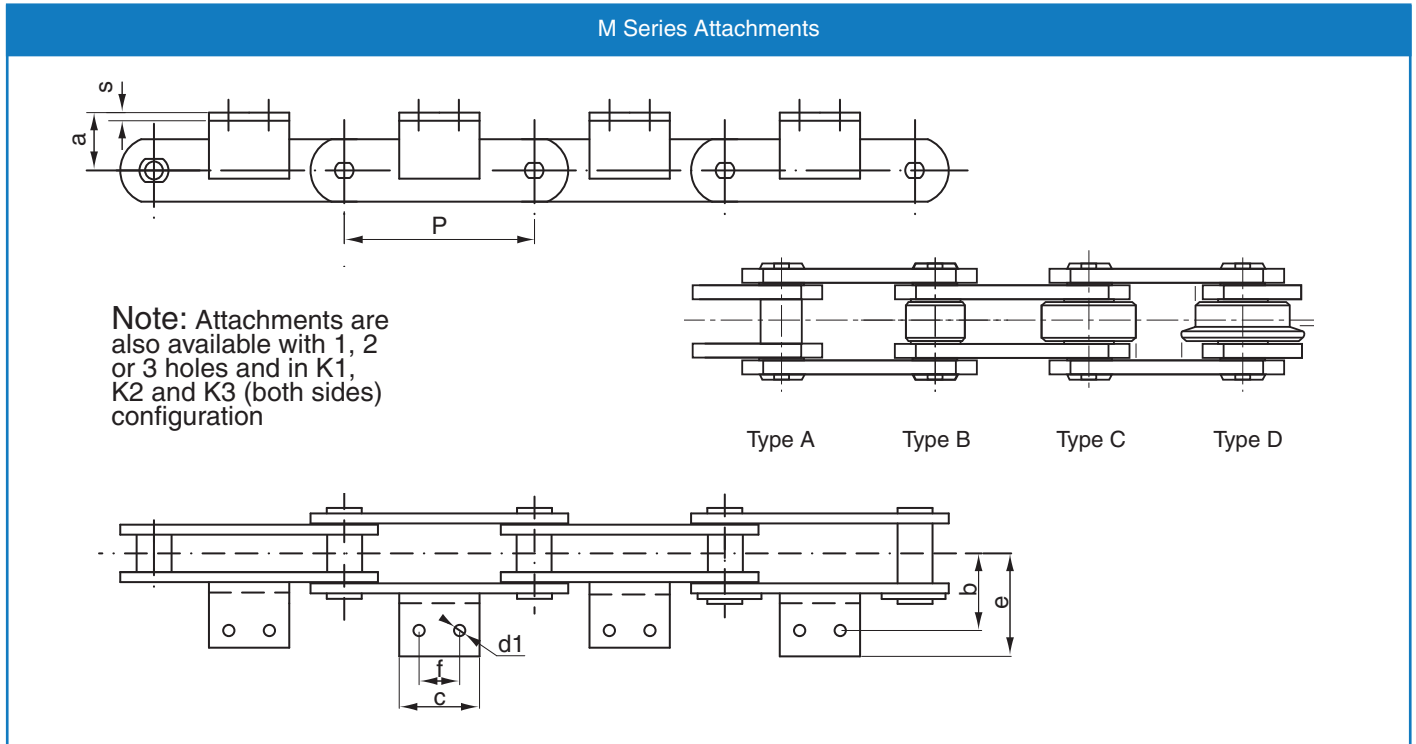
Chain Number	Pitch P	a	b	c	d1	e	f	Welded or Integral attachment	Chain Weight - Excluding Attachments kg/metre				Attachment Weight (A2) kg each
									Type A	Type B	Type C	Type D	
M 112	80	40	55	28	14	80	*	50x6	6.8	8.0	14.0	14.7	0.13
"	100	"	"	40	"	"	*	"	6.2	7.2	12.0	12.5	0.18
"	125	"	"	65	"	"	35	"	5.7	6.5	10.4	10.8	0.30
"	160	"	"	95	"	"	65	"	5.3	5.9	9.0	9.3	0.44
"	200	"	"	130	"	"	100	"	5.0	5.5	7.9	8.2	0.59
M 160	100	45	62	30	14	85	*	50x6	9.7	11.2	18.9	20.2	0.13
"	125	"	"	50	"	"	25	"	8.9	10.0	16.3	18.1	0.23
"	160	"	"	80	"	"	50	"	8.2	9.1	14.0	15.4	0.37
"	200	"	"	115	"	"	85	"	7.6	8.4	12.2	13.4	0.53
"	250	"	"	175	"	"	145	"	7.3	7.9	11.0	12.0	0.80
M 224	125	55	70	35	18	100	*	63x8	13.0	14.8	25.8	26.6	0.30
"	160	"	"	60	"	"	*	"	12.0	13.4	22.0	22.7	0.43
"	200	"	"	100	"	"	65	"	11.0	12.1	19.0	19.5	0.71
"	250	"	"	160	"	"	125	"	10.3	11.2	16.7	17.1	1.13
"	315	"	"	230	"	"	190	"	9.8	10.5	14.9	15.2	1.60
M 315	160	65	80	35	18	115	*	70x8	18.3	20.4	33.3	34.6	0.32
"	200	"	"	85	"	"	50	"	16.7	18.4	28.7	29.7	0.66
"	250	"	"	140	"	"	100	"	15.6	17.0	25.2	26.0	1.10
"	315	"	"	190	"	"	155	"	14.6	15.7	22.3	22.9	1.46
"	400	"	"	205	"	"	155	"	13.9	14.8	20.0	20.5	1.46

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# Conveyor Chain Attachments

**M Series Attachments**

**Metric Conveyor Chain (DIN 8167)**



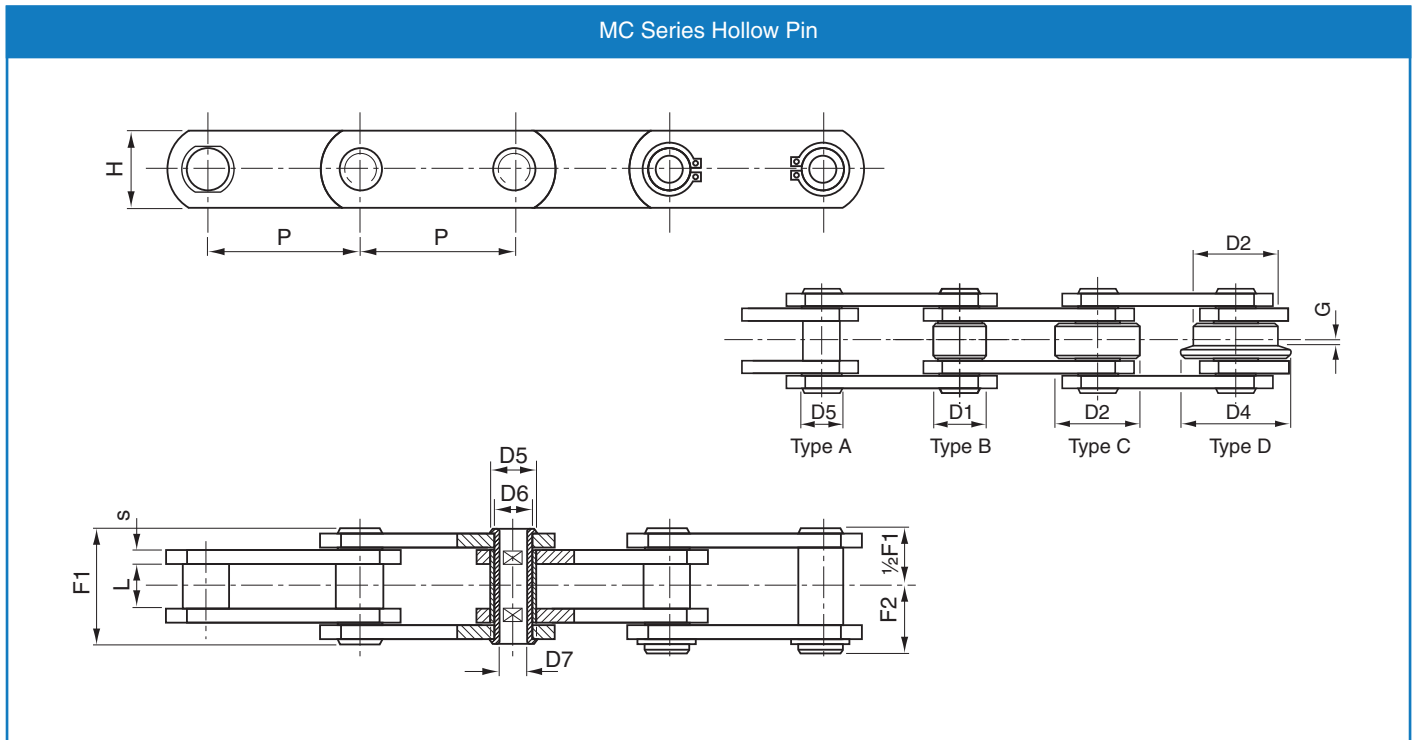
Chain Number	Pitch P	a	b	c	d1	e	f	Welded or Integral attachment	Chain Weight - Excluding Attachments kg/metre				Attachment Weight (A2) kg each
									Type A	Type B	Type C	Type D	
M 450	200	75	90	50	18	125	*	70x9	24.0	27.0	40.5	47.0	0.33
"	250	"	"	125	"	"	85	"	22.0	24.9	39.5	41.0	1.00
"	315	"	"	195	"	"	155	"	21.0	23.0	34.5	36.0	1.60
"	400	"	"	280	"	"	240	"	19.6	21.2	30.5	31.4	2.30
M 630	250	90	115	50	24	165	*	100x12	36.0	40.8	64.0	66.9	0.90
"	315	"	"	150	"	"	100	"	33.4	36.6	55.5	57.7	2.70
"	400	"	"	240	"	"	190	"	31.5	33.9	49.0	50.7	4.30
"	500	"	"	350	"	"	300	"	29.6	31.6	43.6	45.0	6.20
M 900	250	110	140	60	30	195	*	120x15	49.7	56.5	98.3	104.5	1.60
"	315	"	"	125	"	"	65	"	45.5	51.8	84.2	89.7	3.30
"	400	"	"	215	"	"	155	"	42.0	46.2	72.5	76.9	5.70
"	500	"	"	300	"	"	240	"	39.3	42.7	63.8	67.6	8.00
"	600	"	"	350	"	"	300	"	37.3	39.9	56.6	58.9	8.00

\* Attachment With One Hole

# Conveyor Chain

MC Series Hollow Pin

Metric Conveyor Chain (DIN 8167)



Hollow Pin

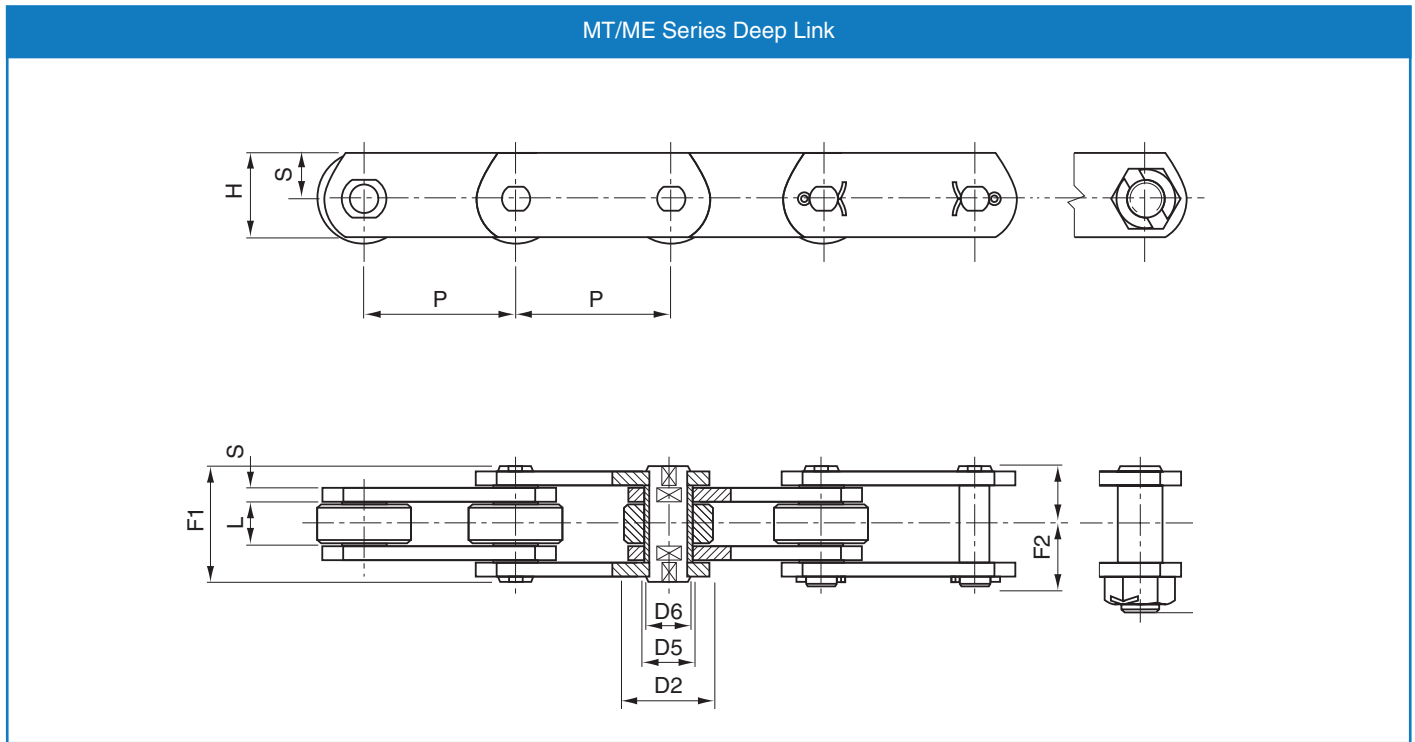
Chain number	Pitch P	L	G	H	S	F1	F2	D1	D2	D4	D5	D6	D7	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
MC 28	50	20	4.5	25	3	36.0	20.5	25	36	45	17	13.0	8.2	28	40	4.3
"	63	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.8
"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.2
"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.8
"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.5
MC 56	63	24	7.0	35	4	45.0	25.0	30	50	60	21	15.5	10.2	56	90	8.5
"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.2
"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.2
"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.4
"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.7
MC 112	80	32	8.5	50	6	62.5	33.0	42	70	85	29	22.0	14.3	112	180	16.6
"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14.0
"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.2
"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	10.2
"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.9
"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.9
MC 224	125	43	10.5	70	8	83.0	44.0	60	100	120	42	30.0	20.3	224	350	32.3
"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	27.1
"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	23.5
"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	20.6
"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	"	17.2

