

CHAIN



VANGUARD STEEL LTD.



This is

VANGUARD STEEL LTD.

at your service

Since 1960, Vanguard Steel Ltd., a sister Company of Ringball Corporation, has been supplying specialty steels and steel products to North American Industries.

By representing some of the most reputable manufacturers around the Globe, Vanguard's various Product Divisions offer a wide range of North American, European and Asian products, many of which are being manufactured to Vanguard's own specifications and often exceed Industry Standards.

Besides office and warehousing facilities throughout Canada, Vanguard Steel relies on a vast network of Canadian and U.S. Distributors to assure local product availability and best possible service.



VANGUARD'S PRODUCT DIVISIONS:

- **SPECIALTY STEELS**
- **WIRE ROPES, CABLES AND RELATED HARDWARE**
- **CHAINS AND ACCESSORIES**
- **BUILDER'S HARDWARE**
- **INDUSTRIAL KNIVES**
- **ABRASIVES**
- **WELDING CONSUMABLES**

WAREHOUSE LOCATIONS

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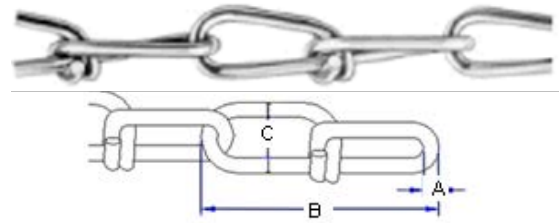
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CONVERSION CHART

TENSO/LION CHAIN (DOUBLE LOOP)

General purpose weldless utility chain, that combines strength, flexibility, light weight and neat appearance. Made with low carbon steel (not heat treated), zinc plated finish.

Commonly used for hardware and manufacturing applications such as playground and gym equipment, hanging of light fixtures, on gates, porch swings, halter, kennel, dog runner, cow ties and tie-out chains.



Trade Size	Dimensions (inches)			WLL (lbs)	Weight (lbs/100')	Pkg Qty (ft)	Vanguard Code	Pkg Qty (ft)	Vanguard Code
	A	B	C						
#4	0.07	1.14	0.20	70	6	100	3830 00041	250	3830 0004
#3	0.08	1.28	0.24	90	6	100	3830 00031	200	3830 0003
#2	0.09	1.97	0.28	115	9			100	3830 0002
#1	0.11	1.81	0.30	155	10			100	3830 0001
2/0	0.13	2.48	0.35	255	17	100	3830 02001	175	3830 0200

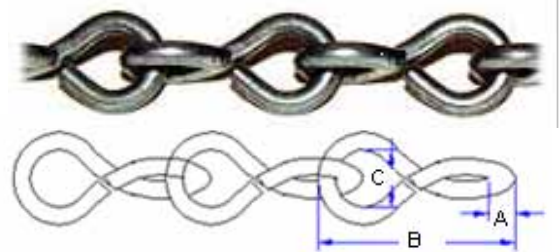
* Not a standard stock item at all distribution centres

** Additional sizes, materials, finishes and lengths available upon request. Minimum order quantity may apply.

SINGLE JACK CHAIN

General purpose weldless light duty chain, each link features two eyes 90° out of plane to each other. Made with low carbon steel (not heat treated), zinc plated finish.

Commonly used for hanging light fixtures, flower pots, children's toys, and general utility applications where high strength is not required



Trade Size	Dimensions (inches)			WLL (lbs)	Weight (lbs/100')	Pkg Qty (ft)	Vanguard Code	Pkg Qty (ft)	Vanguard Code
	A	B	C						
# 12	0.11	0.99	0.22	29	9	100	3830 5112		
# 10T	0.13	1.23	0.32	38	13	50	3830 50101	250	3830 50102
# 8	0.16	1.60	0.37	60	21	1000	3830 5108	100	3830 51081

* Not a standard stock item at all distribution centres

** Additional sizes, materials, finishes and lengths available upon request. Minimum order quantity may apply.

Warning:

NEVER EXCEED WORKING LOAD LIMITS!

Failure to follow these instructions can result in serious property damage, injury or death!

- **NEVER** to be used for overhead lifting or hoisting applications

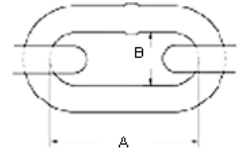
CHAIN

GRADE 30 LONG LINK MOORING CHAIN

Mooring chain is a low carbon general purpose chain with a long link design, allowing the hook up of shackles anywhere on the chain, not just the end links. The long link makes it more flexible and ideally suited for mooring applications.



Made with low carbon steel, hot dipped galvanized finish offers excellent corrosion resistance. Sold in 100 Ft quantities (500 ft/pallet).



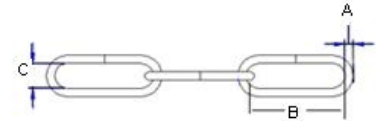
Dimensions (inches)			Breaking Strength (lbs)	Weight (lbs/100')	Vanguard Code
Diameter	A	B			
1/2	3.00	0.88	15,000	230	3899 0032
3/4	4.15	1.19	39,500	480	3899 0048
1	4.15	2.00	55,000	860	3899 0100

* Not a standard stock item at all distribution centres

** Additional sizes, materials, finishes and lengths available upon request. Minimum order quantity may apply.

STRAIGHT LINK COIL CHAIN

General purpose welded chain; the link is easily identified as it is long and relatively narrow in proportion. Made with low carbon steel, hot dipped galvanized finish.



Commonly used for tail gates, safety chains, barriers and animal ties.

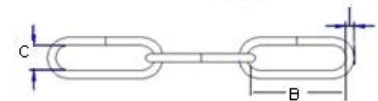
Trade Size	Dimensions (inches)			WLL (lbs)	Packaging (feet)	Weight (lbs/100')	Vanguard Code
	A	B	C				
4/0	0.22	1.39	0.38	670	500	35	3830 6040

* Not a standard stock item at all distribution centres

** Additional sizes, materials, finishes and lengths available upon request. Minimum order quantity may apply.

PASSING LINK CHAIN

General purpose welded chain; the design of the chain links eliminates the tendency to kink or knot. Made with low carbon steel, electro galvanized finish.



Commonly used for tie-out purposes on livestock, farm machinery, for gates and in the general utility industry.

Trade Size	Dimensions (inches)			WLL (lbs)	Packaging (feet)	Weight (lbs/100')	Vanguard Code
	A	B	C				
2/0	0.19	0.88	0.47	450	100	32	3825 0020

* Not a standard stock item at all distribution centres

** Additional sizes, materials, finishes and lengths available upon request. Minimum order quantity may apply.

Warning:

NEVER EXCEED WORKING LOAD LIMITS!

Failure to follow these instructions can result in serious property damage, injury or death!

