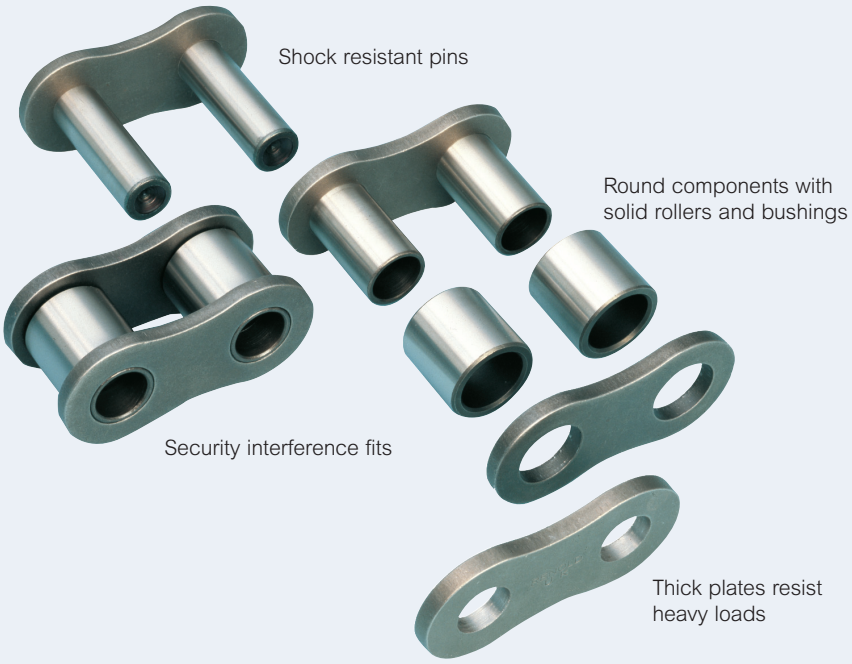
XTRA Series Roller Chain

Shock resistant

Fatigue resistant

High loads



Extra strength for heavy-duty applications

Renold XTRA roller chain combines the performance-enhancing features of our ANSI standard chains — solid bushings, ball-drifted plate holes, shot peening, and optimum interference fits — with thicker link plates and through-hardened pins for added strength.

H Series (Heavy) Dimensions are identical to our ANSI standard chain with the exception of the overall width. Thicker plates help absorb shock and provide excellent resistance to heavy loads.

V Series (Super) Through-hardened pins allow a higher breaking load and offer excellent resistance to shock loads. Dimensions are identical to our ANSI standard chain.

HV Series (Super Heavy) Combines all the features of both our H Series and V Series chains for maximum resistance to both heavy and shock loads.

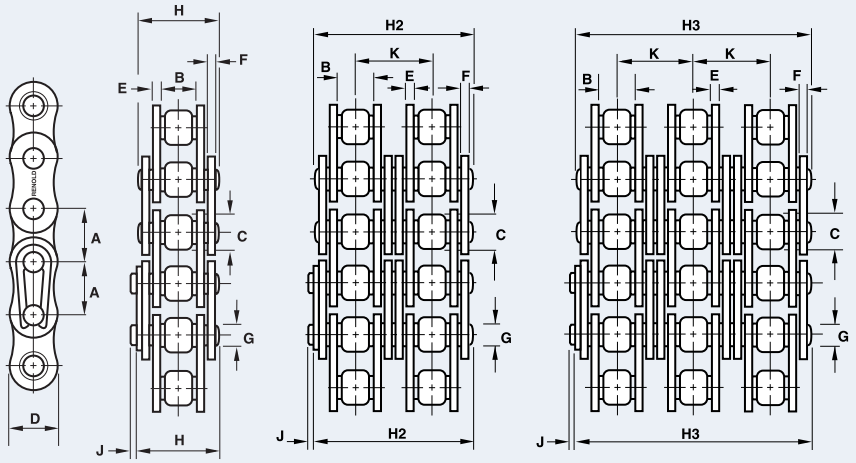
XTRA's gearing dimensions are identical to ANSI standard chains for single-strand sizes and will run on standard sprockets. XTRA H and HV Series double- and triple-strand chains have a larger transverse pitch and require special sprockets.