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# Conveyor Chain

## MT/ME Series Deep Link

## Metric Conveyor Chain (DIN 8167)



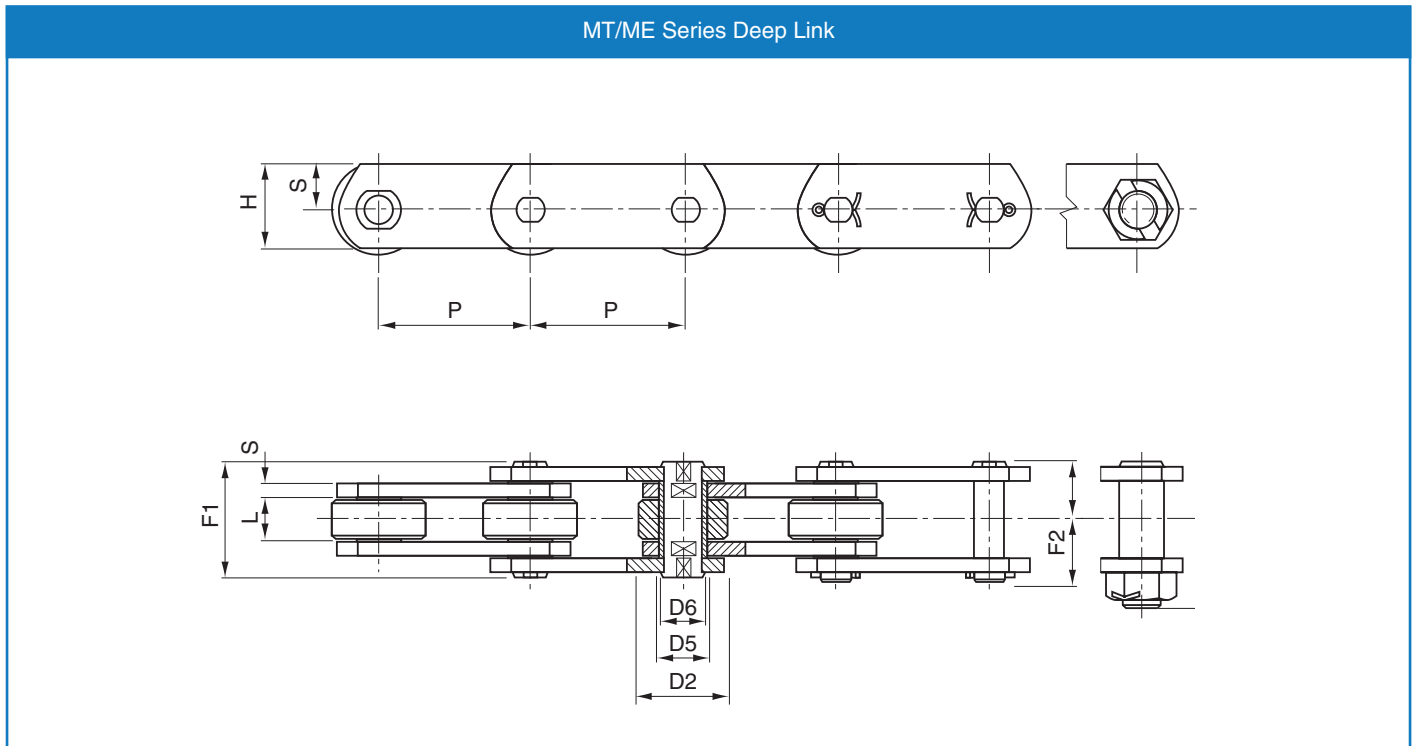
### Deep Link

Chain Number	Pitch P	L	S	H	H1	F1	F2	D2	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
ME 20	40	16	2.5	25	16.0	33.0	19.0	25	9	6	20	32	3.0
"	50	"	"	"	"	"	"	"	"	"	"	"	2.6
"	63	"	"	"	"	"	"	"	"	"	"	"	2.3
"	80	"	"	"	"	"	"	"	"	"	"	"	2.0
ME 28	50	18	3.0	30	20.0	36.0	20.5	30	10	7	28	42	4.1
"	63	"	"	"	"	"	"	"	"	"	"	"	3.5
"	80	"	"	"	"	"	"	"	"	"	"	"	3.1
"	100	"	"	"	"	"	"	"	"	"	"	"	2.8
ME 40	63	20	4.0	35	22.5	40.5	24.0	36	11	8	40	60	5.5
"	80	"	"	"	"	"	"	"	"	"	"	"	4.8
"	100	"	"	"	"	"	"	"	"	"	"	"	4.2
"	125	"	"	"	"	"	"	"	"	"	"	"	3.7
ME 56	63	24	4.0	45	30.0	45.0	26.0	42	15	10	56	85	8.3
"	80	"	"	"	"	"	"	"	"	"	"	"	7.0
"	100	"	"	"	"	"	"	"	"	"	"	"	6.1
"	125	"	"	"	"	"	"	"	"	"	"	"	5.4
ME 80	80	28	5.0	50	32.5	54.5	30.5	50	18	12	80	125	11.0
"	100	"	"	"	"	"	"	"	"	"	"	"	9.5
"	125	"	"	"	"	"	"	"	"	"	"	"	8.5
"	160	"	"	"	"	"	"	"	"	"	"	"	7.2
"	200	"	"	"	"	"	"	"	"	"	"	"	6.0

# Conveyor Chain

MT/ME Series

Metric Conveyor Chain (DIN 8167)



## Deep Link

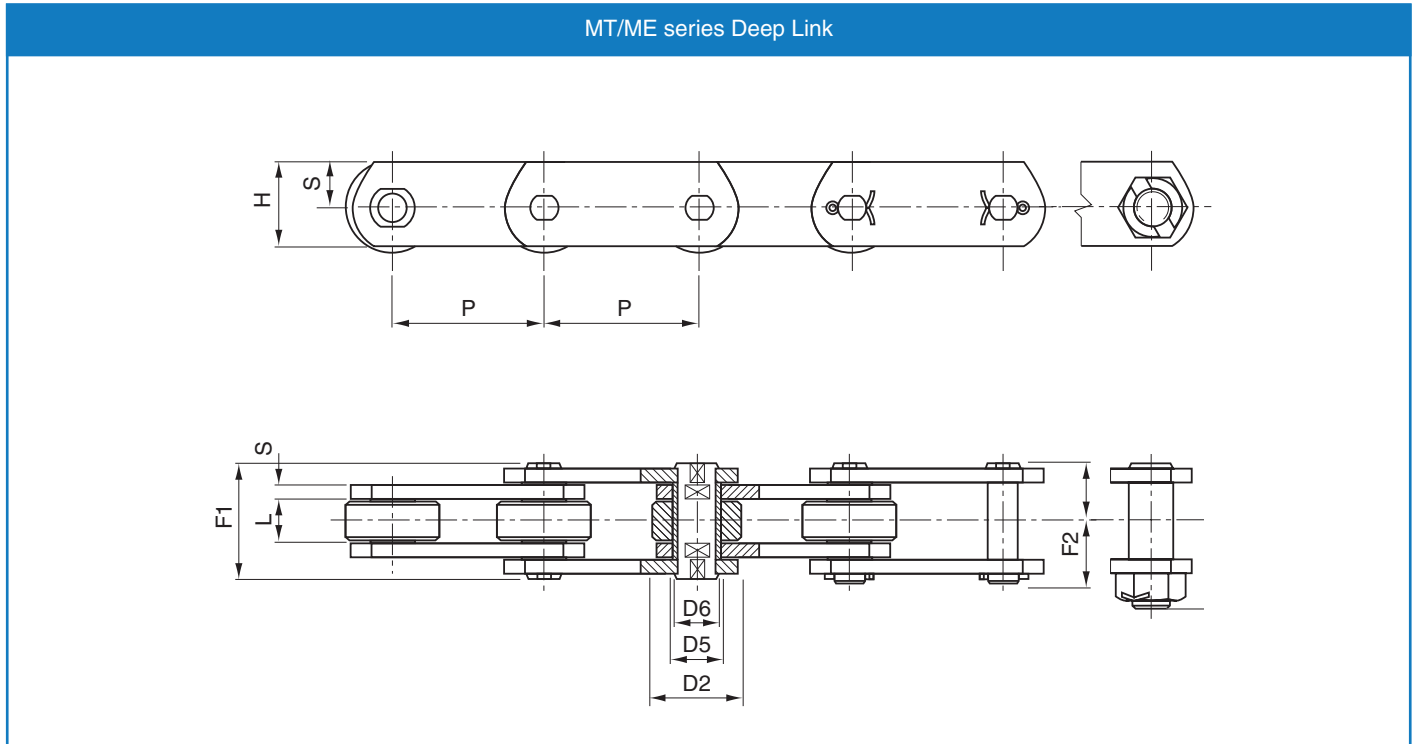
Chain Number	Pitch P	L	S	H	H1	F1	F2	D2	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight kg/m
ME 112	80	32	6	60	40	63	36.0	60	21	15	112	175	17.0
"	100	"	"	"	"	"	"	"	"	"	"	"	14.5
"	125	"	"	"	"	"	"	"	"	"	"	"	13.0
"	160	"	"	"	"	"	"	"	"	"	"	"	11.0
"	200	"	"	"	"	"	"	"	"	"	"	"	10.0
ME 160	100	37	7	70	45	72	41.5	70	25	18	160	260	21.5
"	125	"	"	"	"	"	"	"	"	"	"	"	19.0
"	160	"	"	"	"	"	"	"	"	"	"	"	17.0
"	200	"	"	"	"	"	"	"	"	"	"	"	15.0
"	250	"	"	"	"	"	"	"	"	"	"	"	13.5
ME 224	125	43	8	90	60	84	47.0	85	30	21	224	340	32.5
"	160	"	"	"	"	"	"	"	"	"	"	"	27.5
"	200	"	"	"	"	"	"	"	"	"	"	"	23.0
"	250	"	"	"	"	"	"	"	"	"	"	"	21.0
"	315	"	"	"	"	"	"	"	"	"	"	"	19.0
ME 315	160	48	10	100	65	97	55.0	100	36	25	315	520	43.0
"	200	"	"	"	"	"	"	"	"	"	"	"	37.0
"	250	"	"	"	"	"	"	"	"	"	"	"	32.0
"	315	"	"	"	"	"	"	"	"	"	"	"	28.6
"	400	"	"	"	"	"	"	"	"	"	"	"	25.5

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# Conveyor Chain

MT/ME Series

Metric Conveyor Chain (DIN 8167)



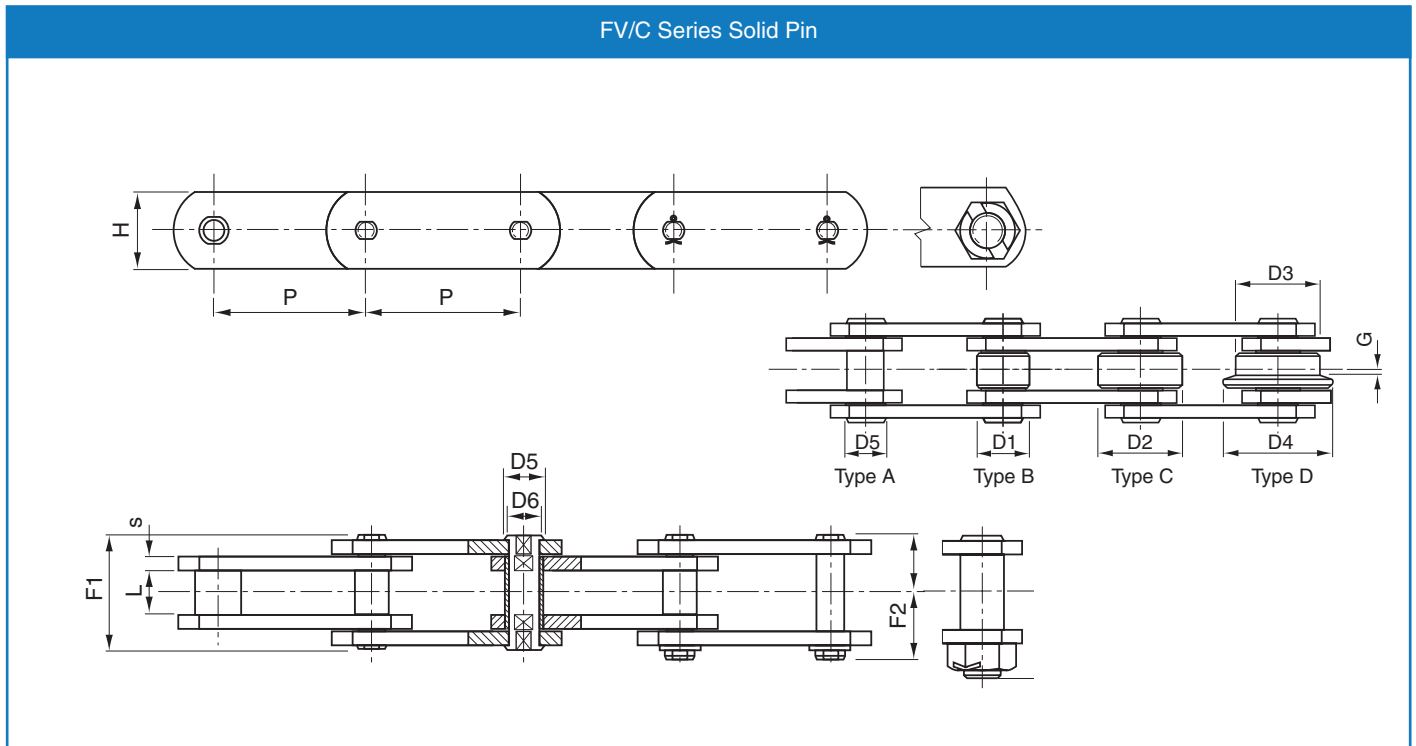
Deep Link

Chain Number	Pitch P	L	S	H	H1	F1	F2	D2	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight kg/m
ME 450	200	56	12	120	80	114	67.0	120	42	30	450	700	47
"	250	"	"	"	"	"	"	"	"	"	"	"	41
"	315	"	"	"	"	"	"	"	"	"	"	"	36
"	400	"	"	"	"	"	"	"	"	"	"	"	32
ME 630	250	66	14	140	90	137	87.5	140	50	36	630	900	71
"	315	"	"	"	"	"	"	"	"	"	"	"	62.5
"	400	"	"	"	"	"	"	"	"	"	"	"	56
"	500	"	"	"	"	"	"	"	"	"	"	"	50.6
"	600	"	"	"	"	"	"	"	"	"	"	"	46.5
ME 900	250	78	16	180	120	153	95.0	170	60	44	900	1,250	108.5
"	315	"	"	"	"	"	"	"	"	"	"	"	94.5
"	400	"	"	"	"	"	"	"	"	"	"	"	82.5
"	500	"	"	"	"	"	"	"	"	"	"	"	73.8
"	600	"	"	"	"	"	"	"	"	"	"	"	66.7

# Conveyor Chain

FV/C Series

Metric Conveyor Chain (DIN 8165)



Solid Pin

DIN Number	Chain number	Pitch P	L	G	H	S	F1	F2	D1	D2	D3	D4	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
FV40	C42	50	18	4	25	3	36	21	20	32	40	50	15	10	42	47	4.0
"	"	63	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.3
"	"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.0
"	"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.6
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	2.3
FV63	C64	63	22	5	30	4	45	26	26	40	50	63	18	12	64	75	6.4
"	"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.3
"	"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.7
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.0
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.5
FV90	C100	63	25	6.5	35	5	53	30	30	48	63	78	20	14	100	115	10.0
"	"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.6
"	"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.3
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.5
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.8
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.8
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.6
FV112	C120	100	30	7.5	40	6	62	35	32	55	72	90	22	16	120	170	11.2
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.6
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.3
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.5
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.7

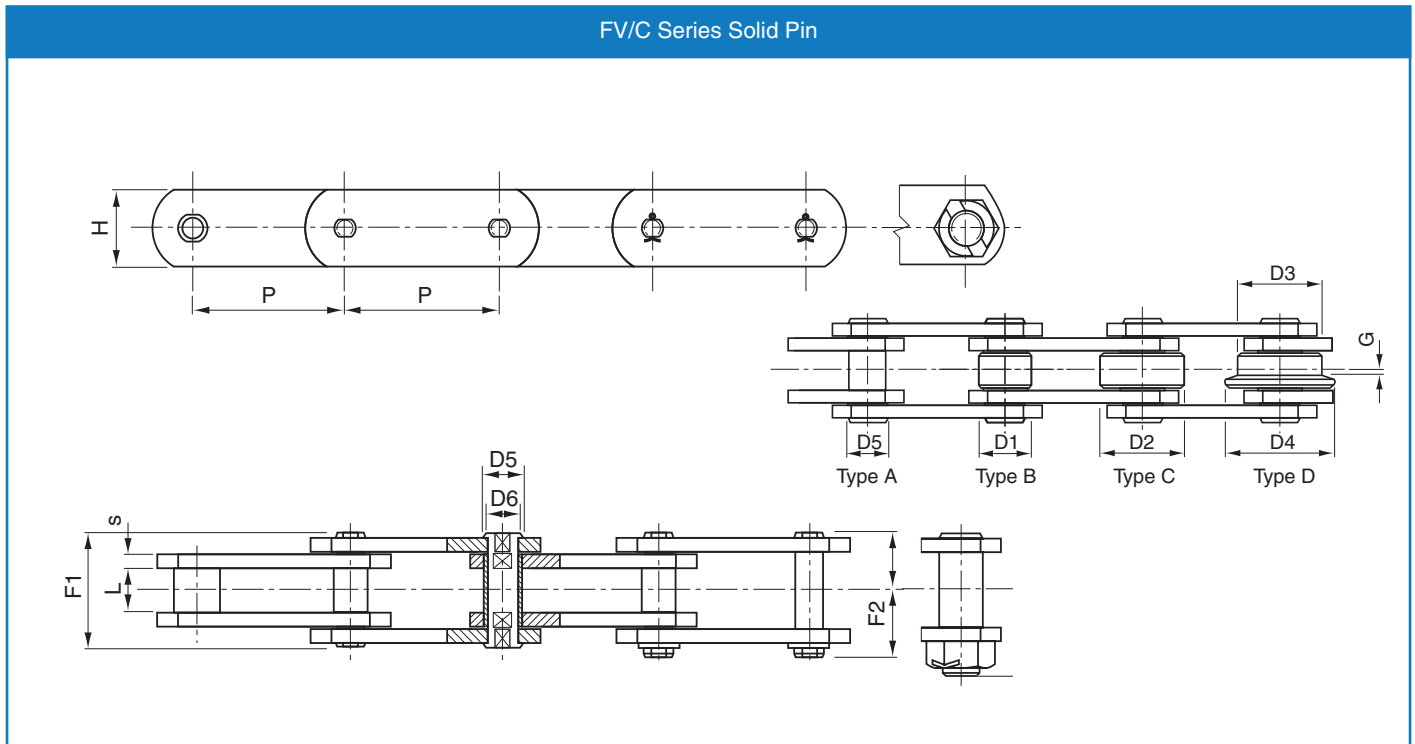
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.