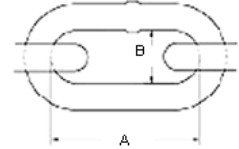
- **NEVER** to be used for overhead lifting or hoisting applications

T-316 STAINLESS STEEL CHAIN

An economical and commonly used chain that is highly corrosion resistant. Due to particular metallurgical structure of the base material it is a low magnetic product that is resistant to high temperatures.



Commonly used for industrial, salt water/marine application, also widely used in chemical plants.



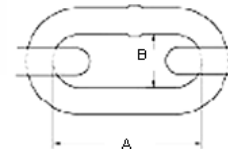
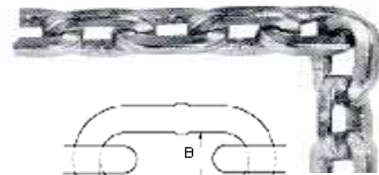
Dimensions (inches)			WLL (lbs)	Weight (lbs/100')	Vanguard Code
Diameter	A	B			
1/8	0.93	0.28	375	18	3816 0008
3/16	0.94	0.38	800	37	3816 0012
1/4	1.24	0.47	1,300	63	3816 0016
5/16	1.26	0.50	1,900	93	3816 0020
3/8	1.38	0.57	2,650	142	3816 0024
1/2	1.79	0.72	4,600	240	3816 0032

* Not a standard stock item at all distribution centres

** Additional sizes, materials, finishes and lengths available upon request. Minimum order quantity may apply.

TITAN ANTI-THEFT SECURITY CHAIN

This chain is manufactured to provide the highest possible security. Triple heat treated chain, made from square bar stock, with short pitch and inverted "V" welds to resist bolt cutters.



Surface hardness exceeds 65 Rockwell, electro galvanized finish provides excellent corrosion resistance.

Dimensions (inches)			WLL (lbs)	Weight (lbs/100')	Vanguard Code
Diameter	A	B			
3/8	1.50	0.62	3,150	400	3840 0024

* Not a standard stock item at all distribution centres

Warning:

NEVER EXCEED WORKING LOAD LIMITS!

Failure to follow these instructions can result in serious property damage, injury or death!

- **NEVER** to be used for overhead lifting or hoisting applications

CHAIN

GRADE 30 CHAIN

- Design factor 4:1
- Working Load Limits and weights for 'exact size' chains*
- Available in self-coloured, eletro or hot dip galvanized, or zinc plated finish



Chain Size	WLL (lbs)	Weight (lbs/100')	Half drums		Vanguard Code (self-colour)	Full drums		Vanguard Code (self-colour)
			feet	lbs		feet	lbs	
GRADE 30 SELF-COLOURED AND HOT DIP GALVANIZED CHAIN								
1/8	375	19	-	-	-	1,000	190	3802 0008
3/16	590	29	-	-	-	750	225	3802 0012
1/4	1,040	50	350	182	3802 00161	700	364	3802 0016
5/16	1,650	73	250	215	3802 00201	500	430	3802 0020
3/8	2,340	123	175	224	3802 00241	350	448	3802 0024
1/2	4,180	215	100	229	3802 00321	200	458	3802 0032
5/8	6,750	321	-	-	3802 00401	150	479	3802 0040
GRADE 30 ZINC PLATED CHAIN								
Size	WLL	Weight	Plastic pails		Zinc Code	Full drums		Zinc Code
1/8	375	19	350	67	3804 0008-350	1,000	190	3804 0008
3/16	590	29	250	73	3804 0012-250	800	232	3804 0012
1/4	1,040	50	140	70	3804 0016-140	450	225	3804 0016
5/16	1,650	73	90	66	3804 0020-090	275	201	3804 0020
3/8	2,340	123	-	-	-	200	246	3804 0024

Vanguard Prefix Codes for H. Galvanized finish - 3803

GRADE 30 EXACT SIZE

Chain Size	Material Diameter		Maximum WLL		Inside Length (nominal)	Inside Width (nominal)
	inch	mm	lbs	kg	inch	inch
1/8	0.125	4.0	375	170	0.940	0.250
3/16	0.190	4.8	600	270	0.945	0.350
1/4	0.250	6.3	1,050	475	1.300	0.430
5/16	0.300	7.6	1,655	750	1.380	0.470
3/8	0.380	9.5	2,340	1,060	1.420	0.560
1/2	0.500	12.5	4,185	1,900	1.790	0.720
5/8	0.630	16.0	6,750	3,060	2.760	0.880

GRADE 40 CHAIN

- Design factor 3:1 (in accordance with NACM specifications)

Chain Size	WLL (lbs)	Galvanized Short Link		Galvanized Regular Link	
		Vanguard Code	(lbs/100')	Vanguard Code	(lbs/100')
1/4	2,600	3809 0016	74	3809 00161	73
5/16	3,900	3809 0020	110	3809 00201	106
3/8	5,400	3809 0024	153	3809 00241	142

Warning:

NEVER EXCEED WORKING LOAD LIMITS!

- NEVER use grade 30 or 40 chains for overhead lifting applications



NACM CHAIN SPECIFICATIONS

GRADE 30 PROOF COIL CHAIN

Chain Size		Material Diameter		WLL (maximum)		Proof Test (minimum)		Breaking Force (minimum)		Inside Length (maximum)		Inside Width (minimum)	
inch	mm	inch	mm	lbs	kg	lbs	kN	lbs	kN	inch	mm	inch	mm
1/8	4.0	0.156	4.0	400	180	800	3.6	1,600	7.20	0.94	23.90	0.25	6.40
3/16	5.5	0.217	5.5	800	365	1,600	7.2	3,200	14.40	0.98	24.80	0.30	7.70
1/4	7.0	0.276	7.0	1,300	580	2,600	11.6	5,200	23.20	1.24	31.50	0.38	9.80
5/16	8.0	0.331	8.4	1,900	860	3,800	16.9	7,600	33.80	1.29	32.80	0.44	11.20
3/8	10.0	0.394	10.0	2,650	1,200	5,300	23.6	10,600	47.20	1.38	35.00	0.55	14.00
7/16	11.9	0.488	11.9	3,700	1,680	7,400	32.9	14,800	65.80	1.64	41.60	0.65	16.60
1/2	13.0	0.512	13.0	4,500	2,030	9,000	40.0	18,000	80.00	1.79	45.50	0.72	18.20
5/8	16.0	0.630	16.0	6,900	3,130	13,800	61.3	27,600	122.60	2.20	56.00	0.79	20.00
3/4	20.0	0.787	20.0	10,600	4,800	21,200	94.3	42,400	188.60	2.76	70.00	0.98	25.00
7/8	22.0	0.866	22.0	12,800	5,810	25,600	114.1	51,200	228.20	3.03	77.00	1.08	27.50
1	26.0	1.020	26.0	17,900	8,140	35,800	159.1	71,600	318.20	3.58	90.90	1.25	31.70