Chain life can be further extended by the use of hardened-tooth sprockets. XTRA H and HV Series are designed for longer fatigue life. Therefore, offset and slip-fit joints, which have a lower fatigue resistance, are not recommended.

Selection Guide

Chain Type	Strength	Wear	Heavy Loads	Shock Loads	High Speeds
ANSI Standard	Good	Excellent	Good	Good	Excellent
H Series	Good	Excellent	Excellent	Good	Not Suitable
V Series	Excellent	Good	Good	Excellent	Good
HV Series	Excellent	Good	Excellent	Excellent	Not Suitable

XTRA H Series roller chain is made with link plates that are one size thicker for greater strength and resistance to link plate fatigue failure. These chains are well suited for heavy-duty service where high shock loading is such that ANSI standard roller chains do not survive. Single-strand XTRA roller chains operate over standard ANSI sprockets. However, multiple-strand chains require special sprockets because the heavy-style link plate increases the transverse pitch.

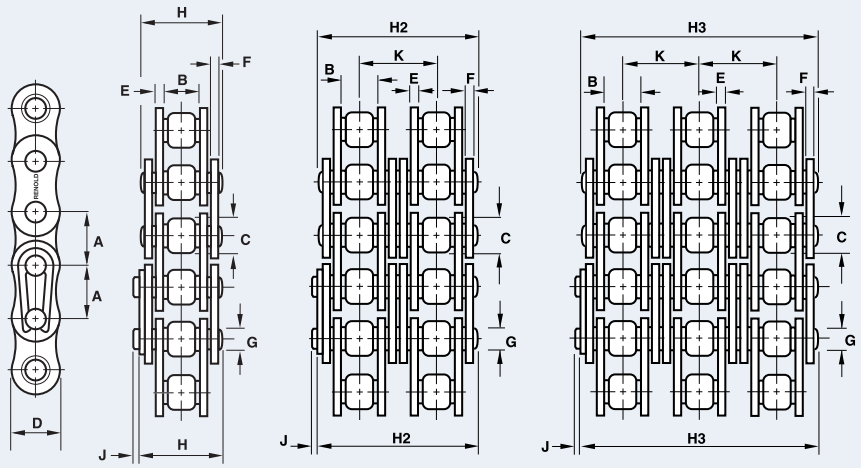


XTRA H Series Roller Chain

Dimensions are in inches unless otherwise indicated.