# Conveyor Chain

FV/C Series

Metric Conveyor Chain (DIN 8165)



Solid Pin

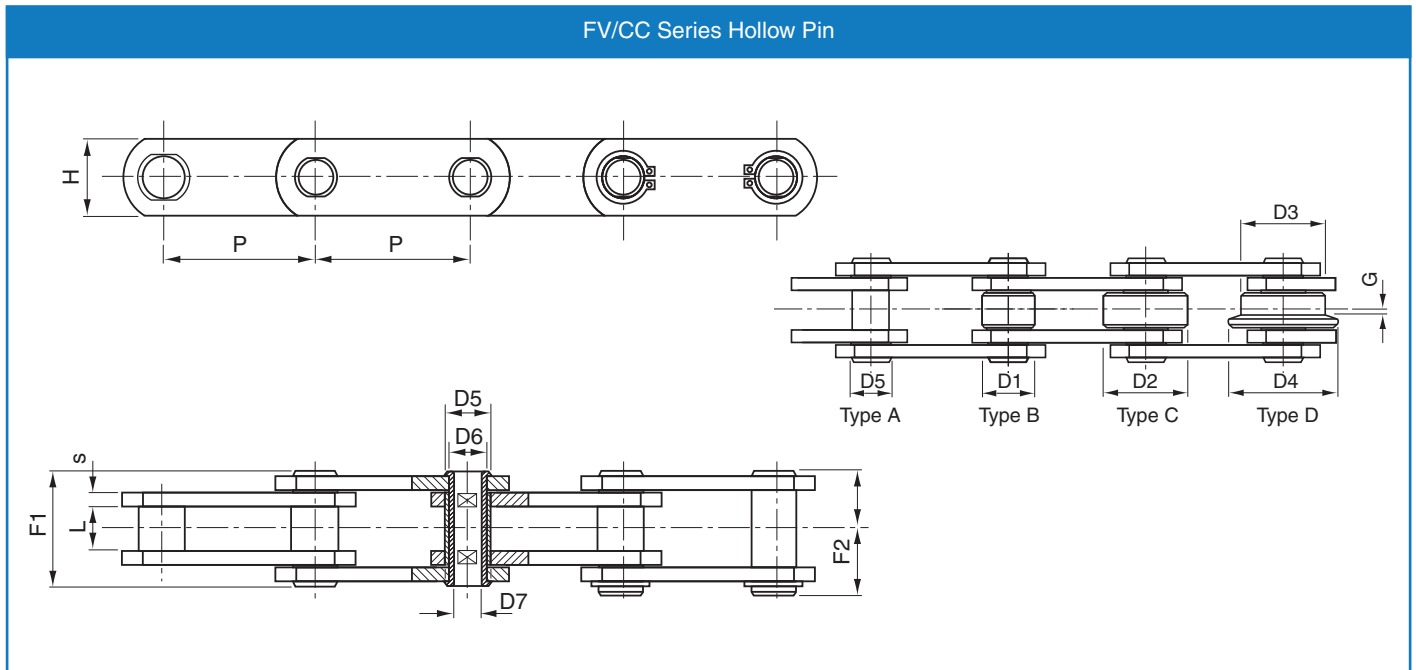
DIN Number	Chain number	Pitch P	L	G	H	S	F1	F2	D1	D2	D3	D4	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight (Type C) kg/m
FV140	C145	100	35	9	45	6	67	38	36	60	80	100	26	18	145	180	14.3
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	12.3
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	10.5
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.0
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.3
FV180	C190	125	45	13	50	8	86	49	42	70	100	125	30	20	190	250	18.9
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	16.7
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14.8
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	13.0
"	"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.6
FV250	C275	160	55	15	60	8	97	55	50	80	125	155	36	26	275	300	23.8
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	20.6
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	17.9
"	"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	"	15.8
"	"	400	"	"	"	"	"	"	"	"	"	"	"	"	"	"	13.9
FV315	C370	160	65	18	70	10	113	70	60	90	140	175	42	30	370	480	33.3
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	28.9
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	25.3
"	"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	"	22.4
"	"	400	"	"	"	"	"	"	"	"	"	"	"	"	"	"	20.2

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# Conveyor Chain

FV/CC Series

Metric Conveyor Chain (DIN 8165)



Hollow Pin

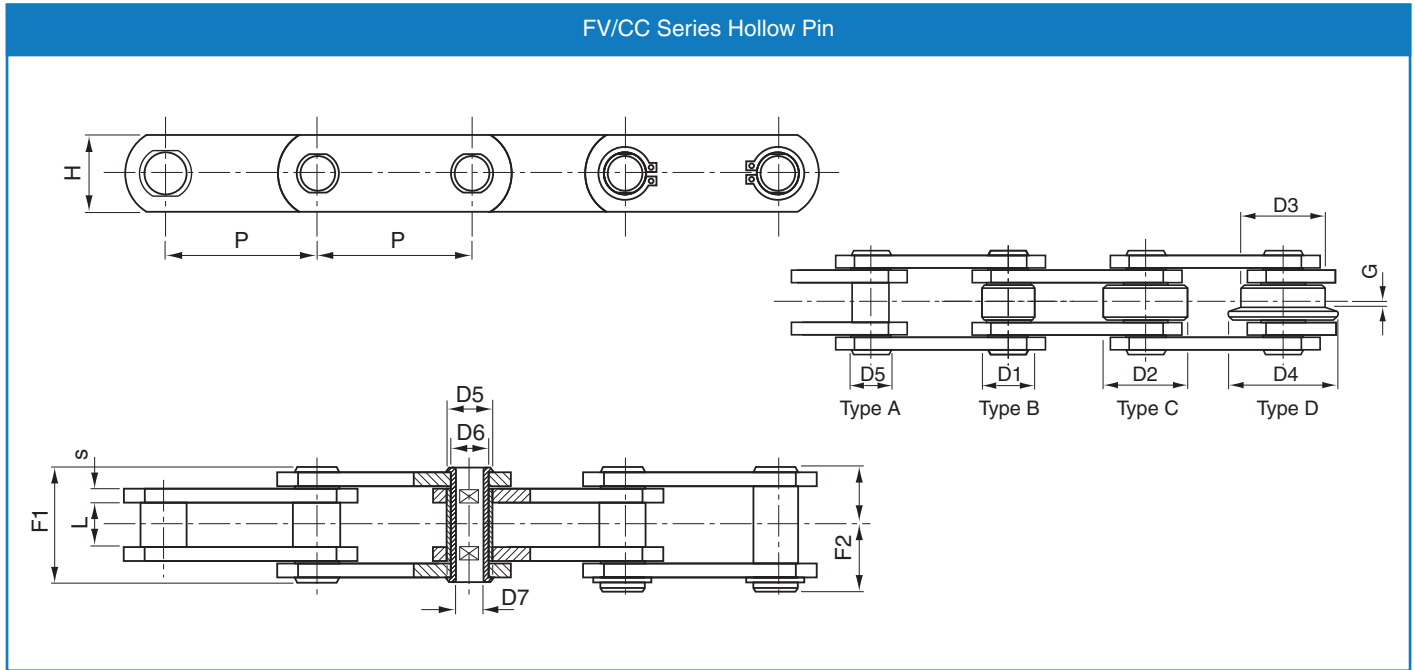
DIN Number	Chain number	Pitch P	L	G	H	S	F1	F2	D1	D2	D3	D4	D5	D6	D7	Breaking Load kN	Weight (Type C) kg/m
FV63	CC46	63	22	5	30	4	45	28	26	40	50	63	18	12	8	46	5.7
"	"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.9
"	"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.3
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.8
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.4
FV90	CC73	63	25	6.5	35	5	53	30	30	48	63	78	20	14	10	73	9.1
"	"	80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.8
"	"	100	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.8
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.6
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	5.3
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.7
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	4.3
FV112	CC90	100	30	7.5	40	6	62	32	32	55	72	90	22	16	11	90	10.2
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.9
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.8
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.0
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	6.3
FV140	CC110	100	35	9	45	6	67	35	36	60	80	100	26	18	12	110	12.9
"	"	125	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.2
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	9.7
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	8.6
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7.7

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.

# Conveyor Chain

FV/CC Series

Metric Conveyor Chain (DIN 8165)



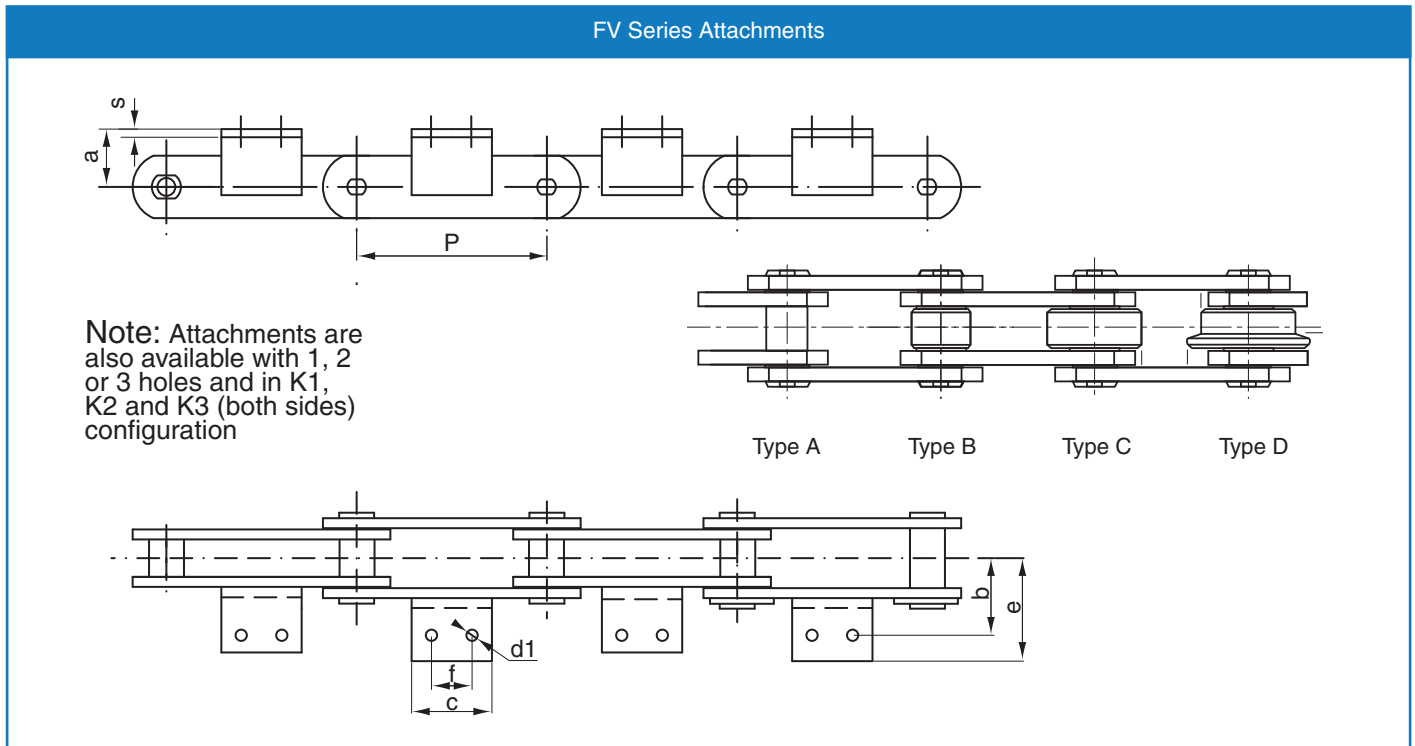
Hollow Pin

DIN Number	Chain number	Pitch P	L	G	H	S	F1	F2	D1	D2	D3	D4	D5	D6	D7	Breaking Load kN	Weight (Type C) kg/m
FV180	CC145	125	45	13	50	8	86	45	42	70	100	125	30	20	14	145	18.2
"	"	160	"	"	"	"	"	"	"	"	"	"	"	"	"	"	15.6
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	13.8
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	12.3
"	"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	"	11.0
FV250	CC215	160	55	15	60	8	97	55	50	80	125	155	36	26	18	215	20.5
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	18.0
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	15.9
"	"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	"	14.2
FV315	CC295	160	65	18	70	10	117	63	60	90	140	175	42	30	20	295	34.1
"	"	200	"	"	"	"	"	"	"	"	"	"	"	"	"	"	29.5
"	"	250	"	"	"	"	"	"	"	"	"	"	"	"	"	"	25.8
"	"	315	"	"	"	"	"	"	"	"	"	"	"	"	"	"	22.8
"	"	400	"	"	"	"	"	"	"	"	"	"	"	"	"	"	20.2

# Conveyor Chain Attachments

FV Series Attachments

Metric Conveyor Chain (DIN 8165)



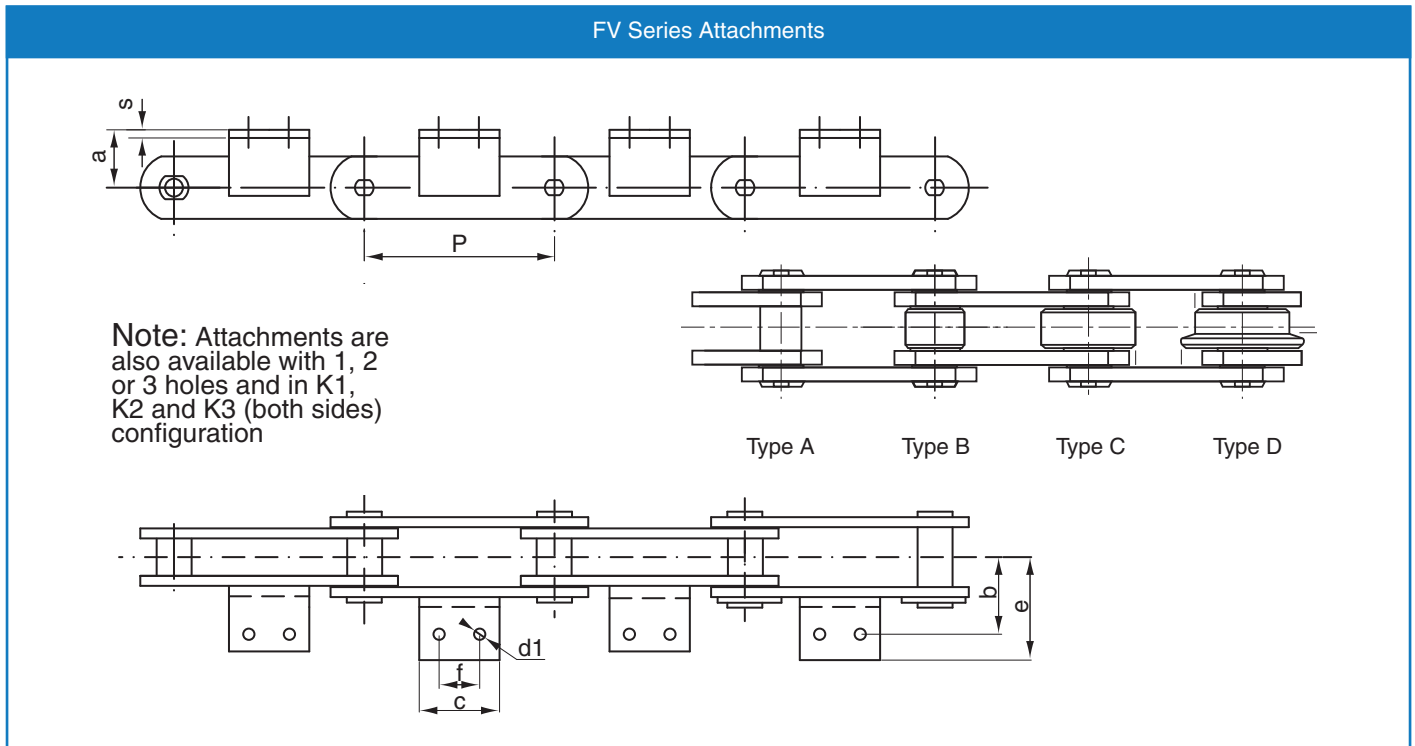
DIN Number	Chain Number	Pitch P	a	b	c	d1	e	f	Welded or Integral attachment	Chain Weight - Excluding Attachments kg/metre				Attachment Weight (A2) kg each
										Type A	Type B	Type C	Type D	
FV40	C42	50	20	25	45	6.5	64.0	*	25x3	2.4	2.9	4.0	5.6	0.050
"	"	63	"	"	31	"	40.5	*		2.0	2.4	3.3	4.5	0.036
"	"	80	"	"	45	"	"	25		1.9	2.2	3.0	3.9	0.050
"	"	100	"	"	50	"	"	30		1.7	2.0	2.6	3.3	0.056
"	"	125	"	"	60	"	"	30		1.6	1.9	2.3	3.0	0.067
FV63	C64	63	30	34	40	8.4	50.0	*	30x4	3.8	4.5	6.4	8.9	0.063
"	"	80	"	"	45	"	"	25		3.2	3.8	5.3	7.2	0.095
"	"	100	"	"	50	"	"	30		3.0	3.5	4.7	6.2	0.110
"	"	125	"	"	60	"	"	40		2.7	3.0	4.0	5.3	0.140
"	"	160	"	"	70	"	"	50		2.4	2.7	3.5	4.4	0.170
FV90	C100	63	35	40	30	8.4	64.0	*	40x4	5.6	6.8	10.0	14.7	0.072
"	"	80	"	"	45	"	"	25		5.1	6.0	8.6	12.3	0.110
"	"	100	"	"	50	"	"	30		4.5	5.3	7.3	10.3	0.130
"	"	125	"	"	60	"	"	40		4.2	4.8	6.5	8.8	0.160
"	"	160	"	"	70	"	"	50		4.0	4.5	5.8	7.6	0.200
"	"	200	"	"	80	"	"	60		3.5	3.8	4.8	5.8	0.240
"	"	250	"	"	85	"	"	65		3.4	3.7	4.6	5.4	0.210
FV112	C120	100	40	50	50	11.0	70.0	30	40x5	6.7	7.7	11.2	18.8	0.200
"	"	125	"	"	65	"	"	40		6.0	6.8	9.6	15.7	0.270
"	"	160	"	"	75	"	"	50		5.5	6.1	8.3	13.0	0.310
"	"	200	"	"	90	"	"	65		5.2	5.7	7.5	11.3	0.400
"	"	250	"	"	105	"	"	80		4.9	5.3	6.7	9.8	0.500