GRADE 43 HIGH TEST CHAIN

Chain Size		Material Diameter		WLL (maximum)		Proof Test (minimum)		Breaking Force (minimum)		Inside Length (maximum)		Inside Width (minimum)	
inch	mm	inch	mm	lbs	kg	lbs	kN	lbs	kN	inch	mm	inch	mm
1/4	7.0	0.276	7.0	2,600	1,180	3,900	17.3	7,800	34.60	1.24	31.50	0.38	9.80
5/16	8.7	0.343	8.7	3,900	1,770	5,850	26.0	11,700	52.00	1.29	32.80	0.44	11.20
3/8	10.0	0.406	10.3	5,400	2,450	8,100	36.0	16,200	72.00	1.38	35.00	0.55	14.00
7/16	11.9	0.468	11.9	7,200	3,270	10,800	48.0	21,600	96.00	1.64	41.60	0.65	16.60
1/2	13.0	0.531	13.5	9,200	4,170	13,800	61.3	27,600	122.60	1.79	45.50	0.72	18.20
5/8	16.0	0.630	16.0	13,000	5,910	19,500	86.5	39,000	173.00	2.20	56.00	0.79	20.00
3/4	20.0	0.787	20.0	20,200	9,180	30,300	134.7	60,600	269.40	2.76	70.00	0.98	25.00
7/8	22.0	0.866	22.0	24,500	11,140	36,750	163.3	73,500	326.60	3.03	77.00	1.08	27.50

GRADE 70 TRANSPORT CHAIN

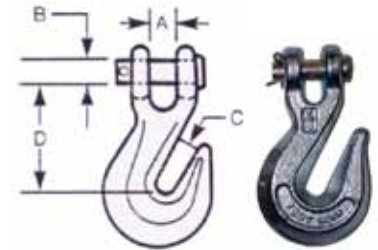
Chain Size		Material Diameter		WLL (maximum)		Proof Test (minimum)		Breaking Force (minimum)		Inside Length (maximum)		Inside Width (minimum)	
inch	mm	inch	mm	lbs	kg	lbs	kN	lbs	kN	inch	mm	inch	mm
1/4	7.0	0.281	7.0	3,150	1,430	6,300	28.0	12,600	56.00	1.24	31.50	0.38	9.80
5/16	8.7	0.343	8.7	4,700	2,130	9,400	41.8	18,800	83.60	1.29	32.80	0.44	11.20
3/8	10.0	0.406	10.3	6,600	2,990	13,200	58.7	26,400	117.40	1.38	35.00	0.55	14.00
7/16	11.9	0.468	11.9	8,750	3,970	17,500	77.8	35,000	155.40	1.64	41.60	0.65	16.60
1/2	13.0	0.531	13.5	11,300	5,130	22,600	100.4	45,200	200.80	1.79	45.50	0.72	18.20
5/8	16.0	0.630	16.0	15,800	7,170	31,600	140.4	63,200	280.80	2.20	56.00	0.79	20.00
3/4	20.0	0.787	20.0	24,700	11,200	49,400	219.6	98,800	439.20	2.76	70.00	0.98	25.00

CHAIN ACCESSORIES

'GOLD PIN'® CLEVIS GRAB HOOKS - CARBON STEEL

- For use with Grade 40 or lower grade chains only
- Self-coloured body with 'gold pin'

Size	WLL (lbs)	Dimensions (inches)				Weight (lbs)	Vanguard Code*
		A	B	C	D		
1/4	2,600	0.35	0.38	0.39	1.97	0.45	3930 0016
5/16	3,900	0.41	0.43	0.44	2.27	0.74	3930 0020
3/8	5,400	0.47	0.47	0.51	2.63	1.14	3930 0024
7/16	7,200	0.67	0.55	0.58	2.79	1.45	3930 0028
1/2	9,200	0.73	0.62	0.69	3.13	2.30	3930 0032

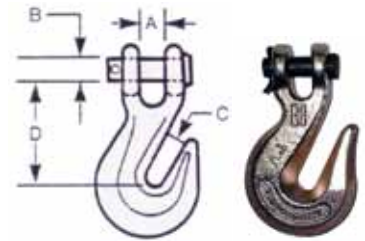


* For Galvanized Clevis Grab Hooks replace the 5th character of the product code with a "5" (example: 3930 5016 for 1/4" Galvanized)

'BLACK PIN'® CLEVIS GRAB HOOKS - ALLOY STEEL

- For use with Grade 70 or lower grade chains only
- Gold Chromated body with 'black pin'

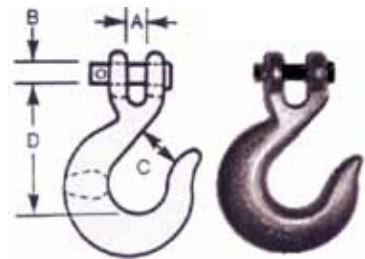
Size	WLL (lbs)	Dimensions (inches)				Weight (lbs)	Vanguard Code
		A	B	C	D		
1/4	3,150	0.36	0.38	0.39	1.97	0.46	3931 0016
5/16	4,700	0.38	0.44	0.43	2.28	0.75	3931 0020
3/8	6,600	0.47	0.47	0.50	2.61	1.10	3931 0024
7/16	8,800	0.67	0.55	0.58	2.79	1.53	3931 0028
1/2	11,300	0.76	0.62	0.67	3.13	2.34	3931 0032



'GOLD PIN'® CLEVIS SLIP HOOKS - CARBON STEEL

- For use with Grade 40 or lower grade chains only
- Galvanized body with 'gold pin'

Size	WLL (lbs)	Dimensions (inches)				Weight (lbs)	Vanguard Code*
		A	B	C	D		
1/4	1,950	0.43	0.37	0.98	2.61	0.65	3903 00161
5/16	2,875	0.50	0.43	1.08	2.81	0.91	3903 00201
3/8	4,000	0.58	0.48	1.37	3.24	1.30	3903 00241
7/16	5,000	0.67	0.55	1.59	3.70	2.18	3903 00281
1/2	6,500	0.75	0.64	1.73	3.95	3.00	3903 00321



*For self-coloured clevis slip hooks, remove '1' at the end of part number (i.e. 3903 0016)

Note:

- Forged Carbon or Alloy Steel, heat treated
- Design Factor 4:1
- Refer to specific applications and warnings!

Warning:

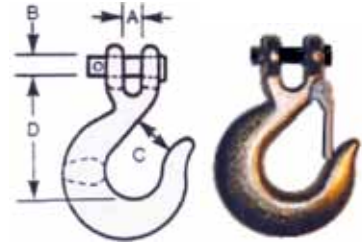
NEVER EXCEED WORKING LOAD LIMITS!

