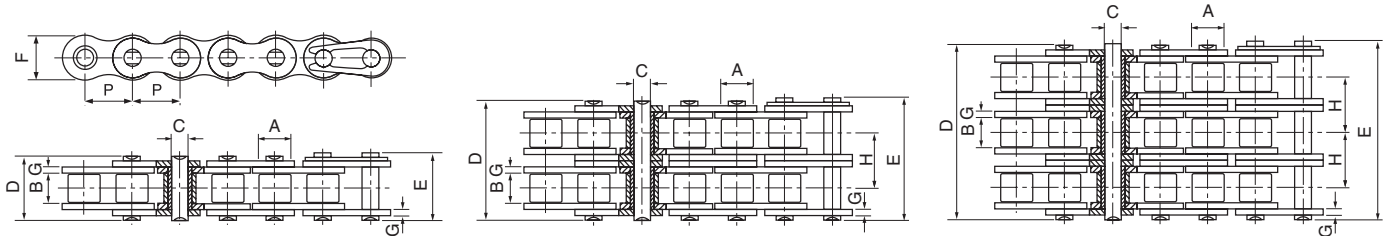


Roller Chain

ANSI Standard Roller Chain

ANSI B29.1, ISO R606, DIN 8188

ANSI Roller Chain



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

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

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

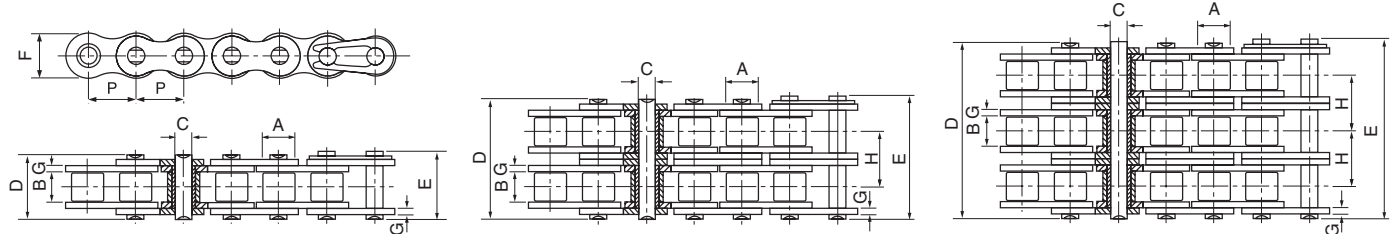
Every effort has been taken to ensure that the data listed in this catalogue is correct. Challenge accepts no liability for any inaccuracies or damage caused. All dimensions in millimetres unless otherwise stated.

Roller Chain

ANSI Heavy Duty Roller Chain

ANSI B29.1, ISO R606, DIN 8188

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

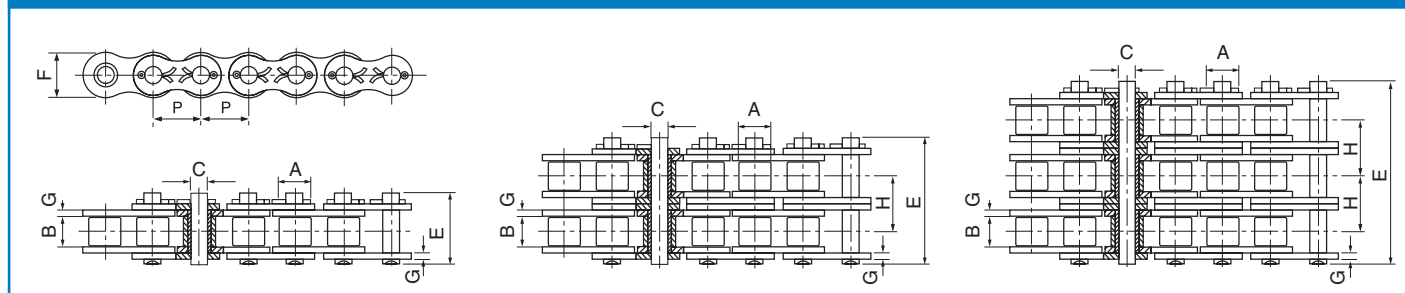
Standard boxed lengths are 5 metres or 10 feet.
Each box contains one CL. Special lengths available.