\* Attachment With One Hole

# Conveyor Chain Attachments

**FV Series Attachments**

**Metric Conveyor Chain (DIN 8165)**



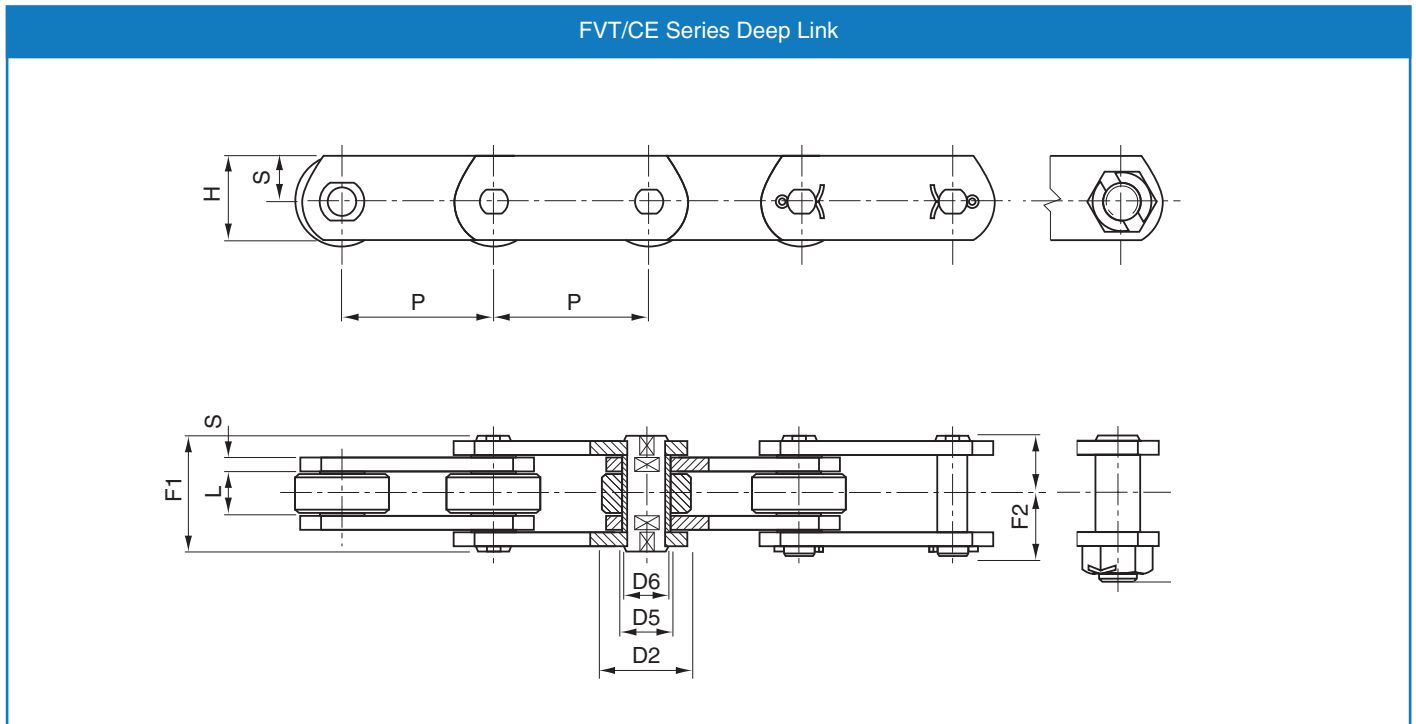
DIN Number	Chain Number	Pitch P	a	b	c	d1	e	f	Welded or Integral attachment	Chain Weight - Excluding Attachments kg/metre				Attachment Weight (A2) kg each
										Type A	Type B	Type C	Type D	
FV140	C145	100	45	50	55	11	81	30	50x6	8.2	9.5	14.3	21.4	0.23
"	"	125	"	"	65	"	"	40	"	7.4	8.5	12.3	18.0	0.30
"	"	160	"	"	75	"	"	50	"	6.7	7.5	10.5	14.9	0.36
"	"	200	"	"	90	"	"	65	"	6.0	6.7	9.0	12.8	0.45
"	"	250	"	"	105	"	"	80	"	5.8	6.3	8.3	11.0	0.54
FV180	C190	125	45	64	63	13	91	35	63x8	10.5	12.4	18.9	31.3	0.32
"	"	160	"	"	80	"	"	50	"	10.2	11.7	16.7	26.5	0.41
"	"	200	"	"	95	"	"	65	"	9.6	10.8	14.8	25.9	0.52
"	"	250	"	"	110	"	"	80	"	8.9	9.8	13.0	19.3	0.62
"	"	315	"	"	130	"	"	100	"	8.3	9.0	11.6	16.6	0.72
FV250	C275	160	55	69	80	14	106	50	63x8	13.4	16.4	23.8	45.9	0.57
"	"	200	"	"	95	"	"	65	"	12.3	14.7	20.6	38.3	0.71
"	"	250	"	"	110	"	"	80	"	11.3	13.3	17.9	32.1	0.85
"	"	315	"	"	130	"	"	100	"	10.5	12.0	15.8	27.0	1.00
"	"	400	"	"	130	"	"	100	"	9.8	10.7	13.9	23.8	1.00
FV315	C370	160	60	85	50	14	130	*	70x8	20.4	24.9	33.3	67.8	0.52
"	"	200	"	"	95	"	"	65	"	18.5	22.1	28.9	56.4	0.98
"	"	250	"	"	110	"	"	80	"	17.0	20.0	25.3	47.3	1.13
"	"	315	"	"	130	"	"	100	"	15.9	18.2	22.4	39.9	1.34
"	"	400	"	"	130	"	"	100	"	15.0	16.8	20.2	34.0	1.34

\* Attachment With One Hole

# Conveyor Chain

FVT/CE Series

Metric Conveyor Chain (DIN 8165)



## Deep Link

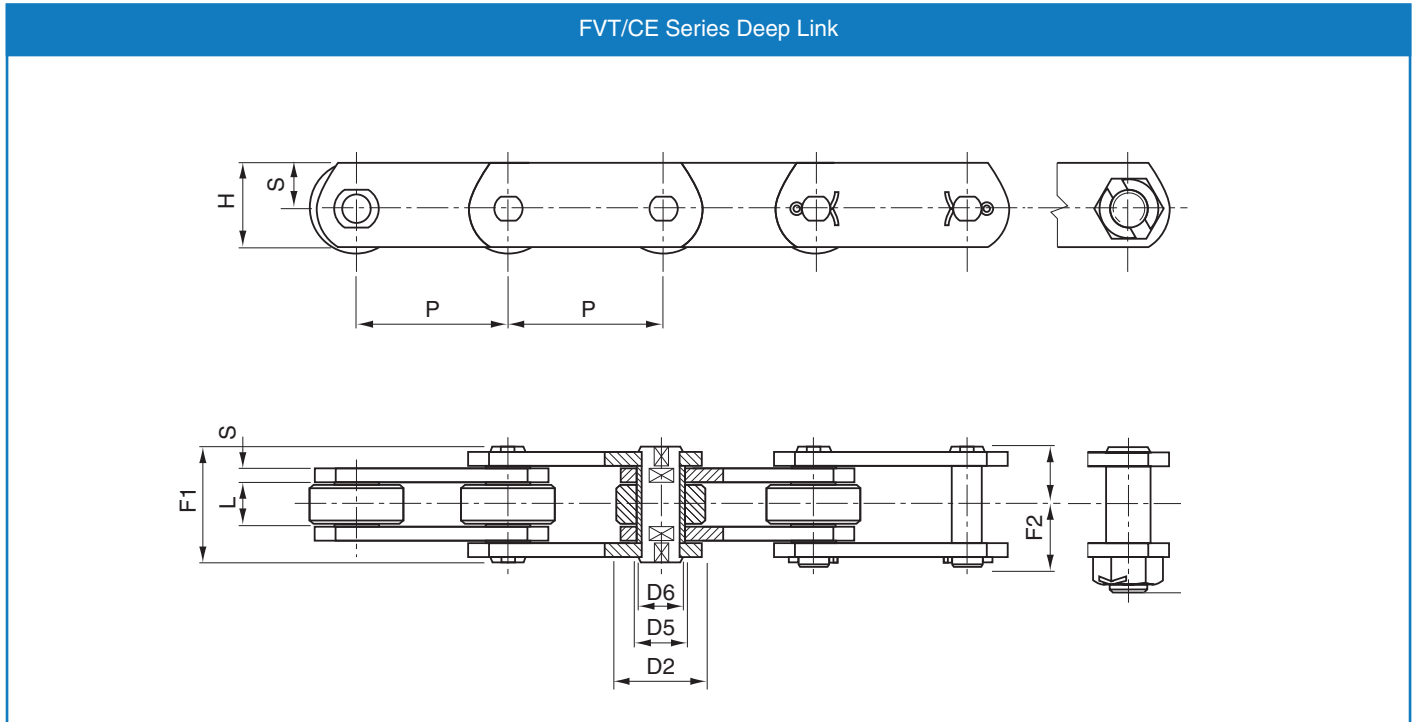
DIN Number	Chain number	P Pitch	L	H	H1	S	F1	F2	D2	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight kg/m
FVT40	CE42	50	18	35	22.5	3	36	21	32	15	10	42	47	5.0
"	"	63	"	"	"	"	"	"	"	"	"	"	"	4.3
"	"	80	"	"	"	"	"	"	"	"	"	"	"	3.8
"	"	100	"	"	"	"	"	"	"	"	"	"	"	3.4
"	"	125	"	"	"	"	"	"	"	"	"	"	"	3.0
FVT63	CE64	63	22	40	25	4	45	26	40	18	12	64	75	7.5
"	"	80	"	"	"	"	"	"	"	"	"	"	"	6.5
"	"	100	"	"	"	"	"	"	"	"	"	"	"	5.7
"	"	125	"	"	"	"	"	"	"	"	"	"	"	5.1
"	"	160	"	"	"	"	"	"	"	"	"	"	"	4.5
FVT90	CE100	63	25	45	27.5	5	53	30	48	20	14	100	115	11.7
"	"	80	"	"	"	"	"	"	"	"	"	"	"	10.0
"	"	100	"	"	"	"	"	"	"	"	"	"	"	8.7
"	"	125	"	"	"	"	"	"	"	"	"	"	"	7.7
"	"	160	"	"	"	"	"	"	"	"	"	"	"	6.8
"	"	200	"	"	"	"	"	"	"	"	"	"	"	5.8
"	"	250	"	"	"	"	"	"	"	"	"	"	"	5.4
FVT112	CE120	100	30	50	30	6	62	35	55	22	16	120	170	12.7
"	"	125	"	"	"	"	"	"	"	"	"	"	"	11.7
"	"	160	"	"	"	"	"	"	"	"	"	"	"	9.7
"	"	200	"	"	"	"	"	"	"	"	"	"	"	8.7
"	"	250	"	"	"	"	"	"	"	"	"	"	"	8.0

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# Conveyor Chain

FVT/CE Series

Metric Conveyor Chain (DIN 8165)



Deep Link

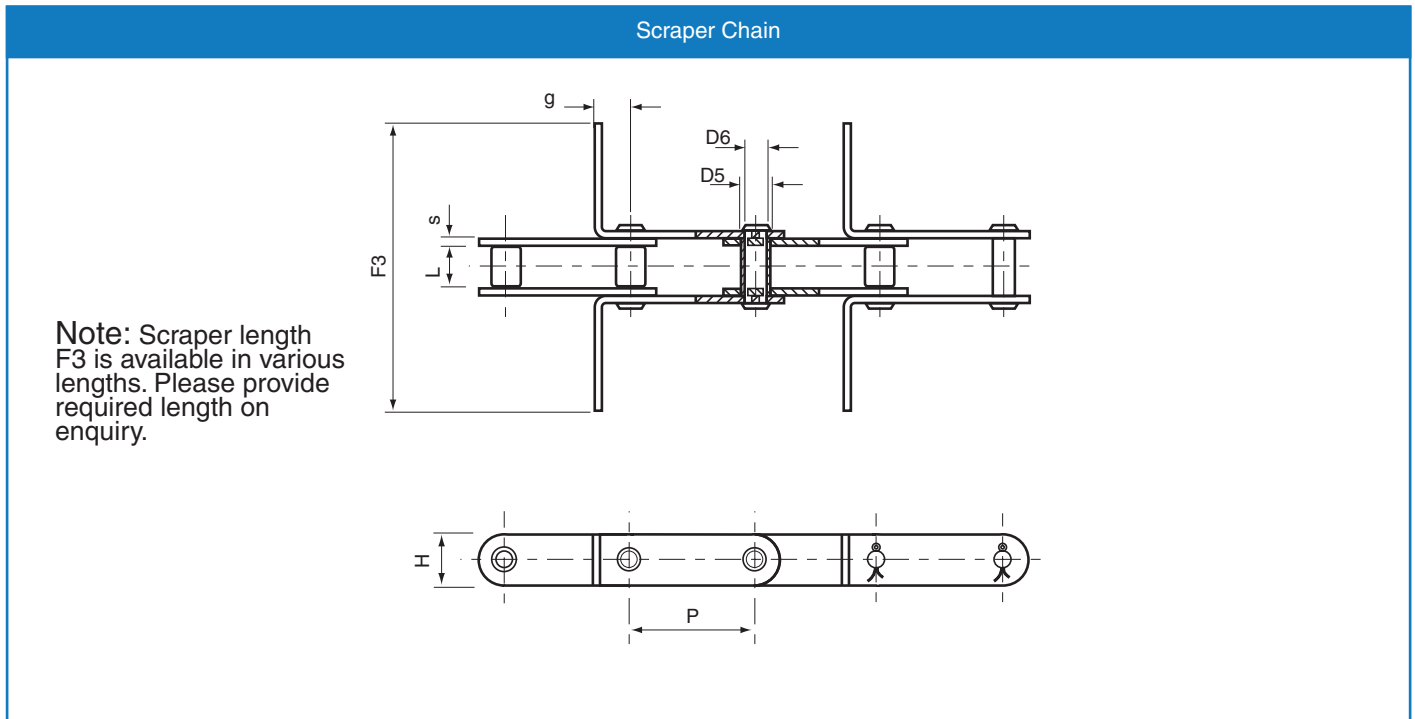
DIN Number	Chain Number	P Pitch	L	H	H1	S	F1	F2	D2	D5	D6	Breaking Load kN	HT Breaking Load, kN	Weight kg/m
FVT140	CE145	100	35	60	37.5	6	67	38	60	25	18	145	180	16.8
"	"	125	"	"	"	"	"	"	"	"	"	"	"	14.6
"	"	160	"	"	"	"	"	"	"	"	"	"	"	12.6
"	"	200	"	"	"	"	"	"	"	"	"	"	"	11.3
"	"	250	"	"	"	"	"	"	"	"	"	"	"	10.1
FVT180	CE190	125	45	70	45	8	86	49	70	30	20	190	250	24.2
"	"	160	"	"	"	"	"	"	"	"	"	"	"	20.8
"	"	200	"	"	"	"	"	"	"	"	"	"	"	18.4
"	"	250	"	"	"	"	"	"	"	"	"	"	"	16.5
"	"	315	"	"	"	"	"	"	"	"	"	"	"	14.9
FVT250	CE275	160	55	80	50	8	97	55	80	36	26	275	300	28.2
"	"	200	"	"	"	"	"	"	"	"	"	"	"	24.5
"	"	250	"	"	"	"	"	"	"	"	"	"	"	21.7
"	"	315	"	"	"	"	"	"	"	"	"	"	"	19.3
FVT315	CE295	160	65	90	55	10	26	70	90	42	30	370	480	39.9
"	"	200	"	"	"	"	"	"	"	"	"	"	"	34.8
"	"	250	"	"	"	"	"	"	"	"	"	"	"	30.6
"	"	315	"	"	"	"	"	"	"	"	"	"	"	27.3
"	"	400	"	"	"	"	"	"	"	"	"	"	"	24.5



# Conveyor Chain

FV/CR Series

Metric Conveyor Chain (DIN 8165)