- **NEVER** use grade 40 or 70 chains for overhead lifting applications
- **ALWAYS** discard hooks which show signs of deformation or excessive wear!

'BLACK PIN'® CLEVIS SLIP HOOKS - ALLOY STEEL

- For use with Grade 70 or lower grade chains only
- Gold Chromated body with 'black pin'
- Available with or without latches

Size	WLL (lbs)	Dimensions (inches)				Weight (lbs)	Vanguard Code*
		A	B	C	D		
1/4	2,750	0.43	0.38	0.98	2.52	0.65	3903 1016
5/16	4,300	0.51	0.43	1.10	2.82	0.92	3903 1020
3/8	5,250	0.58	0.47	1.33	3.22	1.32	3903 1024
7/16	7,000	0.67	0.54	1.61	3.69	2.07	3903 1028
1/2	9,000	0.76	0.62	1.74	3.99	2.90	3903 1032

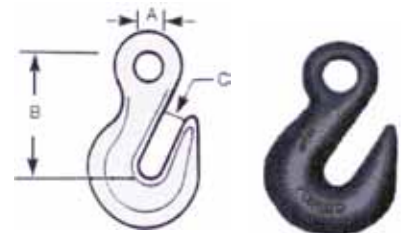


*For clevis slip hooks with latches, add '1' at the end of part number (i.e. 3903 10161)

EYE GRAB HOOKS - CARBON STEEL

- For use with Grade 40 or lower grade chains only

Size	WLL (lbs)	Dimensions (inches)			Weight (lbs)	Vanguard Code
		A	B	C		
1/4	2,600	0.53	1.92	0.34	0.30	3933 0016
5/16	3,900	0.61	2.29	0.43	0.51	3933 0020
3/8	5,400	0.80	2.65	0.49	0.88	3933 0024
1/2	9,200	0.89	3.21	0.65	1.79	3933 0032



EYE SLIP HOOKS - CARBON STEEL

- For use with Grade 40 or lower grade chains only
- Galvanized

Size	WLL (lbs)	Dimensions (inches)			Weight (lbs)	Vanguard Code
		A	B	C		
1/4	1,950	0.50	2.54	0.94	0.49	3908 0016
5/16	2,875	0.62	2.92	1.07	0.62	3908 0020
3/8	4,000	0.73	3.34	1.33	0.98	3908 0024
1/2	6,500	0.94	4.04	1.66	2.52	3908 0032



Warning:

NEVER EXCEED WORKING LOAD LIMITS!

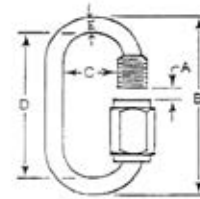
- **NEVER** use grade 40 or 70 chains for overhead lifting applications
- **ALWAYS** inspect hooks and latches frequently - Measure opening (C) and compare with dimensions shown. Increased opening indicates overloading!
- **ALWAYS** discard hooks which show signs of deformation or excessive wear!

CHAIN ACCESSORIES

QUICK LINKS

Multi-purpose connector that is very quick and easy to use – no tools required.

- Cold drawn mild steel - electro galvanized
- Reusable
- Use with chains of equal or lower working load limit (WLL)
- Working load limit (WLL) stamped on each piece
- Breaking strength 2 times WLL



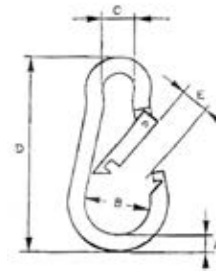
Chain Diameter	Dimensions (inches)					WLL (lbs)	Weight (lbs/pc)	Vanguard Code
	A	B	C	D	E			
1/8	0.21	1.44	0.38	1.17	0.13	220	0.02	2918 0008
3/16	0.26	1.93	0.51	1.54	0.20	660	0.05	2918 0012
1/4	0.30	2.24	0.55	1.77	0.24	880	0.08	2918 0016
5/16	0.43	2.95	0.64	2.35	0.30	1,760	0.18	2918 0020
3/8	0.47	3.23	0.71	2.55	0.35	2,200	0.23	2918 0024
7/16	0.52	3.64	0.79	2.88	0.40	2,640	0.32	2918 0028
1/2	0.57	4.13	0.93	3.19	0.47	3,300	0.52	2918 0032

* Stainless Steel Quick Links available upon request

PEAR SHAPED SNAP HOOKS

Multi-purpose connector that is very quick and easy to use – no tools required.

- Cold drawn mild steel - electro galvanized
- Reusable
- Working load limit (WLL) stamped on each piece
- Breaking strength 2 times WLL
- Not approved for climbing applications



Chain Diameter	Dimensions (inches)					WLL (lbs)	Weight (lbs/pc)	Vanguard Code
	A	B	C	D	E			
1/8	0.16	0.48	0.24	1.60	0.28	200	0.02	2918 1008
3/16	0.20	0.58	0.32	1.99	0.26	220	0.06	2918 1012
1/4	0.23	0.68	0.36	2.37	0.30	260	0.08	2918 1016
5/16	0.30	0.93	0.47	3.53	0.89	500	0.14	2918 1020
3/8	0.38	1.20	0.63	3.94	1.08	770	0.29	2918 1024
1/2	0.46	1.70	0.72	5.47	1.61	1,400	0.72	2918 1032

Warning:

NEVER EXCEED WORKING LOAD LIMITS!

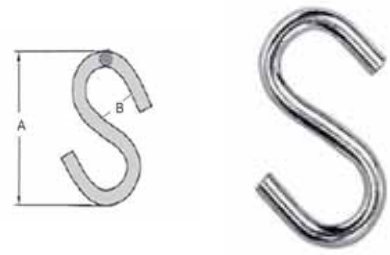
Failure to follow these instructions can result in serious property damage, injury or death!

- **NEVER** use for overhead lifting or hoisting, to support people, for playground or athletic equipment or as a safety device
- Do not use if visibly distorted or worn.

'S' HOOKS

Very versatile hook that can be used for both industrial and residential applications.