Chain No.	Pitch	Inside Width Min	Roller Diam Max	Plate Height Max	Inner Plate Thick Max	Outer Plate Thick Max	Pin Diam Max	Pin Length Max	Conn Link Extra Max	Trans Pitch	Tensile Strength Min	Rated Working Load	Weight
	A	B	C	D	E	F	G	H	J	K	Lbs	Lbs	Lbs/Ft
SINGLE STRAND													
60H	0.750	0.495	0.469	0.713	0.128	0.128	0.235	1.126	0.043	—	7,030	2,200	1.21
80H	1.000	0.620	0.625	0.950	0.160	0.160	0.313	1.409	0.118	—	12,500	3,600	2.21
100H	1.250	0.744	0.750	1.188	0.189	0.189	0.376	1.669	0.165	—	19,530	5,500	3.22
120H	1.500	0.993	0.875	1.425	0.221	0.221	0.437	2.063	0.209	—	28,125	7,300	4.22
140H	1.750	0.993	1.000	1.663	0.250	0.250	0.500	2.281	0.205	—	38,280	9,600	5.76
160H	2.000	1.242	1.125	1.900	0.287	0.287	0.563	2.583	0.256	—	50,000	12,600	7.50
180H	2.250	1.397	1.406	2.139	0.312	0.312	0.688	2.912	0.311	—	63,280	14,200	10.18
200H	2.500	1.490	1.562	2.377	0.375	0.375	0.781	3.404	0.355	—	78,125	17,800	13.07
240H	3.000	1.864	1.875	2.582	0.500	0.500	0.938	4.212	0.414	—	112,500	25,300	20.44
DOUBLE STRAND													
60H-2	0.750	0.495	0.469	0.713	0.128	0.128	0.235	2.246	0.043	1.029	14,060	3,700	2.38
80H-2	1.000	0.620	0.625	0.950	0.160	0.160	0.313	2.707	0.118	1.284	25,000	6,100	4.42
100H-2	1.250	0.744	0.750	1.188	0.189	0.189	0.376	3.278	0.165	1.540	39,060	9,300	6.90
120H-2	1.500	0.993	0.875	1.425	0.221	0.221	0.437	4.137	0.209	1.925	56,250	12,300	8.44
140H-2	1.750	0.993	1.000	1.663	0.250	0.250	0.500	4.212	0.205	2.057	76,560	16,300	11.22
160H-2	2.000	1.242	1.125	1.900	0.287	0.287	0.563	5.138	0.256	2.439	100,000	21,200	15.75
180H-2	2.250	1.397	1.406	2.139	0.312	0.312	0.688	5.548	0.311	2.594	126,560	24,000	20.36
200H-2	2.500	1.490	1.562	2.377	0.375	0.375	0.781	6.489	0.355	3.085	156,250	29,900	26.13
240H-2	3.000	1.864	1.875	2.852	0.500	0.500	0.938	8.195	0.414	3.988	225,000	43,000	40.87
TRIPLE STRAND													
60H-3	0.750	0.495	0.469	0.713	0.128	0.128	0.235	3.274	0.043	1.029	21,090	5,500	3.55
80H-3	1.000	0.620	0.625	0.950	0.160	0.160	0.313	3.991	0.118	1.284	37,500	9,000	6.63
100H-3	1.250	0.744	0.750	1.188	0.189	0.189	0.376	4.819	0.165	1.540	58,590	13,700	10.35
120H-3	1.500	0.993	0.875	1.425	0.221	0.221	0.437	6.225	0.209	1.925	84,375	18,100	12.60
140H-3	1.750	0.993	1.000	1.663	0.250	0.250	0.500	6.320	0.205	2.057	114,840	23,900	16.82
160H-3	2.000	1.242	1.125	1.900	0.287	0.287	0.563	7.206	0.256	2.439	150,000	31,200	23.58
180H-3	2.250	1.397	1.406	2.139	0.312	0.312	0.688	8.116	0.311	2.594	189,840	34,000	30.55
200H-3	2.500	1.490	1.562	2.377	0.375	0.375	0.781	9.574	0.355	3.085	234,375	44,000	38.66
240H-3	3.000	1.864	1.875	2.852	0.500	0.500	0.938	12.182	0.414	3.988	337,500	63,200	61.31

XTRA V Series Roller Chain



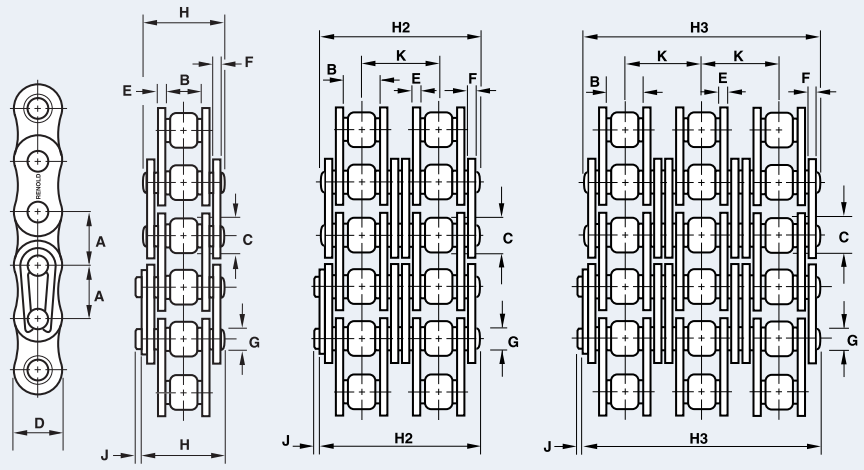
XTRA V Series roller chain is made with special alloy-steel, through-hardened pins for excellent resistance to shock and high breaking loads. V Series dimensions — including the transverse pitch — are identical to ANSI standard chains. Therefore, both single- and multiple-strand V Series chain can be used with ANSI standard sprockets.