## Scraper Chain

DIN Number	Chain Number	Pitch P	L	H	S	g	F3	D5	D6	Breaking Load kN	Weight kg/m
FV40	CR42	80	18	25	3	25	*	15	10	42	1.9
"	"	100	"	"	"	"	*	"	"	"	1.7
"	"	125	"	"	"	"	*	"	"	"	1.6
FV63	CR64	100	22	30	4	25	*	18	12	64	3.0
"	"	125	"	"	"	"	*	"	"	"	2.7
"	"	150	"	"	"	"	*	"	"	"	2.4
FV90	CR100	100	25	35	5	30	*	20	14	100	4.5
"	"	125	"	"	"	"	*	"	"	"	4.2
"	"	150	"	"	"	"	*	"	"	"	4.0
FV112	CR120	100	30	40	6	35	*	22	16	120	6.7
"	"	125	"	"	"	"	*	"	"	"	6.0
"	"	150	"	"	"	"	*	"	"	"	5.5
FV140	CR145	100	35	45	"	38	*	26	18	145	7.4
"	"	125	"	"	"	"	*	"	"	"	6.7
"	"	150	"	"	"	"	*	"	"	"	6.0
FV180	CR190	125	45	50	8	44	*	30	20	190	10.5
"	"	150	"	"	"	"	*	"	"	"	10.2
"	"	200	"	"	"	"	*	"	"	"	9.6
FV250	CR275	125	55	60	"	50	*	36	26	275	13.4
"	"	150	"	"	"	"	*	"	"	"	12.3
"	"	200	"	"	"	"	*	"	"	"	11.3

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# Conveyor Chain Attachments

## Attachment Chain Designations




### Attachment Chain Designations

# M 1 - 01

#### Attachment Orientation

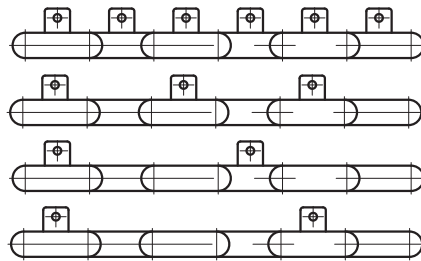
- M = Vertical one side 
- MK = Vertical both sides 
- A = Horizontal one side 
- K = Horizontal both sides 

#### Mounting Holes

- 1 = Single Hole 
- 2 = Double 
- 3 = Triple 

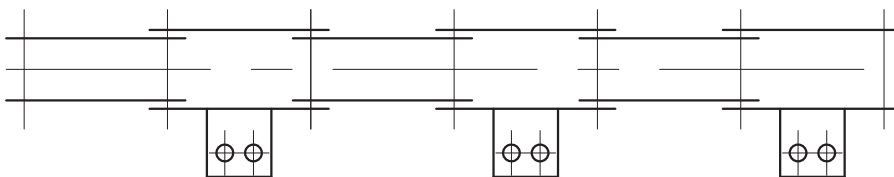
#### Frequency

- 01 = Every side plate
- 02 = Every other side plate
- 03 = Every third side plate
- 04 = Every fourth side plate

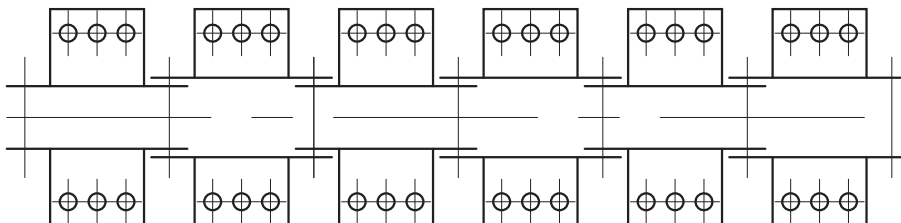


### Examples

A2-02

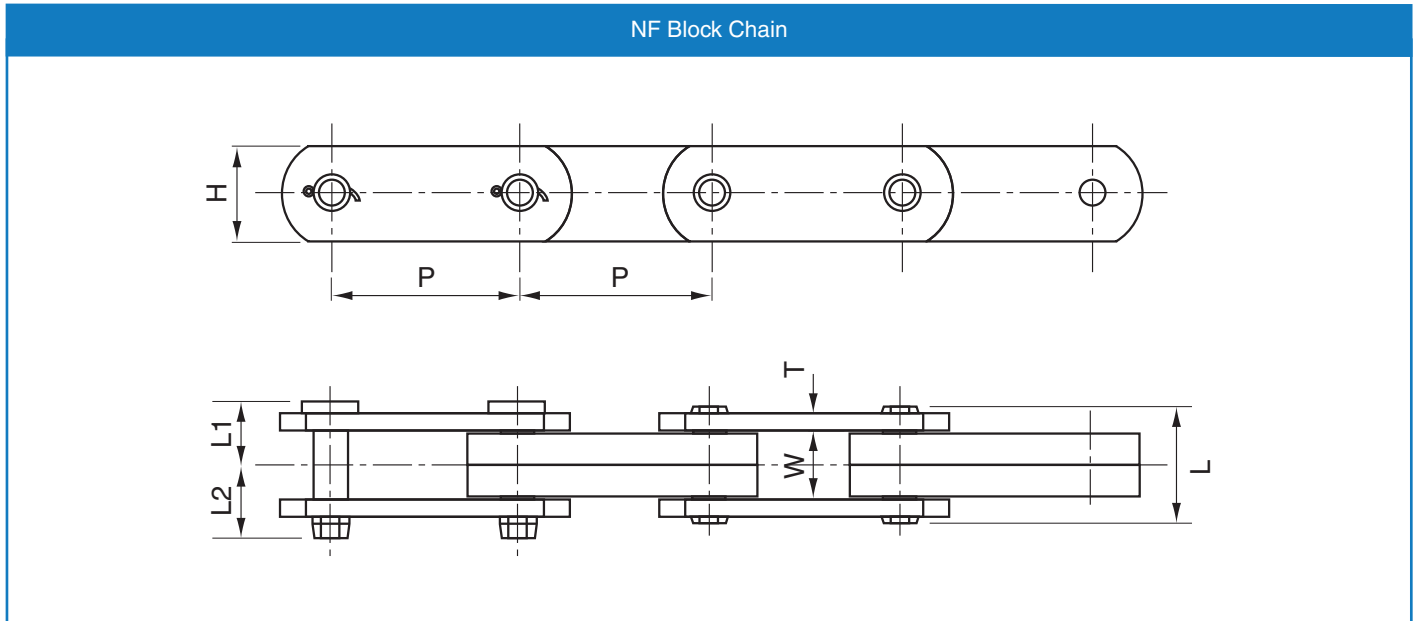


K3-01



# Block Chain

## NF Block Chain



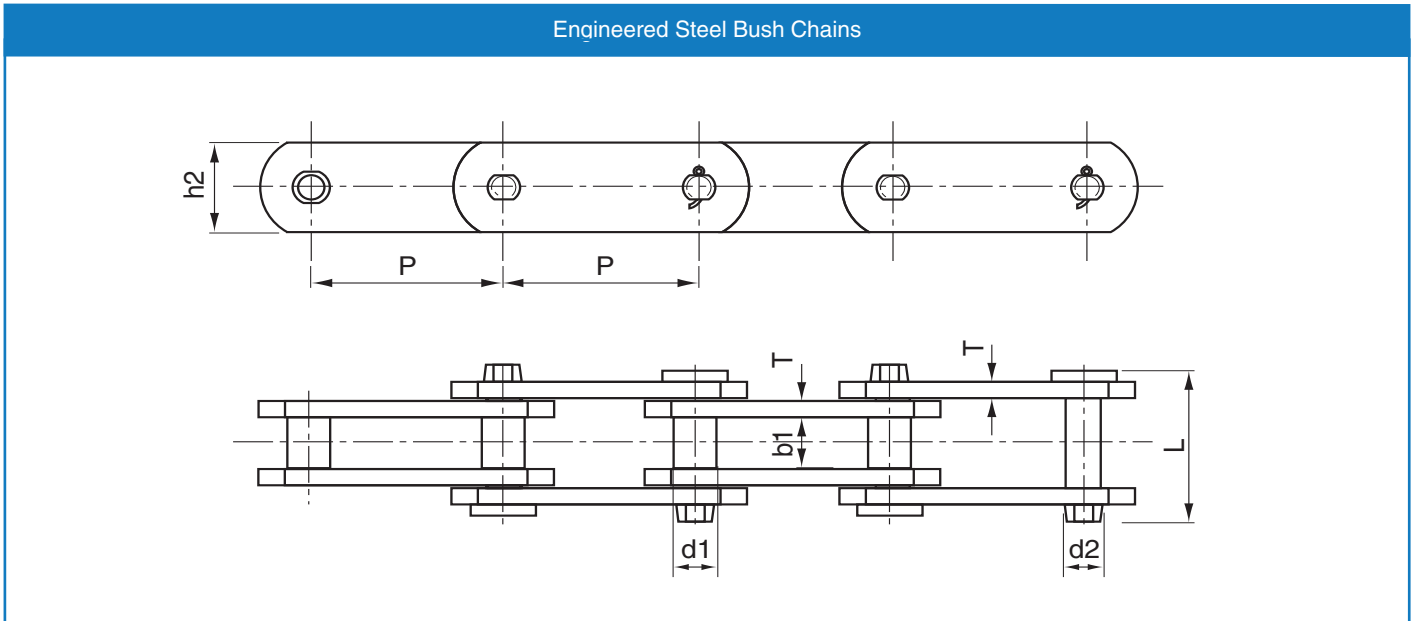
Chain number	Chain pitch	Roller diameter	Width between inner plates	Bearing pin diameter	Pin length			Side plate height	Plate thickness	Tensile strength	Approx weight
	P	R	W	D	L	L1	L2	H	T	kN(kgf)	kg/m
NF 30150	150.00	/	23.3	/	47.0	24.00	32.00	38.1	7.9	309(31500)	7.0
NF 30200	200.00	/	23.3	/	47.0	24.00	32.00	38.1	7.9	309(31500)	6.6
NF 40150	150.00	/	26.5	/	50.0	25.50	33.50	44.5	7.9	397(40500)	9.0
NF 40200	200.00	/	26.5	/	50.0	25.50	33.50	44.5	7.9	397(40500)	8.5
NF 56200	200.00	/	29.5	/	57.0	29.50	40.50	54	9.5	554(56500)	12.3
NF 56250	250.00	/	29.5	/	57.0	29.50	40.50	54	9.5	554(56500)	12.0
NF 63200	200.00	/	31.5	/	59.0	30.50	41.50	57	9.5	618(63000)	13.7
NF 63250	250.00	/	31.5	/	59.0	30.50	41.50	57	9.5	618(63000)	13.0
NF 70200	200.00	/	33.5	/	61.0	31.50	42.50	63.5	9.5	721(73500)	16.2
NF 70250	250.00	/	33.5	/	61.0	31.50	42.50	63.5	9.5	721(73500)	15.5
NF 90200	200.00	/	38	/	68.0	34.50	45.50	72	10.5	907(92500)	21.0
NF 90250	250.00	/	38	/	68.0	34.50	45.50	72	10.5	907(92500)	20.0
NF115250	250.00	/	40	/	76.0	38.00	49.00	76.2	12.7	1120(114000)	25.0
NF115300	300.00	/	40	/	76.0	38.00	49.00	76.2	12.7	1120(114000)	24.0
NF140250	250.00	/	47.5	/	84.0	44.00	54.00	85	14	1400(143000)	32.0
NF140300	300.00	/	47.5	/	84.0	44.00	54.00	85	14	1400(143000)	31.0
NF180300	300.00	/	52.5	/	94.0	48.50	58.50	95	16	1740(177500)	39.0
NF180350	350.00	/	52.5	/	94.0	48.50	58.50	95	16	1740(177500)	37.8
NF210300	300.00	/	59	/	101.0	51.50	61.50	110	16	2150(219500)	50.0
NF210350	350.00	/	59	/	101.0	51.50	61.50	110	16	2150(219500)	48.3
NF250300	300.00	/	66	/	114.0	58.50	68.50	112	19	2440(248500)	58.8
NF250350	350.00	/	66	/	114.0	58.50	68.50	112	19	2440(248500)	56.7
NF280300	300.00	/	67	/	115.0	58.50	68.50	122	19	2720(277500)	66.0
NF280350	350.00	/	67	/	115.0	58.50	68.50	122	19	2720(277500)	62.3

These chains consist of outer link plates, inner block links and pins.

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.

# Engineered Bush Chains

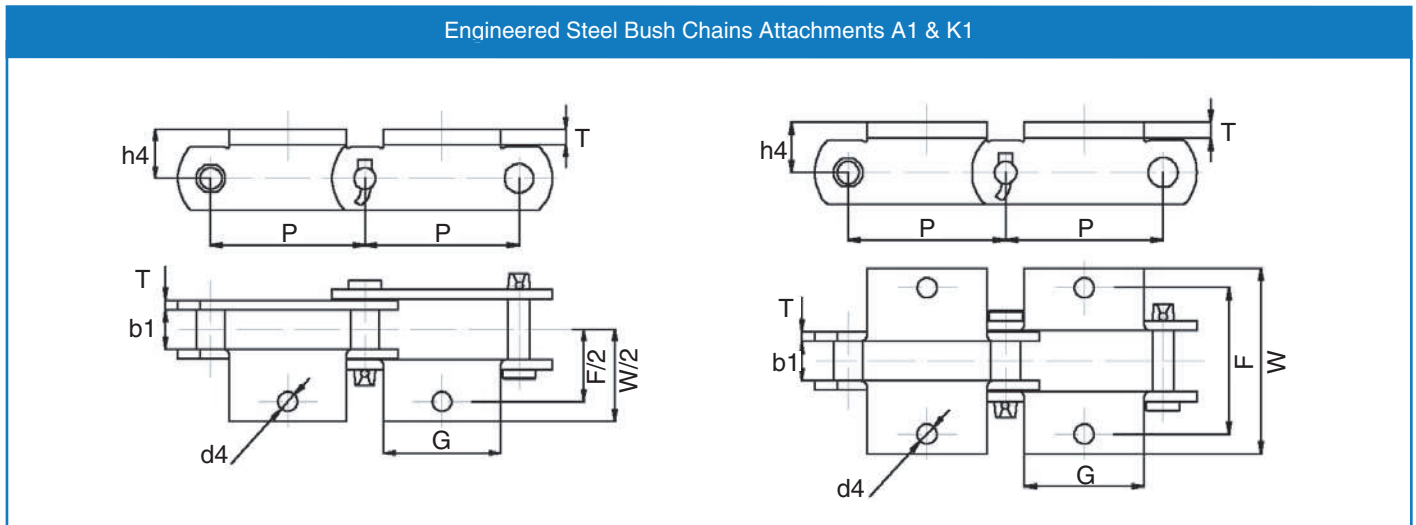
## Engineered Steel Bush Chains



ANSI chain number	Challenge chain number	Pitch inches	Pitch mm	Bush diameter	Width between inner plates	Pin diameter	Pin length	Side plate height	Plate thickness	Average Tensile strength	Approx weight
		P	P	d1 max	b1 min	d2	L max	h2	T	kN/bf	kg/m
S102B	S102B	4.00	101.60	25.4	54.1	15.88	111.3	38.10	9.70	176.00	10.40
S110	S110	6.00	152.40	32	54.1	15.88	111.3	38.10	9.70	176.00	9.80
S111	S111	4.76	120.90	36.6	66.8	19.05	131.2	50.80	9.70	235.40	15.90
S131	S131	3.08	78.11	32	33.5	15.88	90.5	38.10	9.70	176.00	11.60
S150	S150	6.05	153.67	44.7	84.3	25.4	164.6	63.50	12.70	416.00	25.70
S188	S188	2.61	66.27	22.4	26.9	12.7	68.6	28.40	6.40	112.20	5.60
S856	S856	6.00	152.40	44.4	76.2	25.4	154.9	63.50	12.70	401.50	25.00
S857	S857	6.00	152.40	44.4	76.2	25.4	154.9	82.60	12.70	475.20	32.00
S859	S859	6.00	152.40	60.4	95.3	31.75	188.5	101.60	16.00	759.00	55.90
S864	S864	7.00	177.80	60.4	95.3	31.75	188.5	101.60	16.00	759.00	51.80