- Low Carbon steel - electro galvanized
- After engaging chain, close the "S" hooks to prevent disengagement
- Designed for light duty applications



Size (mm)	Dimensions (inches)		Weight (lbs/pc)	Vanguard Code
	A	B		
3 x 25	1.00	0.13	0.02	2930 0030
4 x 37	1.35	0.16	0.05	2930 0040
5 x 45	1.63	0.19	0.08	2930 0050
6 x 55	2.13	0.25	0.18	2930 0060
8 x 76	3.25	0.31	0.23	2930 0080
10 x 103	4.00	0.38	0.32	2930 0100

Additional shapes, styles, materials and finishes available upon request

TWIN AND DOUBLE CLEVIS LINKS

Designed for a variety of applications to join Grade 70 chain or lower grades of chain and/or components

- Body heat treated carbon steel, painted black and embossed with the chain diameter and V7
- Pins are quenched and tempered alloy steel, yellow chromate finished embossed with 'A'
- Reusable
- Ultimate load 4 times working load limit (WLL)



Chain Diameter	Dimensions (inches)				WLL (lbs)	Weight (lbs/pc)	Vanguard Code
	A	B	C	D			
TWIN CLEVIS LINKS							
1/4 - 5/16	0.44	1.24	0.38	0.46	4,700	0.31	3936 5020
3/8	0.52	1.38	0.47	0.50	6,600	0.54	3936 5024
1/2	0.65	1.72	0.57	0.61	11,250	1.18	3936 5032
DOUBLE CLEVIS LINKS							
5/16 - 3/8*	0.56	1.00	0.63	0.44	5,400	0.78	3935 0024

* Additional sizes available upon request

Warning:

NEVER EXCEED WORKING LOAD LIMITS!

Failure to follow these instructions can result in serious property damage, injury or death!

- **NEVER** use for overhead lifting or hoisting.
- Do not use if visibly distorted or worn.

CHAIN ACCESSORIES

COLD SHUTS

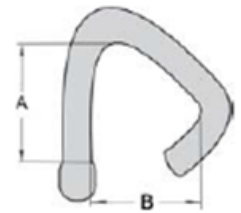
Very economical method for temporary repairing or connecting of low carbon proof coil chain with equal or lower working load limit (WLL).

- Mild steel - electro galvanized
- Use one size bigger than the chain being repaired/connected
- Use with chains of equal or lower working load limit (WLL)
- With a hammer, drive the open end through the cold shut eye and peen the extended end to prevent opening
- Never reuse after closure has been made
- Design factor 4:1



Diameter (inches)	Dimensions (inches)		WLL (lbs)	Weight (lbs/pc)	Vanguard Code
	A	B			
3/16	0.89	0.83	450	0.03	2917 0012
1/4	1.31	0.38	750	0.06	2917 0016
5/16	1.43	0.41	1,250	0.10	2917 0020
3/8	1.25	0.63	1,900	0.18	2917 0024
7/16	1.38	1.25	2,650	0.26	2917 0028
1/2	1.60	1.25	3,500	0.38	2917 0032

Not a standard stock item at all distribution centres



LAP LINKS

Very economical method for temporary repairing or connecting of low carbon proof coil chain with equal or lower working load limit (WLL).

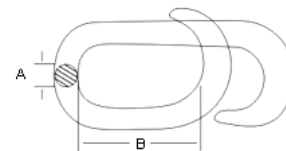
- Cold drawn mild steel - electro galvanized
- Never reuse after closure has been made
- Use with chains of equal or lower working load limit (WLL)
- Thread onto chain link then flatten, link must be completely closed before using
- Design factor 4:1



Dimensions (inches)		WLL (lbs)	Weight (lbs/pc)	Vanguard Code
A	B			
3/16	1.00	240	0.03	2916 1210
1/4	2.00	400	0.04	2916 1620
5/16	2.00	950	0.17	2916 2020
3/8	2.00	1,250	0.26	2916 2420
1/2	2.50	1,525	0.53	2916 3225
5/8*	2.50	1,000	0.81	2916 4025

* Side opening

Not a standard stock item at all distribution centres



Warning:

NEVER EXCEED WORKING LOAD LIMITS!

Failure to follow these instructions can result in serious property damage, injury or death!

- **NEVER** use for overhead lifting or hoisting.
- Do not use if the chain or components are visibly distorted or worn.



GRADE 80 & 100 WARNINGS AND INFORMATION

It is very important to read and understand all information shown before using/assembling a chain sling

Warning:

FAILURE TO OBSERVE THESE WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH!

- **ALWAYS** make sure that chain slings, load chain and components are regularly inspected before use
- **ALWAYS** destroy and discard any sling that is damaged beyond repair
- **ALWAYS** make sure that the load is evenly balanced to avoid excessive forces when lifting
- **ALWAYS** make sure that the hook NOT the latch supports the load - NEVER tip load
- **ALWAYS** store chain slings in a dry clean environment
- **NEVER** exceed the working load limit (WLL) of the sling or any of its components – consult sling load charts for capacity reduction due to sling angle
- **NEVER** lift or transport loads over or near people
- **NEVER** use a chain sling for lifting or transporting people
- **NEVER** push or pull on the sling while under load
- **NEVER** use slings that appear defective, worn or damaged
- **NEVER** field weld or repair chain slings – all repairs should be performed by a competent/qualified repair facility
- **NEVER** expose slings to impact, rapid lifts or sudden stops
- **NEVER** tie knots to shorten slings
- **NEVER** fasten chain over sharp corners or edges
- **NEVER** use in highly acidic or caustic environments without first checking to see how the environment will affect the sling performance or capacity

High and low temperatures reduce the working load limit (WLL)!

Chain slings should not be in contact with objects or used in temperatures higher than 204°C (400°F) or lower than -40°C (-40°F)


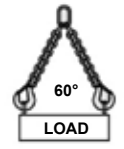
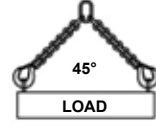
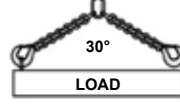
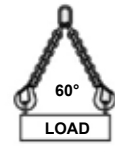
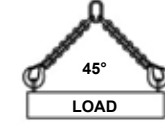
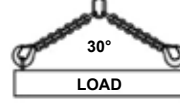
SLING LOAD CHAIN AND COMPONENT INSPECTION:

All chain slings should be immediately removed from service if any of the following conditions are found. They should not be returned to service until repaired and recertified by a competent/qualified repair facility. If the unit cannot be repaired destroy and discard it.