XTRA V Series Roller Chain

Dimensions are in inches unless otherwise indicated.

Chain No.	Pitch	Inside Width Min	Roller Diam Max	Plate Height Max	Inner Plate Thick Max	Outer Plate Thick Max	Pin Diam Max	Pin Length Max	Conn Link Extra Max	Trans Pitch	Tensile Strength Min	Rated Working Load	Weight
	A	B	C	D	E	F	G	H	J	K	Lbs	Lbs	Lbs/Ft
SINGLE STRAND													
80V	1.000	0.620	0.625	0.950	0.128	0.128	0.313	1.288	0.118	—	16,860	3,500	1.88
100V	1.250	0.744	0.750	1.188	0.160	0.160	0.376	1.564	0.165	—	27,426	5,400	2.81
120V	1.500	0.993	0.875	1.425	0.189	0.189	0.437	1.942	0.209	—	37,991	7,170	3.82
140V	1.750	0.993	1.000	1.663	0.221	0.221	0.500	2.084	0.205	—	52,828	9,690	5.23
160V	2.000	1.242	1.125	1.900	0.250	0.250	0.563	2.486	0.256	—	64,967	12,500	6.97
180V	2.250	1.397	1.406	2.139	0.281	0.281	0.688	2.782	0.311	—	85,986	13,400	9.34
200V	2.500	1.490	1.562	2.377	0.320	0.320	0.781	3.028	0.354	—	100,036	17,200	11.59
DOUBLE STRAND													
80V-2	1.000	0.620	0.625	0.950	0.128	0.128	0.313	2.439	0.118	1.153	33,720	6,000	3.69
100V-2	1.250	0.745	0.751	1.188	0.160	0.160	0.376	2.971	0.165	1.408	54,851	9,170	5.63
120V-2	1.500	0.993	0.875	1.425	0.189	0.189	0.437	3.731	0.209	1.789	75,982	12,180	7.37
140V-2	1.750	0.993	1.000	1.663	0.221	0.221	0.500	4.011	0.205	1.924	105,656	16,450	10.39
160V-2	2.000	1.242	1.125	1.900	0.250	0.250	0.563	4.791	0.256	2.305	129,934	21,350	13.80
180V-2	2.250	1.397	1.406	2.139	0.281	0.281	0.688	5.378	0.311	2.592	171,972	22,930	18.57
200V-2	2.500	1.490	1.562	2.377	0.320	0.320	0.781	5.846	0.354	2.817	200,072	29,220	23.05
TRIPLE STRAND													
80V-3	1.000	0.620	0.625	0.950	0.128	0.128	0.313	3.593	0.118	1.153	50,580	8,830	5.56
100V-3	1.250	0.745	0.751	1.188	0.160	0.160	0.376	4.381	0.165	1.408	82,277	13,490	8.44
120V-3	1.500	0.993	0.875	1.425	0.189	0.189	0.437	5.524	0.209	1.789	113,974	17,940	11.19
140V-3	1.750	0.993	1.000	1.663	0.221	0.221	0.500	5.938	0.205	1.924	158,484	24,280	15.48
160V-3	2.000	1.242	1.125	1.900	0.250	0.250	0.563	7.100	0.256	2.305	194,902	31,470	20.77
180V-3	2.250	1.397	1.406	2.139	0.281	0.281	0.688	7.971	0.311	2.592	257,958	33,720	27.81
200V-3	2.500	1.490	1.562	2.377	0.320	0.320	0.781	9.023	0.354	2.817	300,108	42,940	34.30

XTRA HV Series roller chain is made with link plates that are one size thicker and special alloy-steel, through-hardened pins and rollers for superior strength and resistance to pin, link, and roller failure. These chains offer up to 30% more shock load resistance due to the special steels used in their manufacture. Single-strand HV Series roller chains operate over standard ANSI sprockets. However, multiple-strand chains require special sprockets because the heavy-style link plate increases the transverse pitch.



XTRA HV Series Roller Chain

Dimensions are in inches unless otherwise indicated.