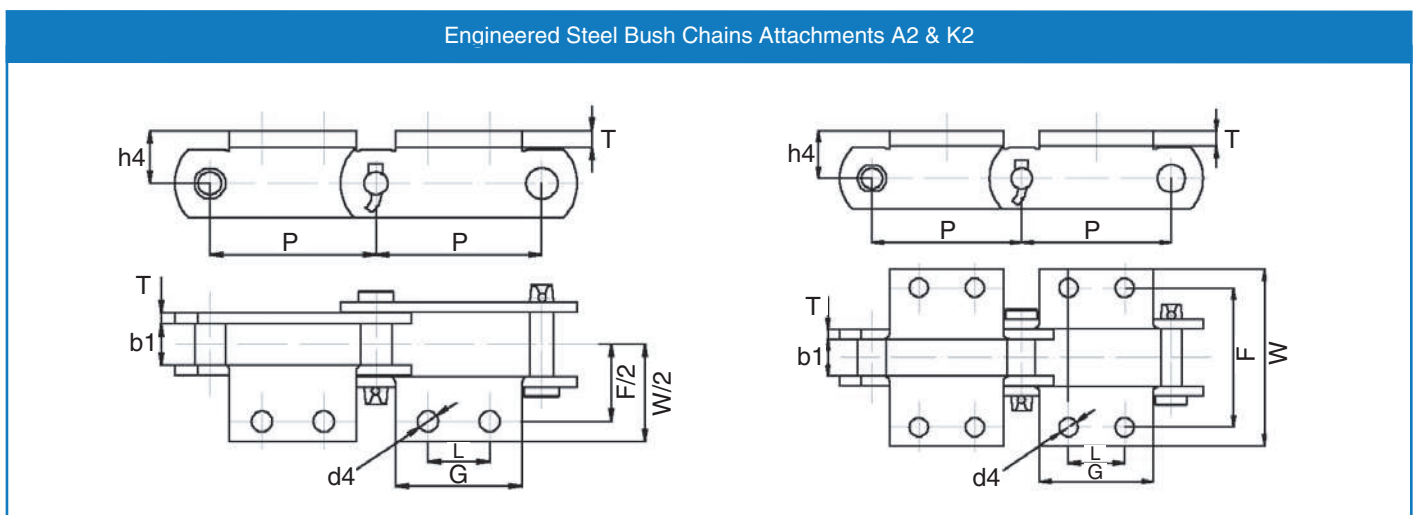
# Engineered Bush Chains

## Engineered Steel Bush Chains Attachments A1 & K1



ANSI chain number	Challenge chain number	Pitch inches	Pitch mm	Attachment diameter				Plate thickness	
		P	P	G	F	W	h4	d4	T
*S102B	*S102B	4.00	101.60	77.0	121.0	180.8	25.4	10.20	9.70
S131	S131	3.08	78.11	73.9	104.6	157	25.4	13.50	9.70
S188	S188	2.61	66.27	54.6	95.2	131.6	20.6	10.20	6.40

## Engineered Steel Bush Chains Attachments A2 & K2

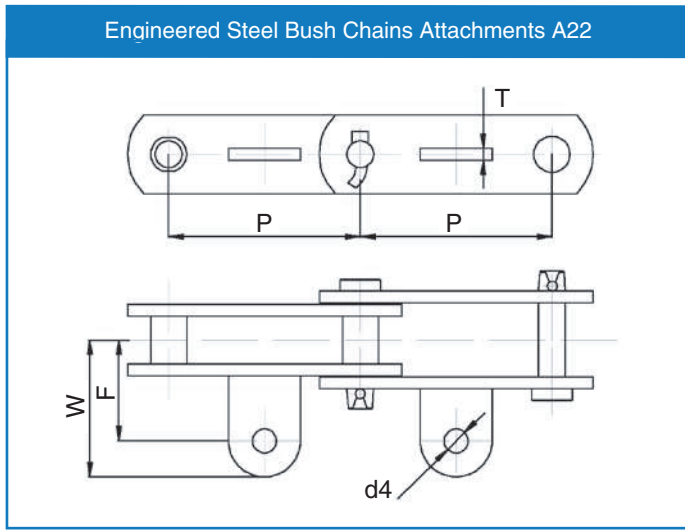


ANSI chain number	Challenge chain number	Pitch inches	Hole distance	Attachment diameter				Plate thickness	
		P	L	G max	F	W max	h4	d4 min	T
*S102B	*S102B	101.60	44.50	69.9	134.9	180.8	25.4	10.20	9.70
S110	S110	152.40	44.50	89.6	134.9	180.8	25.4	10.20	9.70
S111	S111	120.90	58.70	92.7	158.8	210.8	38.1	13.50	9.70
S131	S131	78.11	38.10	73.9	104.6	157	25.4	13.50	9.70
S150	S150	153.67	69.90	108.7	190.5	249.4	47.8	13.50	12.70
S188	S188	66.27	31.80	54.6	106.4	131.6	20.6	8.60	6.40
S856	S856	152.40	63.50	103.1	184.2	241.3	47.8	16.80	12.70

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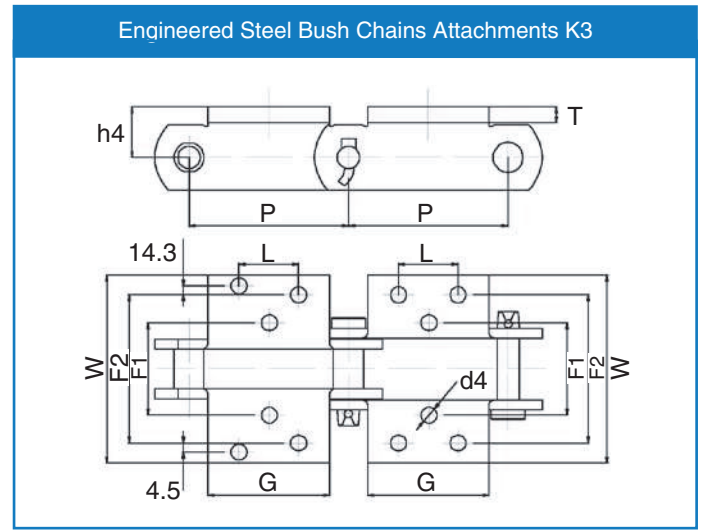
# Engineered Bush Chains

## Engineered Steel Bush Chains Attachments A22



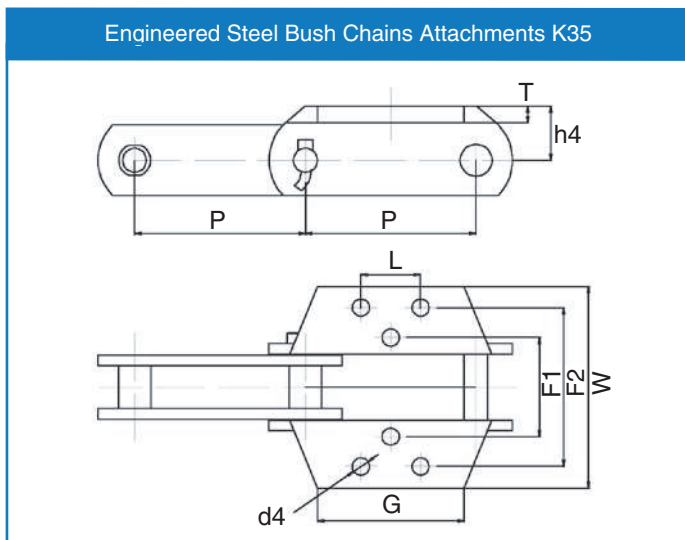
ANSI chain number	Challenge chain number	Pitch		Attachment diameter				Plate thickness	
		inches	mm	P	G	F	W	h4	d4
S188	S188	2.61	66.27	49.2	45.2	61.2	/	10.20	10.40
/	S188A22F1	2.61	66.27	32.0	45.2	61.2	/	12.00	6.40

## Engineered Steel Bush Chains Attachments K3



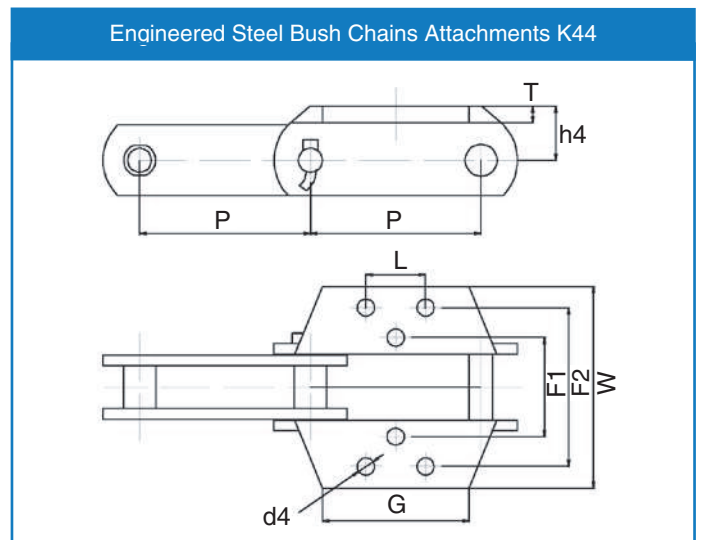
ANSI chain number	Challenge chain number	Pitch		Attachment diameter				Plate thickness		
		inches	mm	P	G	L	F1	F2	W	h4
S150	S150	153.67	109.5	69.9	190.5	292.1	347.5	47.80	13.50	13.5
S856	S856	152.40	152.4	69.9	166.6	277.9	349.3	47.80	13.50	13.5

## Engineered Steel Bush Chains Attachments K35



ANSI chain number	Challenge chain number	Pitch		Attachment diameter				Plate thickness		
		inches	mm	P	G	L	F1	F2	W	h4
S856	S856	152.40	146.1	63.5	184.2	298.5	349.3	47.80	16.80	13.5

## Engineered Steel Bush Chains Attachments K44

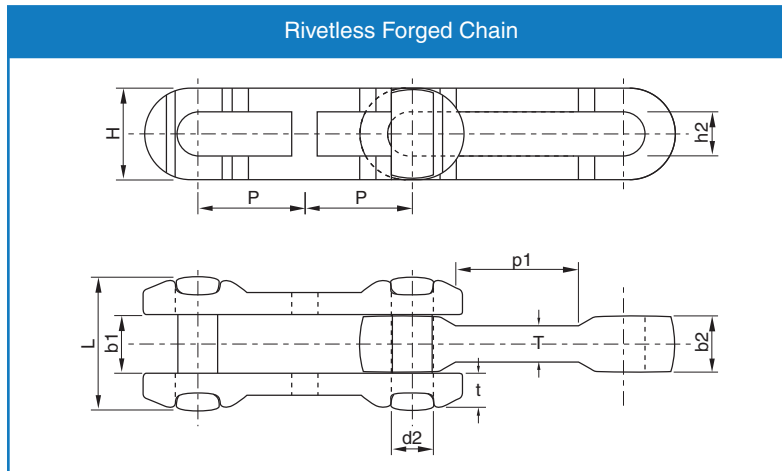


ANSI chain number	Challenge chain number	Pitch		Attachment diameter				Plate thickness			
		inches	mm	P	G	L1	L2	F1	F2	W	h4
S857	S857	152.40	146.1	88.9	88.9	177.8	304.8	355.60	63.50	13.5	13.5
S859	S859	152.40	146.1	114.3	69.9	228.6	330.2	381.00	76.20	16.8	13.5
S864	S864	177.80	146.1	139.7	95.3	228.6	330.2	381.00	76.20	16.8	13.5

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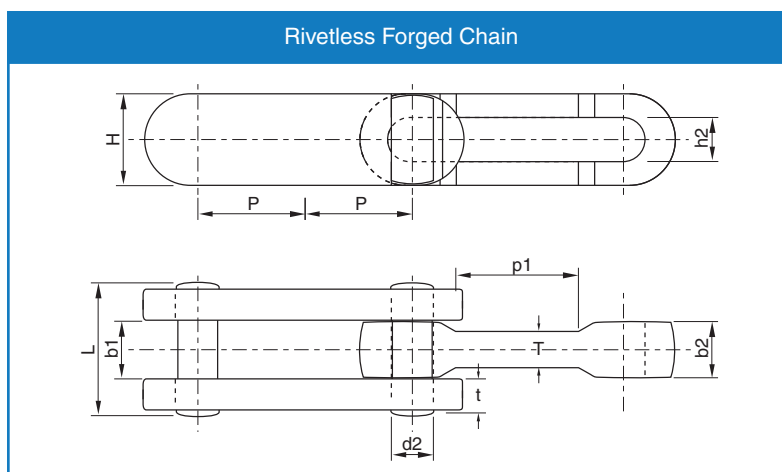
# Drop Forged Chain

## Rivetless Forged Chain



Chain number	Pitch	Pin diameter	Pin length	Center link		Plate thickness		Center link width	Ultimate tensile strength / kN	Designation
	mm			gap	Chain height	t	T			
	P	d2	L	h2 min	H max	t	T	b1		
X228	50.80	6.40	27.70	7.90	18.00	6.40	9.40	13.00	26.70	PHC X288...
X348	76.20	12.40	43.90	13.50	27.90	10.20	13.00	20.10	97.90	PHC X348...
X458	101.60	16.00	57.20	16.80	36.60	12.20	16.30	27.20	210.00	PHC X458...
X458XP*	101.60	16.00	57.20	16.80	36.60	12.20	16.30	27.20	255.00	PHC 468...
468	102.40	19.05	84.10	22.35	47.80	10.40	28.70	42.93	391.00	PHC 468H...
X678	152.40	22.10	77.00	24.10	51.60	17.80	21.10	34.30	380.00	PHC X658...
X678XP*	152.40	22.10	77.00	24.10	51.60	17.80	21.10	34.30	450.00	PHCX678...
698	152.40	28.70	95.25	31.75	65.00	14.20	25.40	41.40	650.00	PHC 678...
698XP*	152.40	28.70	95.25	31.75	65.00	14.20	25.40	41.40	720.00	PHC 698...
998	229.40	28.70	95.30	31.75	67.60	14.20	25.40	42.93	578.00	PHC XT100...
9118	229.40	35.00	124.00	38.10	76.20	19.80	33.30	51.10	979.00	PHC XT160...

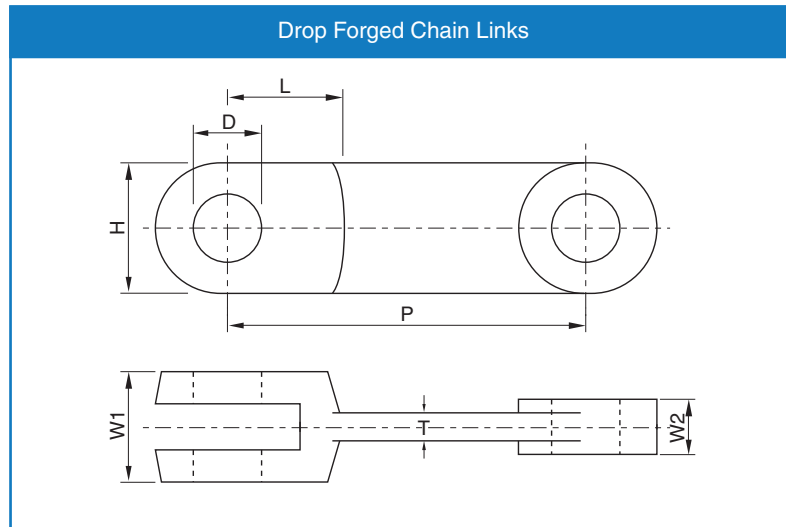
## Rivetless Forged Chain



Chain number	Pitch	Pin diameter	Pin length	Center link		Plate thickness		Center link width	Ultimate tensile strength / kN	Designation
	mm			gap	Chain height	t	T			
	P	d2	L	h2 min	H max	t	T	b1		
S348	76.68	12.70	44.45	20.57	28.70	12.70	14.22	8.89	3.58	PHC S348...
S458	102.39	16.00	52.32	26.92	35.05	16.00	17.53	17.78	5.22	PHC S458...
S468	102.39	19.05	74.68	42.93	50.80	28.70	22.35	29.78	11.78	PHC S468...
S678	153.19	22.35	76.20	36.58	50.80	20.57	25.40	34.22	12.83	PHC S678...
S698	153.19	28.70	82.55	41.40	63.50	25.40	31.75	48.00	17.45	PHC S698...
S998	229.39	28.70	82.55	42.93	63.50	25.40	31.75	48.00	18.05	PHC S998...
S9118	229.39	35.05	111.25	54.10	76.20	33.27	38.10	81.33	34.75	PHC S9118...

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# Drop Forged Chain



Chain number	Pitch mm	H	W1	W2	T	L	D	*Weight kg	Min. UTS kN
102	102	36	28	12	7.6	32	14	0.44	150
142	142	50	42	20	11	46	25	1.26	300
142H	142	50	62	30	16.5	55	25	2.1	450
142T	142	50	62	30	16.5	55	25	2.1	600
200	200	60	62	28	20	58	25	3.2	500
216	216	72	58	25	18	60	35	4.6	582
260	260	75	70	31	20	79	32	5.65	700

\* Weight including Pin and Circlip.

Nylon and welded steel flights available, eg:

**Square Bar Flight**

**Flat Bar Flight**

**Paddle Flight**

**U Flight**

**Closed U Flight**

**Close U Flight with Filler Plates**

**OO Flight**

**OO Flight with Filler Plates**

**Return Cup Flights**



# Note

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## The Benefits Spin Riveted Palm Oil Chain

**Challenge Palm Oil conveyor chains are designed to withstand the harsh environments found in today's modern Palm Oil mills. Shock loads, heat and lubricating issues demand a tough, high quality solution.**

**Material** – High quality alloy steels used throughout.

**Case Hardened alloy steel precision machined bushes**

– Ensuring minimum distortion and superior concentricity.

**Bushes from seamless tube with location shoulders and interference fit**

– For precise assembly; control on inner width and prevention of pin rotation. Bush shoulder length extended to form clearance between inner and outer plates providing uniform lubrication, increased strength and life and greatly minimises possibility of chain seizure.

**Spin Riveted Induction Hardened Pins in alloy steel** – For optimum life.

**Pins with location shoulders and interference fit** – For precise positioning of outer plate.

**Hardened Rollers with outer diameter finished by grinding**

– Gives excellent wear resistance and good load carrying qualities plus reduced wear on sprockets and a better visual result.