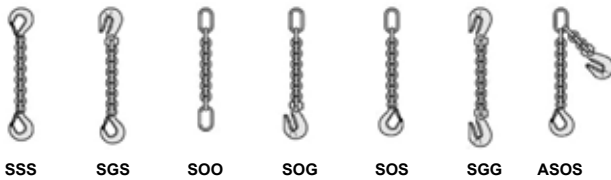
- Missing or unreadable identification tags
- Cracks in the chain or components
- Excessive nicks, gouges, wear or corrosion
- Stretched, bent, twisted or distorted chain links or components
- Evidence of heat damage, field welding, welding spatter or any other condition which put the integrity of the chain sling in question

V-LINE CHAIN & ACCESSORIES

V-LINE GRADE 80 CHAIN SLINGS - LOAD CHART

Grade 80 Chain Size (inches)	Single Leg Type "S"	Double Leg Type "D"			Triple Leg Type "T" and Quadruple Leg Type "Q"		
							
Working Load Limits (WLL) (lbs)							
9/32	3,500	6,000	4,900	3,500	9,000	7,400	5,200
3/8	7,100	12,200	10,000	7,100	18,300	14,900	10,600
1/2	12,000	20,700	17,000	12,000	31,100	25,400	18,000
5/8	18,100	31,300	25,600	18,100	47,000	38,300	27,100
3/4	28,300	48,900	40,000	28,300	73,400	59,900	42,400
7/8	34,200	59,200	48,300	34,200	88,800	72,500	51,200
1	47,700	82,500	67,400	47,700	123,800	101,000	71,500

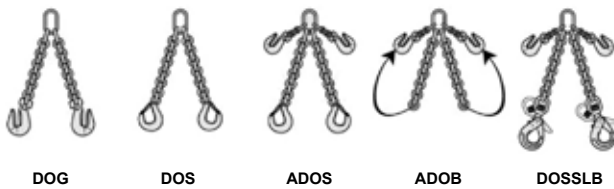
SINGLE LEG CHAIN SLING STYLES



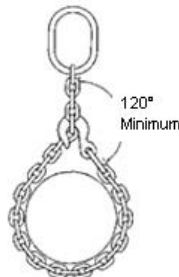
TRIPLE LEG CHAIN SLING STYLES



DOUBLE LEG CHAIN SLING STYLES



QUADRUPLE LEG CHAIN SLING STYLES



If a chain sling is used as a choker the working load limit (WLL) must be reduced by 20%. We recommend a minimum angle of choke of 120°



V-LINE GRADE 80 COMPONENT SELECTION GUIDE

Chain Size	Oblong Master Link	Master Link Sub-Assembly	Coupling Link	Clevis Grab Hook	Clevis Sling Hook	Self Locking Clevis Hook	Self Locking Eye Hook	Self Locking Swivel Hook
Single Leg Chain Sling								
9/32	V-87-8	N/A	V-60	V-90	V-80SU	VSC-7/8	VSL-7/8	VSLG-7/8
3/8	V-108-8	N/A	V-61	V-91	V-81SU	VSC-10	VSL-10	VSLG-10
1/2	V-1310-8	N/A	V-62	V-92	V-82SU	VSC-13	VSL-13	VSLG-13
5/8	V-1613-8	N/A	V-63	V-93	V-83SU	VSC-16	VSL-16	VSLG-16
Double Leg Chain Sling								
9/32	V-87-8	V-7-8	V-60	V-90	V-80SU	VSC-7/8	VSL-7/8	VSLG-7/8
3/8	V-1310-8	V-10-8	V-61	V-91	V-81SU	VSC-10	VSL-10	VSLG-10
1/2	V-1613-8	V-13-8	V-62	V-92	V-82SU	VSC-13	VSL-13	VSLG-13
5/8	V-2016-8	V-16-8	V-63	V-93	V-83SU	VSC-16	VSL-16	VSLG-16
3/4	V-2220-8	V-20-8	V-64	V-94	V-84SU			
Triple Leg Chain Sling								
9/32	V-1310-8	V-7-8	V-60	V-90	V-80SU	VSC-7/8	VSL-7/8	VSLG-7/8
3/8	V-1613-8	V-10-8	V-61	V-91	V-81SU	VSC-10	VSL-10	VSLG-10
1/2	V-2016-8	V-13-8	V-62	V-92	V-82SU	VSC-13	VSL-13	VSLG-13
5/8	V-2220-8	V-16-8	V-63	V-93	V-83SU	VSC-16	VSL-16	VSLG-16
3/4	V-2622-8	V-20-8	V-64	V-94	V-84SU			
Quadruple (Quad) Leg Chain Sling								
9/32	V-1310-8	V-7-8	V-60	V-90	V-80SU	VSC-7/8	VSL-7/8	VSLG-7/8
3/8	V-1613-8	V-10-8	V-61	V-91	V-81SU	VSC-10	VSL-10	VSLG-10
1/2	V-2016-8	V-13-8	V-62	V-92	V-82SU	VSC-13	VSL-13	VSLG-13
5/8	V-2220-8	V-16-8	V-63	V-93	V-83SU	VSC-16	VSL-16	VSLG-16
3/4	V-2622-8	V-20-8	V-64	V-94	V-84SU			

* Additional components and larger chain slings available upon request

V-LINE CHAIN & ACCESSORIES

V-LINE GRADE 80 CHAIN

- Approved for overhead lifting
- Produced from the highest quality domestic alloy steel
- Heat treated
- Meet the specifications of NACM, ASTM and O.S.H.A.
- Permanently embossed with L8 (grade) and trace code every 6 links (alternating links)
- Design factor 4:1 (in accordance with NACM specifications)
- Black finish



Chain Size	WLL (lbs)	Material Diameter	Inside Length	Inside Width	Weight (lbs/100')	Full drums		Vanguard Code
						feet	lbs	
9/32	3,500	0.275	0.880	0.410	72	400	288	3808 00161
5/16	4,500	0.330	1.020	0.480	106	500	530	3808 00201
3/8	7,100	0.397	1.220	0.570	150	400	600	3808 00241
1/2	12,000	0.520	1.560	0.750	261	200	522	3808 00321
5/8	18,100	0.630	1.930	0.920	361	150	542	3808 00401
3/4	28,300	0.790	2.360	1.020	610	196	1,195	3808 00481
7/8	34,200	0.870	2.600	1.130	720	164	1,181	3808 00561
1	47,700	1.020	3.070	1.330	1,025	98	1,005	3808 01001

V-LINE GRADE 100 CHAIN

- Approved for overhead lifting
- Produced from the highest quality domestic alloy steel
- Heat treated
- Meet the specifications of NACM, ASTM and O.S.H.A.
- Permanently embossed with L10 (grade) and trace code every 6 links (alternating links)
- Design factor 4:1 (in accordance with NACM specifications)
- 25% Higher working load limit (WLL) than comparable Grade 80 Alloy Chain
- Grey armored finish



Chain Size	WLL (lbs)	Material Diameter	Inside Length	Inside Width	Weight (lbs/100')	Full drums		Vanguard Code
						feet	lbs	
9/32	4,300	0.275	0.880	0.410	72	800	576	3815 0018
3/8	8,800	0.397	1.220	0.570	150	400	600	3815 0024
1/2	15,000	0.520	1.560	0.750	261	200	522	3815 0032
5/8	22,600	0.630	1.930	0.920	361	150	542	3815 0040

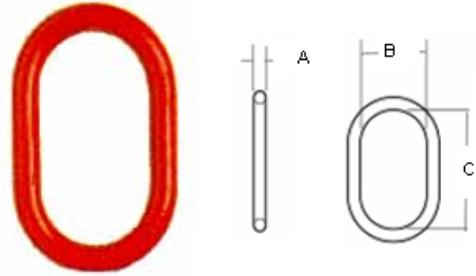
Warning:

NEVER EXCEED WORKING LOAD LIMITS!

