

# Roller Chain

## The Benefits...

### CHALLENGE X Series Transmission Chain

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



### The X Series Range...

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

## Also in the Roller Chain range

#### Roller Chain

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

#### Chain

Roller Chain Attachments

#### Double Pitch Chain

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

#### Leaf Chain

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

#### Timber Chain

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

#### Straight Sidebar Roller Chain

- Welded Steel Drag Chain
- Drag Chain Attachments

#### Agricultural Chain

- Steel Agricultural Chain
- Agricultural Chain Attachments

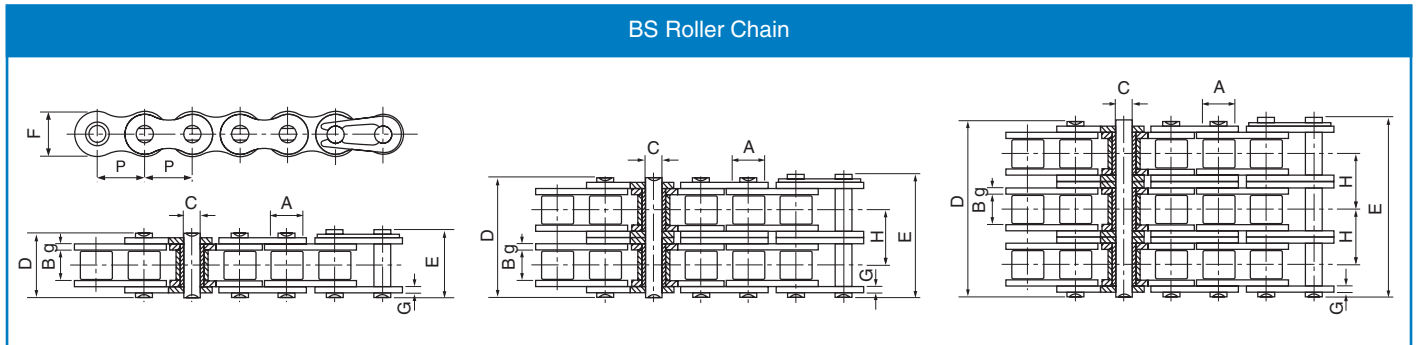
#### Conveyor Chain

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

# Roller Chain

British Standard Roller Chain

BS228, ISO R606, DIN 8187



ISO Chain number	Pitch	Roller diameter	Width between inner plates	Pin diameter	Pin length		Inner plate height	Plate thickness	Transverse pitch	Minimum tensile strength	Average tensile strength	Weight
	P	A	B	C	D	E	F	g/G	H	kN	kN	kg/m
<b>SIMPLEX</b>												
04B-1	6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	-	3.00	3.20	0.11
05B-1	8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	-	5.00	5.90	0.20
06B-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-1X	31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	-	95.00	106.70	3.70
24B-1X	38.100	25.40	25.40	14.63	53.40	57.80	33.20	6.0/4.8	-	160.00	178.00	7.10
28B-1X	44.450	27.94	30.99	15.90	65.10	69.50	36.70	7.5/6.0	-	200.00	222.00	8.50
32B-1X	50.800	29.21	30.99	17.81	66.00	71.00	42.00	7.0/6.0	-	250.00	277.50	10.25
40B-1X	63.500	39.37	38.10	22.89	82.20	89.20	52.96	8.5/8.0	-	355.00	394.00	16.35
48B-1X	76.200	48.26	45.72	29.24	99.10	107.00	63.80	12.0/10.0	-	560.00	621.60	25.00
56B-1X	88.900	53.98	53.34	34.32	114.60	123.00	77.80	13.5/12.0	-	850.00	940.00	35.88
64B-1X	101.600	63.50	60.96	39.40	130.00	138.50	90.17	15.0/13.0	-	1120.00	1240.00	46.50
<b>DUPLEX</b>												
04B-2	6.000	4.00	2.80	1.85	12.00	13.00	5.00	0.60	-	4.68	5.50	0.18
05B-2	8.000	5.00	3.00	2.31	13.90	14.50	7.10	0.80	5.64	7.80	10.20	0.33
06B-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-2X	31.750	19.05	19.56	10.19	77.80	81.50	26.40	4.5/3.5	36.45	170.00	211.20	7.20
24B-2X	38.100	25.40	25.40	14.63	101.70	106.20	33.20	6.0/4.8	48.36	280.00	319.20	13.40
28B-2X	44.450	27.94	30.99	15.90	124.60	129.10	36.70	7.5/6.0	59.56	360.00	406.80	16.60
32B-2X	50.800	29.21	30.99	17.81	124.60	129.60	42.00	7.0/6.0	58.55	450.00	508.50	21.00
40B-2X	63.500	39.37	38.10	22.89	154.50	161.50	52.96	8.5/8.0	72.29	630.00	711.90	32.00
48B-2X	76.200	48.26	45.72	29.24	190.40	198.20	63.80	12.0/10.0	91.21	1000.00	1130.00	50.00
56B-2X	88.900	53.98	53.34	34.32	221.20	229.60	77.80	13.5/12.0	106.60	1600.00	1760.00	71.76
64B-2X	101.600	63.50	60.96	39.40	249.90	258.40	90.17	15.0/13.0	119.89	2000.00	2200.00	93.00
<b>TRIPLEX</b>												
05B-3	8.000	5.00	3.00	2.31	19.50	20.20	7.10	0.80	5.64	11.10	13.80	0.48
06B-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-3X	31.750	19.05	19.56	10.19	114.20	117.90	26.40	4.5/3.5	36.45	250.00	290.00	10.82
24B-3X	38.100	25.40	25.40	14.63	150.10	154.60	33.20	6.0/4.8	48.36	425.00	493.00	20.10
28B-3X	44.450	27.94	30.99	15.90	184.20	188.70	36.70	7.5/6.0	59.56	530.00	609.50	24.92
32B-3X	50.800	29.21	30.99	17.81	183.20	188.20	42.00	7.0/6.0	58.55	670.00	770.50	31.56
40B-3X	63.500	39.37	38.10	22.89	226.80	233.80	52.96	8.5/8.0	72.29	950.00	1092.50	48.10
48B-3X	76.200	48.26	45.72	29.24	281.60	289.40	63.80	12.0/10.0	91.21	1500.00	1710.00	75.00
56B-3X	88.900	53.98	53.34	34.32	327.80	336.20	77.80	13.5/12.0	106.60	2240.00	2240.00	107.64
64B-3X	101.600	63.50	60.96	39.40	369.80	378.30	90.17	15.0/13.0	119.89	3000.00	3300.00	139.50

\* SSP =Straight Side Plate Chain

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

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