Roller Chain

ANSI Cottered Series Roller Chain

ANSI B29.1, ISO R606, DIN 8188

ANSI Cottered Series Roller Chain



ANSI Chain number	Pitch P	Roller diameter A	Width between inner plates B	Pin diameter C	Pin length E	Inner plate height F	Plate thickness G	Transverse pitch H	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
SIMPLEX											
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
DUPLEX											
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
TRIPLEX											
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

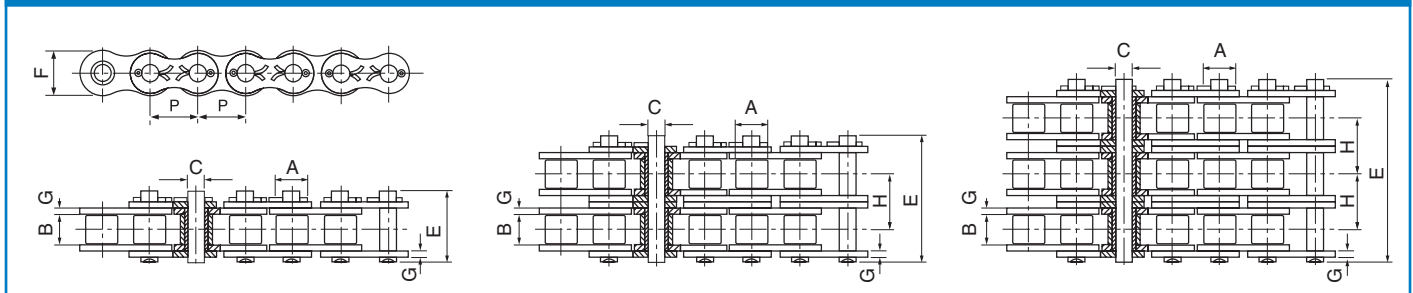
Standard boxed lengths are 5 metres or 10 feet.
Each box contains one CL. Special lengths available.

Roller Chain

ANSI Cottered Heavy Duty Roller Chain

ANSI B29.1, ISO R606, DIN 8188

ANSI Cottered Heavy Duty Roller Chain

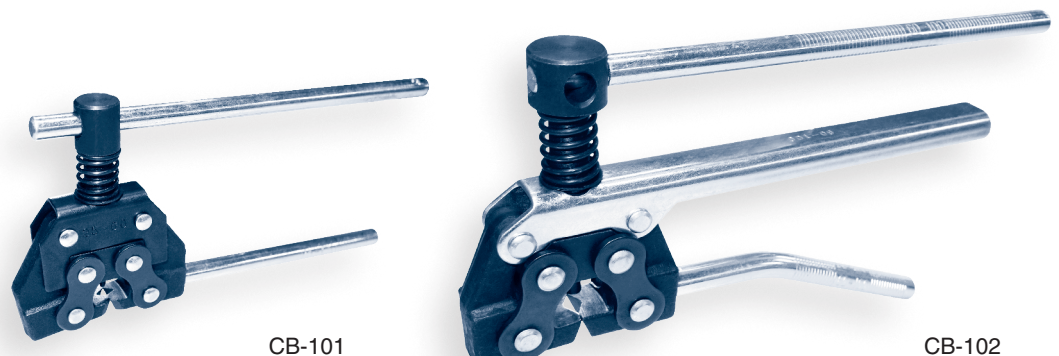


ANSI Chain number	Pitch P	Roller diameter A	Width between inner plates B	Pin diameter C	Pin length E	Inner plate height F	Plate thickness G	Transverse pitch H	Minimum tensile strength kN	Average tensile strength kN	Weight kg/m
SIMPLEX											
50H-1C	15.875	10.16	9.40	5.08	24.40	15.09	2.42	-	22.20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

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

Chain Breakers

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

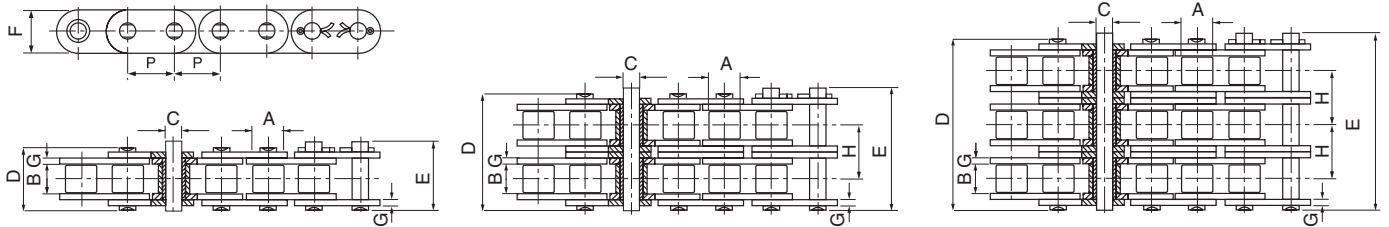


Roller Chain

ANSI Straight Side Plate Roller Chain

ANSI B29.1, ISO R606, DIN 8188

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

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

Chain Pullers

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