- **ONLY USE V-LINE GRADE 80 CHAINS** or higher for overhead lifting applications
- **ALWAYS** inspect chains & fittings prior to use

V-LINE GRADE 80 ALLOY MASTER LINKS

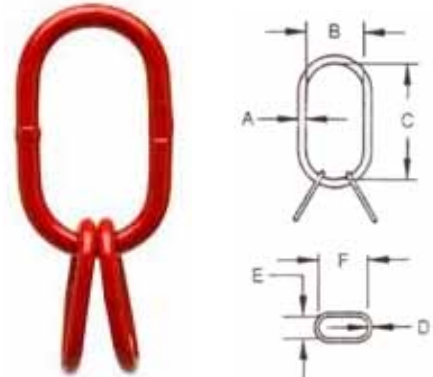
- Alloy Steel – Quenched and Tempered
- Individually proof tested per ASTM 906/952 prescribed loads
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Proof tested to 2 times the Working Load Limit (WLL)
- Design factor 4:1



Model No.	Dimensions (inches)			WLL (lbs)	Weight (lbs)	Sling Size & Type				Vanguard Code
	A	B	C			Single	Double	Triple	Quad	
V-87-8	0.50	2.75	4.72	6,100	0.80	9/32-5/16	9/32			3953 00322
V-108-8	0.63	3.15	5.50	7,750	1.55	3/8	5/16			3953 00402
V-1310-8	0.75	3.75	6.30	12,300	2.70	1/2	3/8	9/32 - 5/16	9/32 - 5/16	3953 00482
V-1613-8	1.00	4.33	7.50	20,800	5.30	5/8	1/2	3/8	3/8	3953 01002
V-2016-8	1.25	5.10	9.00	31,300	9.75	3/4	5/8	1/2	1/2	3953 01162
V-2220-8	1.50	5.90	10.80	49,000	18.00	7/8	3/4	5/8	5/8	3953 01322
V-2622-8	1.75	7.10	13.40	73,500	29.00	1	7/8	3/4	3/4	3953 01482
V-3226-8	2.00	7.50	13.75	88,900	38.00	1-1/4	1	7/8	7/8	3953 02002

V-LINE GRADE 80 ALLOY SUB-ASSEMBLY

- Alloy Steel – Quenched and Tempered
- Individually proof tested per ASTM 906/952 prescribed loads
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Proof tested to 2 times the Working Load Limit (WLL)
- Design factor 4:1



Model No.	Chain Size	Dimensions (inches)						WLL (lbs @ 60°)	Weight (lbs)	Vanguard Code
		A	B	C	D	E	F			
V-7-8	9/32	0.75	3.75	6.30	0.50	2.36	4.33	12,300	4.25	3954 00482
V-10-8	3/8	1.00	4.33	7.50	0.75	3.75	6.30	20,800	12.75	3954 01002
V-13-8	1/2	1.25	5.10	9.00	1.00	4.33	7.50	31,300	22.00	3954 01162
V-16-8	5/8	1.50	5.90	10.80	1.13	5.10	9.05	49,000	33.00	3954 01322
V-20-8	3/4	1.75	7.10	13.40	1.25	5.10	9.05	73,500	48.00	3954 01482

Warning:

NEVER EXCEED WORKING LOAD LIMITS!

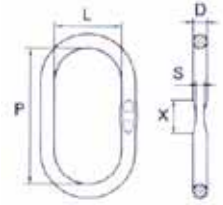
Failure to follow these instructions can result in serious property damage, injury or death!

- **ONLY USE V-LINE GRADE 80 CHAINS** or higher for overhead lifting
- **ALWAYS** inspect chain slings, load chain and components before use
- For more information see grade 80 & 100 warnings and information found in the chain section of this catalogue

V-LINE CHAIN & ACCESSORIES

V-LINE GRADE 80 ALLOY MASTER LINKS WITH FLAT SPOT

- Alloy Steel – Quenched and Tempered
- Individually proof tested per ASTM 906/952 prescribed loads
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Proof tested to 2 times the Working Load Limit (WLL)
- Design factor 4:1

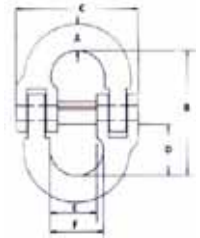


Dimensions (inches)			(mm)	WLL (lbs)	Weight (lbs)	Sling Size & Type				Vanguard Code
D	L	P	S x X			Single	Double	Triple	Quad	
1/2	2.75	4.72	8 x 25	6,100	0.80	9/32-5/16	9/32			3953 0032
5/8	3.15	5.50	8 x 25	7,750	1.55	3/8	5/16			3953 0040
3/4	3.75	6.30	11.5 x 35	12,300	2.70	1/2	3/8	9/32-5/16	9/32-5/16	3953 0048
1	4.33	7.50	14 x 45	20,800	5.30	5/8	1/2	3/8	3/8	3953 0100
1-1/4	5.10	9.00	18 x 45	31,300	9.75	3/4	5/8	1/2	1/2	3953 0116

* Not a standard stock item at all distribution centres

V-LINE GRADE 80 COUPLING LINKS

- Alloy Steel – Quenched and Tempered
- Meet or exceed ASTM A-952-96 standard
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Fast and easy assembly without the need for special tools
- Designed for attaching hooks, master links/sub-assemblies and other end fittings to Grade 80 alloy chain
- Proof tested to 2.5 times the Working Load Limit (WLL)
- Design factor 4:1



Model No.	Chain Size	Dimensions (inches)						WLL (lbs)	Weight (lbs)	Vanguard Code
		A	B	C	D	E	F			
V60	9/32	0.46	2.17	2.12	0.97	0.75	0.87	4,500	0.44	3956 00161
V61	3/8	0.50	2.68	2.64	1.18	0.98	1.10	7,100	0.70	3956 00241
V62	1/2	0.65	3.34	3.07	1.48	1.04	1.28	12,000	1.50	3956 00321
V63	5/8	0.82	4.17	4.09	1.85	1.38	1.65	18,100	2.43	3956 00401
V64	3/4	0.90	4.57	4.25	1.90	1.73	1.85	28,300	3.80	3956 00481
V65	7/8	1.02	5.24	5.28	2.01	1.93	2.17	34,200	4.85	3956 00561

Warning:

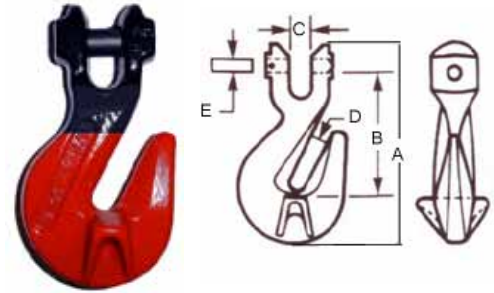
NEVER EXCEED WORKING LOAD LIMITS!