Chain No.	Pitch	Inside Width Min	Roller Diam Max	Plate Height Max	Inner Plate Thick Max	Outer Plate Thick Max	Pin Diam Max	Pin Length Max	Conn Link Extra Max	Trans Pitch	Tensile Strength Min	Rated Working Load	Weight
	A	B	C	D	E	F	G	H	J	K	Lbs	Lbs	Lbs/Ft
SINGLE STRAND													
60HV	0.750	0.495	0.469	0.713	0.128	0.128	0.235	1.126	0.043	—	12,365	2,400	1.21
80HV	1.000	0.620	0.625	0.950	0.160	0.160	0.313	1.409	0.118	—	19,558	4,000	2.21
100HV	1.250	0.744	0.750	1.188	0.189	0.189	0.376	1.669	0.165	—	30,000	7,300	3.22
120HV	1.500	0.993	0.875	1.425	0.221	0.221	0.437	2.063	0.209	—	41,004	9,500	4.22
140HV	1.750	0.993	1.000	1.663	0.250	0.250	0.500	2.281	0.205	—	57,998	12,800	5.76
160HV	2.000	1.242	1.125	1.900	0.287	0.287	0.563	2.503	0.256	—	70,003	16,500	7.50
180HV	2.250	1.397	1.406	2.139	0.312	0.312	0.688	2.912	0.311	—	94,978	18,000	10.18
200HV	2.500	1.490	1.562	2.377	0.375	0.375	0.781	3.404	0.355	—	134,992	22,500	13.07
240HV	3.000	1.864	1.875	2.852	0.500	0.500	0.938	4.212	0.414	—	189,992	31,300	20.44
DOUBLE STRAND													
60HV-2	0.750	0.495	0.469	0.713	0.128	0.128	0.235	2.246	0.043	1.029	24,728	4,800	2.38
80HV-2	1.000	0.620	0.625	0.950	0.160	0.160	0.313	2.707	0.118	1.284	39,115	7,900	4.42
100HV-2	1.250	0.744	0.750	1.188	0.189	0.189	0.376	3.278	0.165	1.540	59,999	12,500	6.90
120HV-2	1.500	0.993	0.875	1.425	0.221	0.221	0.437	4.137	0.209	1.925	82,007	16,100	4.22
140HV-2	1.750	0.993	1.000	1.663	0.250	0.250	0.500	4.212	0.205	2.057	115,997	21,750	11.22
160HV-2	2.000	1.242	1.125	1.900	0.287	0.287	0.563	5.138	0.256	2.439	140,005	28,100	15.75
180HV-2	2.250	1.397	1.406	2.139	0.312	0.312	0.688	5.548	0.311	2.594	189,956	30,600	20.36
200HV-2	2.500	1.490	1.562	2.377	0.375	0.375	0.781	6.489	0.355	3.085	269,985	38,250	26.13
240HV-2	3.000	1.864	1.875	2.852	0.500	0.500	0.938	8.195	0.414	3.988	379,984	53,220	40.87
TRIPLE STRAND													
60HV-3	0.750	0.495	0.469	0.713	0.128	0.128	0.235	3.274	0.043	1.029	37,092	6,970	3.55
80HV-3	1.000	0.620	0.625	0.950	0.160	0.160	0.313	3.991	0.118	1.284	58,673	11,570	6.63
100HV-3	1.250	0.744	0.750	1.188	0.189	0.189	0.376	4.819	0.165	1.540	89,999	18,710	10.35
120HV-3	1.500	0.993	0.875	1.425	0.221	0.221	0.437	6.225	0.209	1.925	89,999	23,700	12.60
140HV-3	1.750	0.993	1.000	1.663	0.250	0.250	0.500	6.320	0.205	2.057	173,995	31,950	16.82
160HV-3	2.000	1.242	1.125	1.900	0.287	0.287	0.563	7.206	0.256	2.439	210,019	41,250	23.58
180HV-3	2.250	1.397	1.406	2.139	0.312	0.312	0.688	8.116	0.311	2.594	284,934	45,000	30.55
200HV-3	2.500	1.490	1.562	2.377	0.375	0.375	0.781	9.574	0.355	3.085	404,977	56,250	38.66
240HV-3	3.000	1.864	1.875	2.852	0.500	0.500	0.938	12.182	0.414	3.988	569,976	78,260	61.31