**Link plates cropped from cold drawn steel**

– Ensures internal stresses are minimised resulting in a plate able to withstand fatigue and shock loads.

**Holes precision punched on dedicated progression tooling** – consistently high tolerance pitch control guaranteed.

**Links manufactured from high carbon steel** – Giving increased breaking load.

**Shot peened** – Produces strong surface and reduced fatigue.

**Attachments and options**

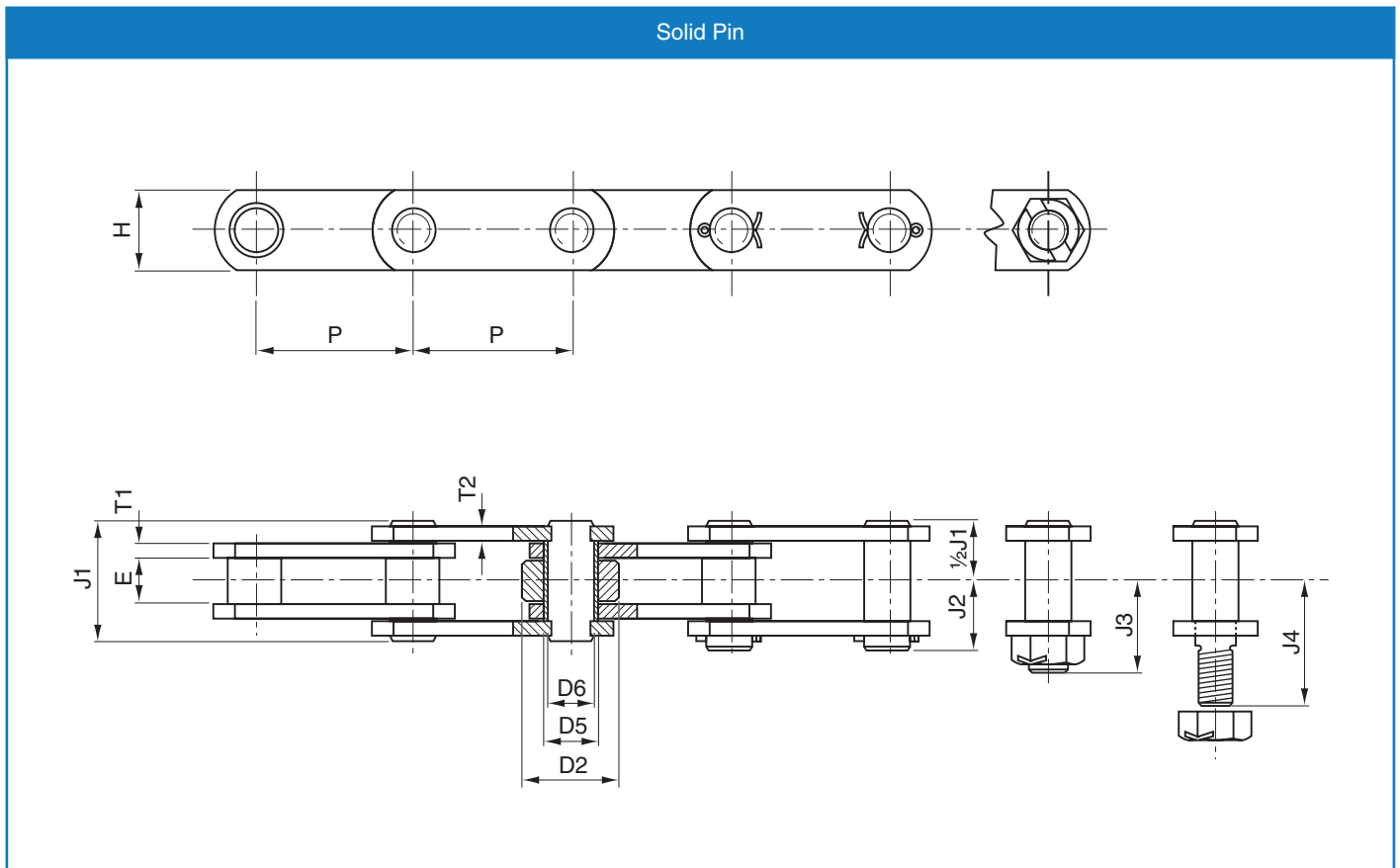
– Zinc and Nickel plated parts, molykoted pins, bushes and rollers. Flanged rollers, hardened plates, Stainless parts, liner bushes etc.

**Connecting links** – Use zinc plated steel locking nuts (Nylok).



# Palm Oil Chain

## BS Conveyor Chain (BS 4116 Part 4)



### Solid Pin

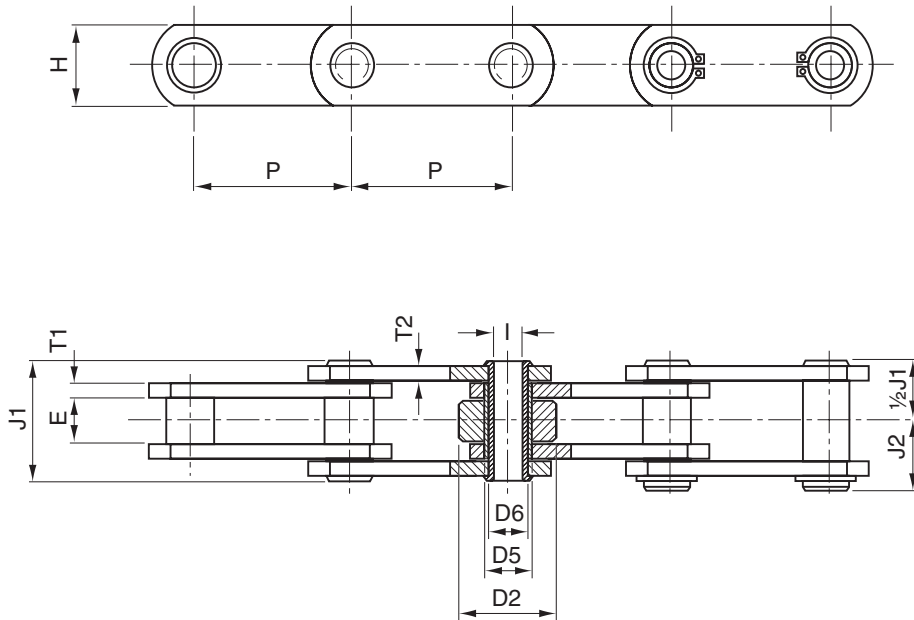
Chain number	Minimum Breaking Load, lbf	Pitch Inches P	Pitch mm P	E	H	T1	T2	J1	J2	J3	J4	D2	D4	D5	D6	G	Breaking Load, kN	HT Breaking Load, kN	Weight (Type C) kg/m
PCC-15-101.6	15000	4.0	101.6	19.6	38.2	5.1	4	46.1	28	37	57	57	47.63	25.4	19	3.5	100	6.5	4
PCC-15-152.4	15000	6.0	152.4	19.6	38.2	5.1	4	46.1	28	37	57	57	47.63	25.4	19	3.5	100	5.3	3.5
PCC-30-101.6	30000	4.0	101.6	25.5	50.8	7.1	5.1	59.13	34.5	51	76	76	66.7	34.9	26.9	3.5	156	14.3	3.2
PCC-30-152.4	30000	6.0	152.4	25.5	50.8	7.1	5.1	59.13	34.5	51	76	76	66.7	34.9	26.9	3.5	156	11.3	3
PCC-45-152.4	45000	6.0	152.4	38	65	10	8	82.5	47	70	93	93	88.9	41.3	31.75	8.5	300	24.3	2.8
PCC-55-152.4	55000	6.0	152.4	25.5	50.8	7.1	5.1	59.13	34.5	51	76	76	66.7	34.9	26.9	3.5	245	11.3	2.6

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# Palm Oil Chain

## BS Conveyor Chain (BS 4116 Part 4)

Hollow Pin



### Hollow Pin

Chain number	Minimum Breaking Load, lbf	Pitch Inches P	Pitch mm P	E	H	T1	T2	J1	J2	J3	D2	D4	D5	D6	G	Breaking Load, kN	HT Breaking Load, kN	Weight (Type C) kg/m
PCC-12-101.6	12000	4.0	101.6	19.16	38.2	5.1	4	44	23.5	47.63	25.4	19	3.5	60	6.0	100	6.5	4
PCC-12-152.4	12000	6.0	152.4	19.16	38.2	5.1	4	44	23.5	47.63	25.4	19	3.5	60	4.9	100	5.3	3.5
PCC-24-101.6	24000	4.0	101.6	25.5	50.8	7.1	5.1	57	31.5	66.7	34.9	26.9	4	150	12.8	156	14.3	3.2
PCC-24-152.4	24000	6.0	152.4	25.5	50.8	7.1	5.1	57	31.5	66.7	34.9	26.9	4	150	11.0	156	11.3	3
PCC-36-152.4	36000	6.0	152.4	38	65	10	8	82.5	47	88.9	41.3	31.75	8.5	300	22.3	300	24.3	2.8
PCC-50-152.4	50000	6.0	152.4	25.5	50.8	7.1	5.1	57	31.5	66.7	34.9	26.9	4	225	11.0	245	11.3	2.6



# Sugar Chain

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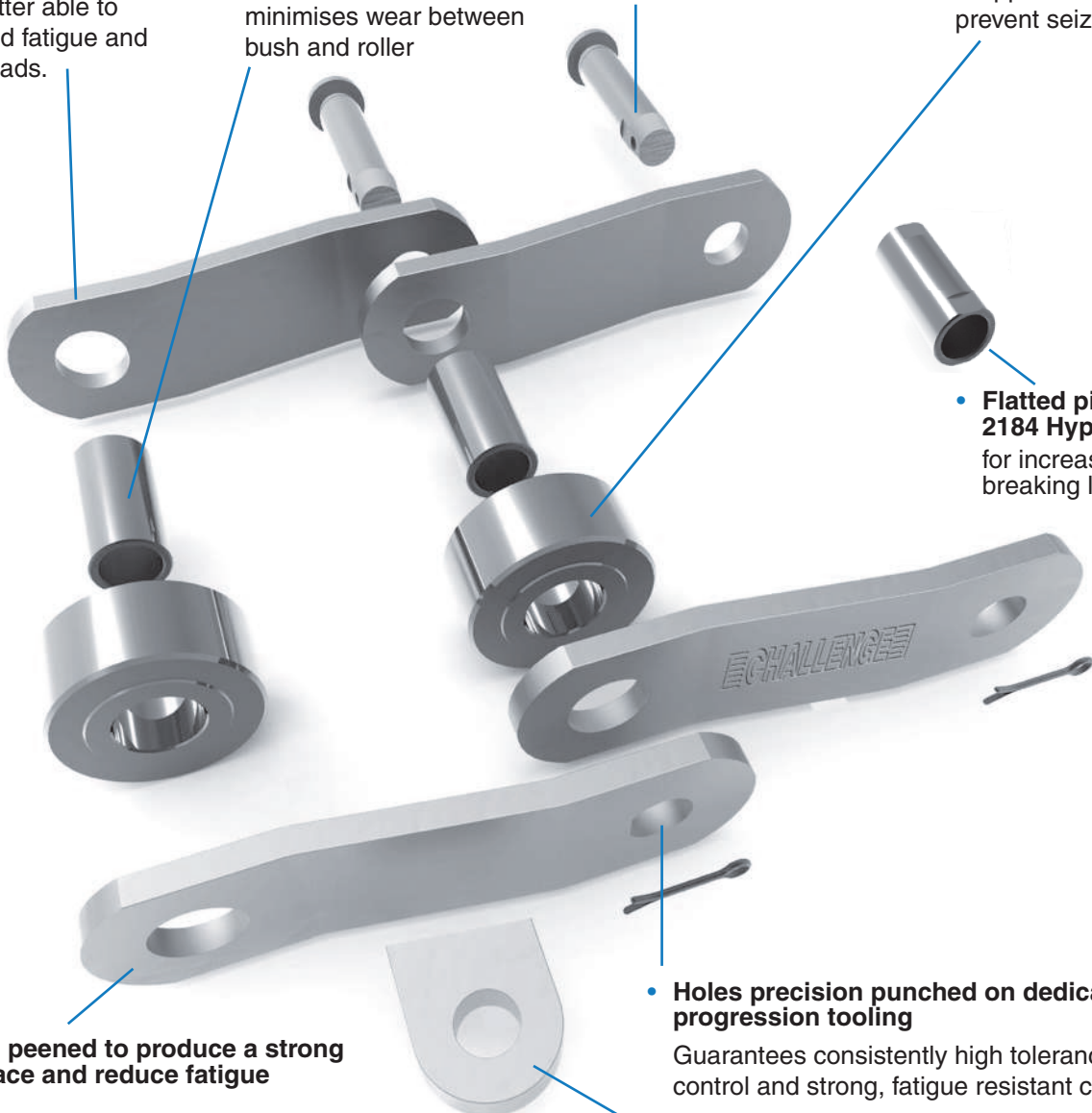
All dimensions in millimetres unless otherwise stated. Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused.



# Sugar Chain

## The Benefits of Challenge Sugar Chain

- **Material** – High quality steels used throughout
- **Link plates cropped from high carbon cold drawn steel**  
To avoid internal stresses associated with guillotined steel, Challenge produces all plates from high tolerance, on size, cold drawn steel bars resulting in a plate better able to withstand fatigue and shock loads.
- **Case Hardened Alloy steel bushes precision machined from seamless tube**  
Ensuring minimum distortion and superior concentricity. Interference fit extends wear life by preventing bush rotation. Surface grinding minimises wear between bush and roller
- **Induction Hardened Pins in High Chrome Alloy Steel**  
Pins headed and flattened to ensure location and prevent rotation. Challenge EasyFit® pins designed with long lead in to aid on-site maintenance and assembly.
- **Hardened Rollers with grinding**  
Grinding the outer diameter gives excellent wear resistance and good load carrying qualities plus reduced wear on sprockets and better visual result. Stepped down to help prevent seizure.



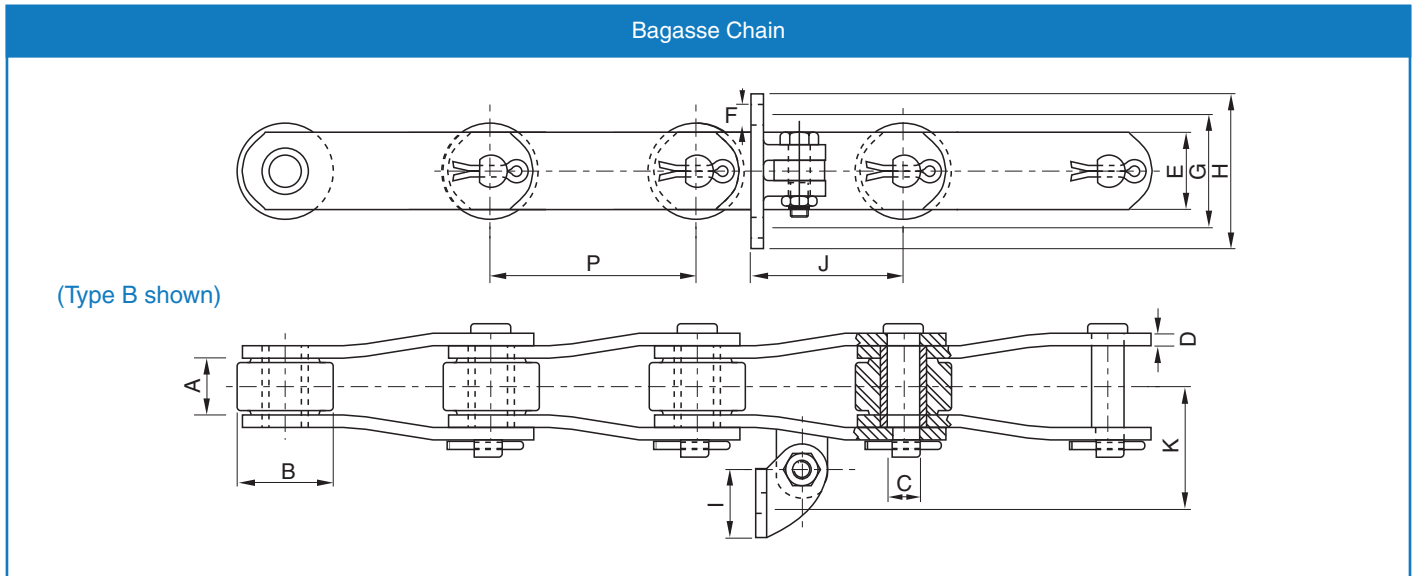
- **Flatted pin on 2184 Hyper Chain** for increased breaking load.

- **Shot peened to produce a strong surface and reduce fatigue**
- **Challenge has invested heavily in CNC controlled machinery for optimum batch component conformity.**
- **Attachment plates jig assembled maintains position and squareness.**
- **Holes precision punched on dedicated progression tooling**  
Guarantees consistently high tolerance pitch control and strong, fatigue resistant chain.
- **Robotic welding of attachment**  
All industry standard attachments available.

In-house design team for all special requirements.

# Sugar Chain

## Bagasse Chain



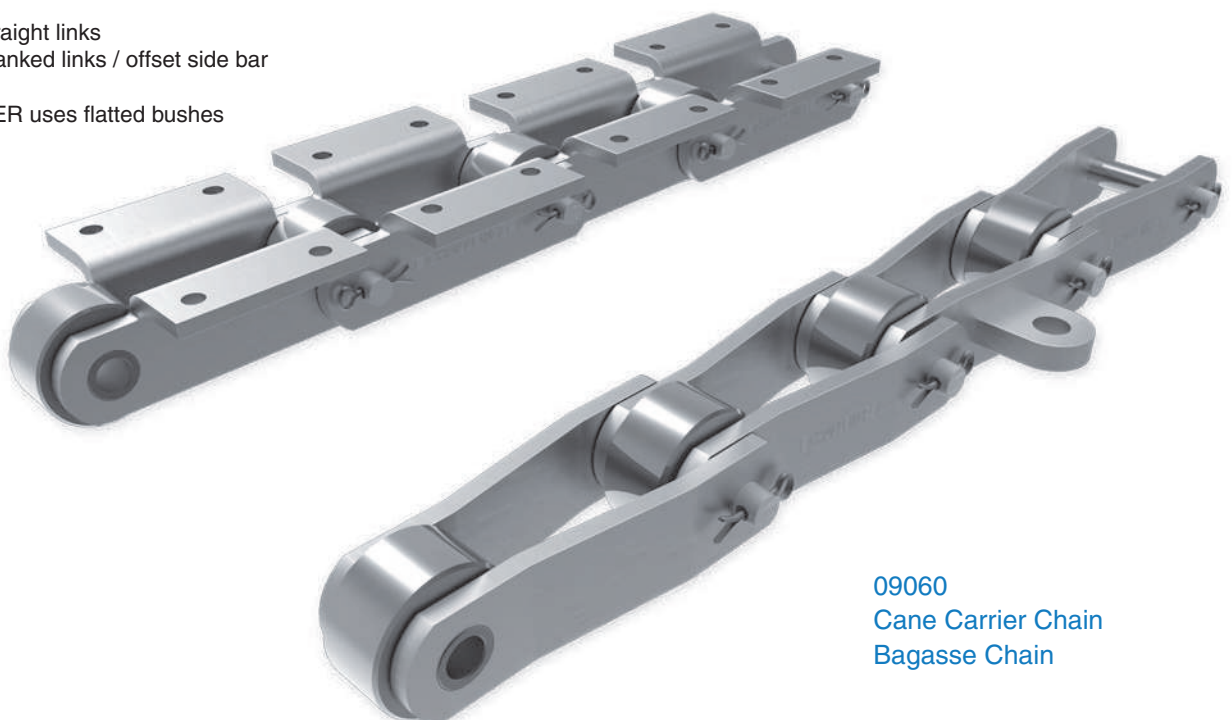
Chain number	Type	Pitch P	Inside width A	Roller diameter B	Pin diameter C	Plate thickness D	Plate height E	Attachment hole diameter F	Attachment hole centres G	Attachment length H	Attachment width I	Attachment face J	Transverse pitch K	Breaking load(kN)	Weight (kg/m)
CH1796	A	152.4	38.1	69.85	22.2	9.52	57.15	12.7	82.5	114.3	50.8	115.8	88.9	445	22
CH1796	B	152.4	38.1	69.85	22.2	9.52	57.15	12.7	82.5	114.3	50.8	115.8	88.9	445	22.9
CH2184	B	152.4	34.93	76.2	22.2	9.52	50.8	14.3	88.9	127	50.8	143	90.4	356	21
*CH2184 HYPER	B	152.4	34.93	76.2	22.2	9.52	50.8	12.7	88.9	127	50.8	143	90.4	380	21
CH9060	A	152.4	38.1	69.85	18.9	9.52	50.8	12.7	82.5	114.3	50.8	115.8	88.9	272	18.5
CH9060	B	152.4	38.1	69.85	18.9	9.52	50.8	12.7	82.5	114.3	50.8	115.8	88.9	272	18.5
CH9061	A	152.4	38.1	76.2	18.9	9.52	57.15	12.7	82.5	114.3	50.8	115.8	88.9	386	19.85
CH9061	B	152.4	38.1	76.2	18.9	9.52	57.15	12.7	82.5	114.3	50.8	115.8	88.9	386	20.3
CH9063	A	152.4	38.1	76.2	23.82	10.28	63.5	14.3	88.9	127.9	50.8	142.9	100	620	25.1

Heat treated stainless steel versions available on request.

**TYPE A** with straight links

**TYPE B** with cranked links / offset side bar

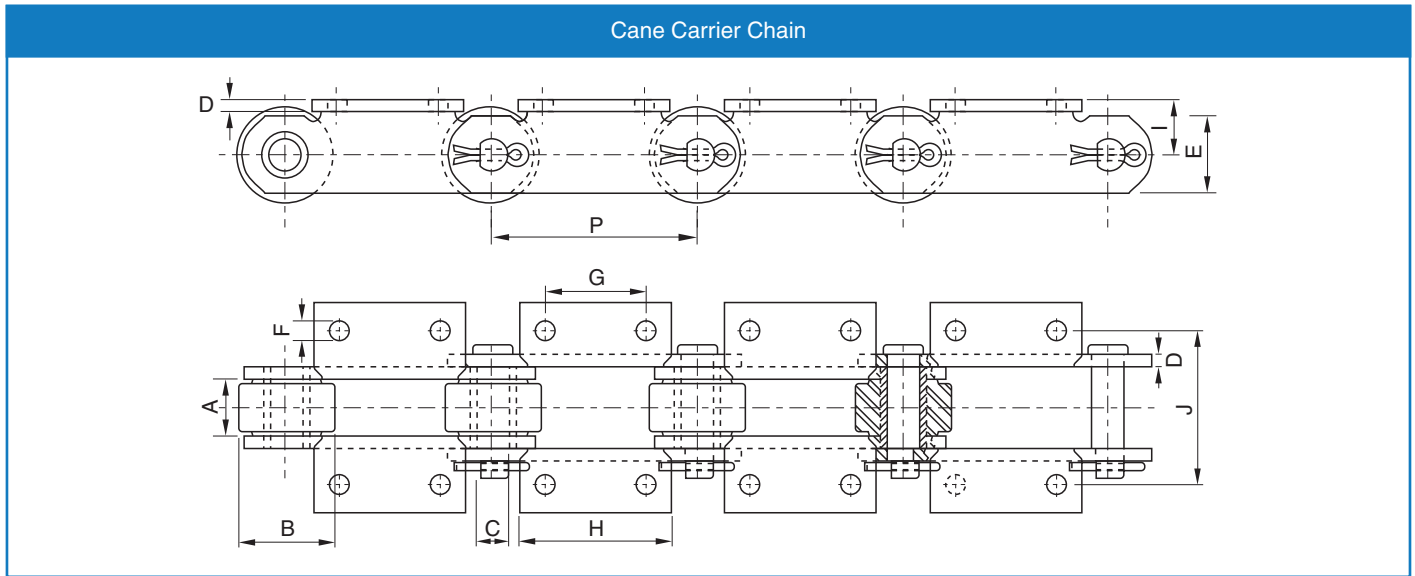
\* CH2184 HYPER uses flatted bushes



09060  
Cane Carrier Chain  
Bagasse Chain

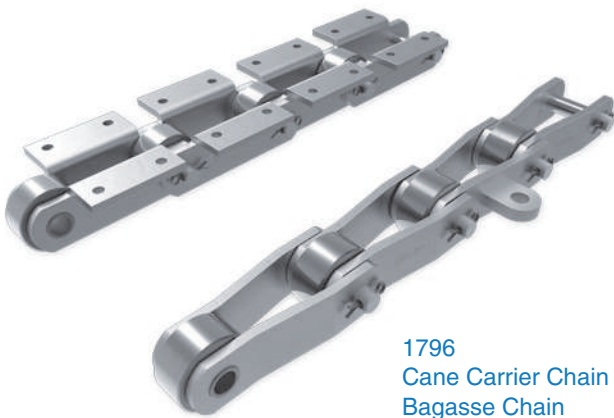
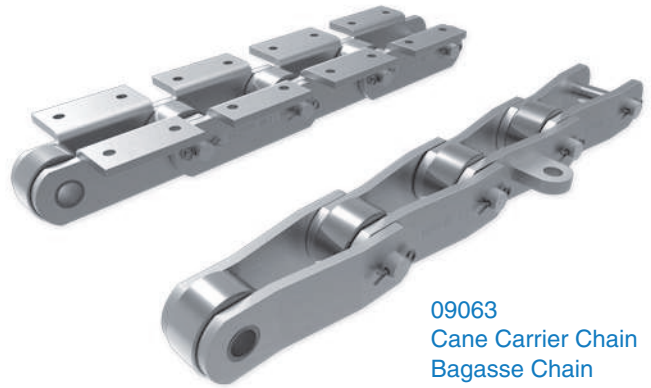
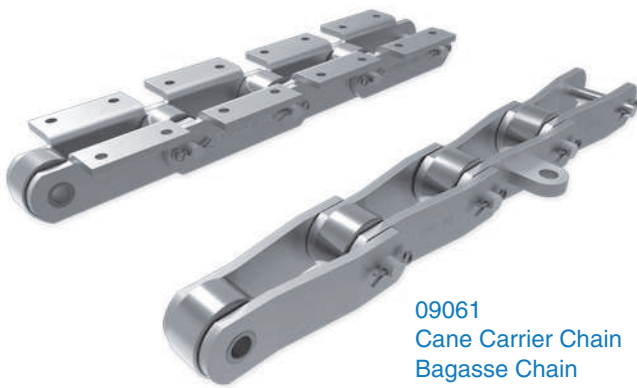
# Sugar Chain

## Cane Carrier Chain



Chain number	Pitch P	Inside width A	Roller diameter B	Pin diameter C	Plate thick D	Plate height E	Attachment hole diameter F	Attachment hole centres G	Attachment length H	Platform height I	Transverse pitch J	Breaking Load (kN)	Weight (kg/m)
CH9060	152.40	36.50	69.85	19.05	9.52	50.80	12.70	76.20	114.30	41.30	111.20	272	24.70
CH9061	152.40	36.50	69.85	19.05	9.52	57.15	12.70	76.20	114.30	41.30	111.20	386	25.30
CH9063	152.40	36.50	76.20	23.80	10.30	61.90	12.70	76.20	114.30	44.45	111.20	620	27.50
CH1796	152.40	36.50	69.85	22.23	9.52	57.15	12.70	76.20	114.30	41.30	111.20	445	26.20

Heat treated stainless steel versions available on request.

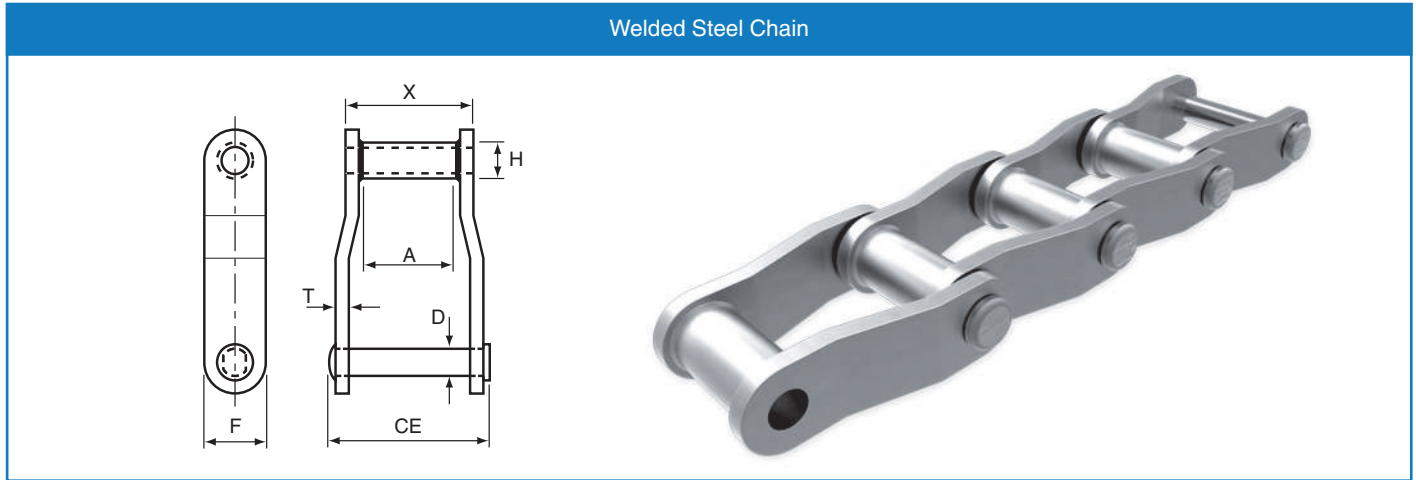


Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.



# Sugar Chain

## Welded Steel Chain

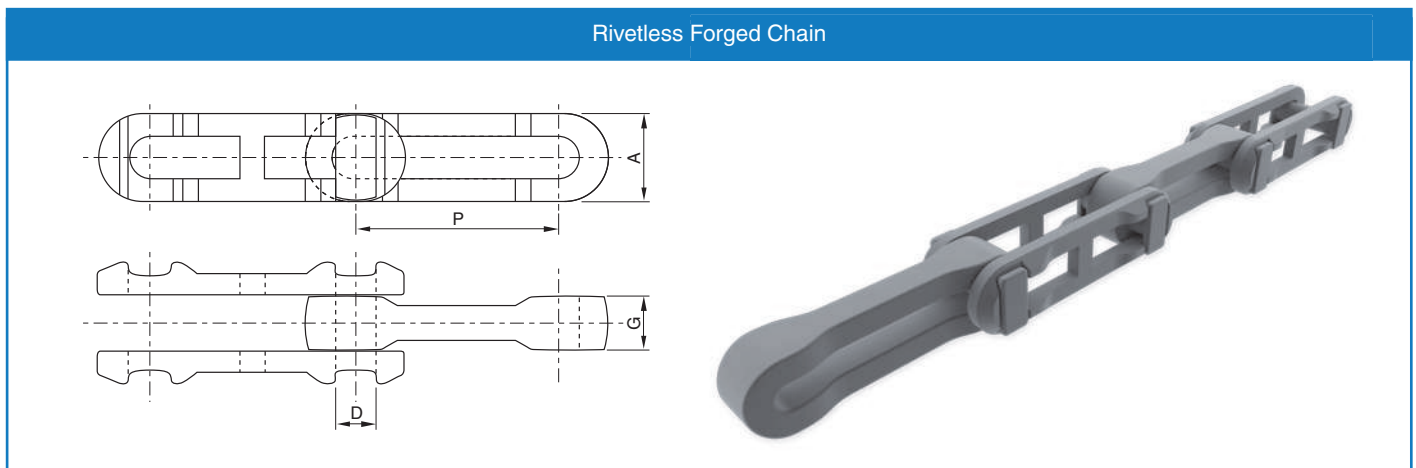


## Welded Steel Chain (Offset Side Bar)

Chain Number	Pitch		Average Ultimate Strength lbf	Max. Working Load lbf	Approx. Links Per Foot	Average Weight lbf/ft	Dimensions						
	mm	Inches					CE	X	D	T	F	H	A
WR78	66.26	2.609	24000	3000	4.6	4.0	76.20	50.80	12.70	6.35	28.58	22.23	28.58
WH78	66.26	2.609	36000	3500	4.6	4.0	76.20	50.80	12.70	6.35	28.58	22.23	28.58
WR82	78.10	3.074	30000	5000	3.9	5.0	79.50	57.00	14.29	6.40	31.80	25.40	32.00
WH82	78.10	3.074	40000	6650	3.9	5.2	79.50	57.00	14.29	6.40	31.80	27.00	32.00
WR124	101.60	4.000	46000	6300	3.0	8.3	107.95	69.85	19.05	9.53	38.10	31.75	38.10
WH124	101.60	4.000	60000	7350	3.0	8.3	107.95	69.85	19.05	9.53	38.10	31.75	38.10
WR132	153.67	6.050	84000	13100	2.0	14.2	158.75	111.00	25.40	12.70	50.80	41.28	73.03
WH132	153.67	6.050	110000	15000	2.0	14.2	158.75	111.00	25.40	12.70	50.80	41.28	73.03

WR - Welded steel chain - through hardened pins and case hardened bushes.  
 WH - Welded steel chain - all components fully heat treated

## Rivetless Forged Chain



Chain number	Average Pitch	Pins	Overall width		Chain Height	Link Thickness	Rated Working Load	Average Weight	Chain Part	Brinell Hardness	Average Ultimate Strength	Sprocket Unit No.	
	P	A	B	C									D
X458	102.39	16.00	55.63	26.92	35.05	16.00	17.53	4,000	3.1	Side Link Center Link Pin	311/388 331/388 363/415	57,000	458
X678	153.19	22.35	76.96	35.05	50.80	20.57	25.40	7,100	6.5	Side Link Center Link Pin	311/388 331/388 340/415	125,000	678
698	153.19	28.70	95.25	41.40	65.79	25.40	31.75	10,800	12.5	Side Link Center Link Pin	311/388 331/388 340/415	175,000	698

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