Failure to follow these instructions can result in serious property damage, injury or death!

- **ONLY USE V-LINE GRADE 80 CHAINS** or higher for overhead lifting
- **ALWAYS** inspect chain slings, load chain and components before use
- For more information see grade 80 & 100 warnings and information found in the chain section of this catalogue

V-LINE GRADE 80 CLEVIS GRAB HOOKS

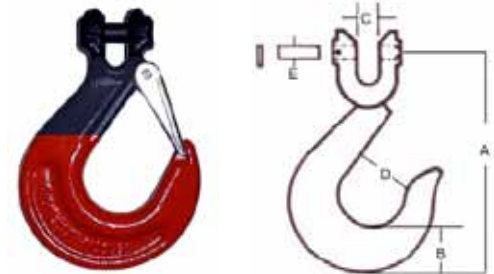
- Alloy Steel – Quenched and Tempered
- Meet or exceed ASTM A-952-96 standard
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Fast and easy assembly without the need for special tools
- Proof tested to 2.5 times the Working Load Limit (WLL)
- Design factor 4:1



Model No.	Chain Size	Dimensions (inches)					WLL (lbs)	Weight (lbs)	Vanguard Code
		A	B	C	D	E - Pin			
V90	9/32 - 5/16	3.62	1.97	0.41	0.41	0.39	4,500	0.73	3950 00161
V91	3/8	5.00	2.83	0.57	0.49	0.49	7,100	1.82	3950 00241
V92	1/2	5.98	3.54	0.68	0.65	0.63	12,000	3.52	3950 00321
V93	5/8	7.03	4.29	0.69	0.86	0.81	18,100	5.63	3950 00401
V94	3/4	8.25	5.04	0.94	0.98	0.98	28,300	8.58	3950 00481
V95	7/8	9.84	5.45	0.98	1.02	1.04	34,200	15.4	3950 00561

V-LINE GRADE 80 CLEVIS SLING HOOKS

- Alloy Steel – Quenched and Tempered
- Meet or exceed ASTM A-952-96 standard
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Fast and easy assembly without the need for special tools
- Proof tested to 2.5 times the Working Load Limit (WLL)
- Design factor 4:1



Model No.	Chain Size	Dimensions (inches)					WLL (lbs)	Weight (lbs)	Vanguard Code
		A	B	C	D	E			
V80SU	9/32 - 5/16	3.54	1.26	0.35	1.02	0.39	4,500	1.34	3951 10161
V81SU	3/8	4.44	1.40	0.47	1.22	0.49	7,100	2.24	3951 10241
V82SU	1/2	5.37	1.57	0.67	1.65	0.63	12,000	3.92	3951 10321
V83SU	5/8	6.79	1.98	0.75	2.05	0.81	18,100	9.72	3951 10401
V84SU	3/4	8.66	2.62	1.06	2.48	0.98	28,300	19.58	3951 10481
WA-85SU	7/8	10.82	2.44	0.97	2.44	1.02	34,200	19.35	3951 1056

Warning:

NEVER EXCEED WORKING LOAD LIMITS!

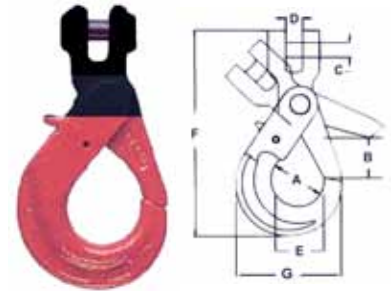
Failure to follow these instructions can result in serious property damage, injury or death!

- **ONLY USE V-LINE GRADE 80 CHAINS** or higher for overhead lifting
- **ALWAYS** inspect chain slings, load chain and components before use
- For more information see grade 80 & 100 warnings and information found in the chain section of this catalogue

V-LINE CHAIN & ACCESSORIES

V-LINE GRADE 80 SELF LOCKING CLEVIS HOOKS

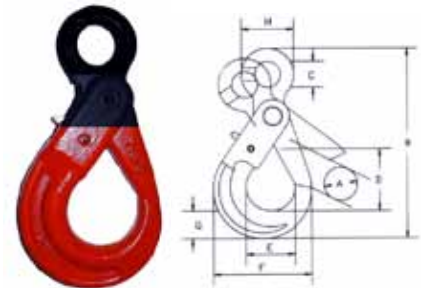
- Alloy Steel – Quenched and Tempered
- Meet or exceed ASTM A-952-96 standard
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Fast and easy assembly without the need for special tools
- The latch on this hook automatically closes when pulling force is applied
- Proof tested to 2.5 times the Working Load Limit (WLL)
- Design factor 4:1



Model No.	Chain Size	Dimensions (inches)							WLL (lbs)	Weight (lbs)	Vanguard Code
		A	B	C	D	E	F	G			
VSC 7/8	9/32 - 5/16	1.69	1.30	0.39	0.39	1.69	6.50	3.46	4,500	1.94	3962 00161
VSC 10	3/8	2.20	1.89	0.49	0.47	2.20	8.15	4.33	7,100	3.69	3962 00241
VSC 13	1/2	2.76	2.05	0.63	0.63	2.76	10.04	5.43	12,000	7.15	3962 00321
VSC 16	5/8	3.23	2.68	0.79	0.73	3.23	11.81	6.93	18,100	13.20	3962 00401

V-LINE GRADE 80 SELF LOCKING EYE HOOKS

- Alloy Steel – Quenched and Tempered
- Meet or exceed ASTM A-952-96 standard
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Fast and easy assembly without the need for special tools
- The latch on this hook automatically closes when pulling force is applied
- Proof tested to 2.5 times the Working Load Limit (WLL)
- Design factor 4:1



Code	Chain Size	Dimensions (inches)								WLL (lbs)	Weight (lbs)	Vanguard Code
		A	B	C	D	E	F	G	H			
VSL 7/8	9/32 - 5/16	1.50	6.65	0.98	2.52	1.73	3.39	1.02	1.83	4,500	1.85	3958 00161
VSL 10	3/8	2.05	8.62	1.24	3.03	2.28	4.33	1.42	2.46	7,100	3.47	3958 00241
VSL 13	1/2	2.44	10.59	1.56	3.86	2.64	5.41	1.61	3.17	12,000	6.86	3958 00321
VSL 16	5/8	2.95	12.60	1.97	4.53	3.39	6.89	2.17	3.82	18,100	13.00	3958 00401

Warning:

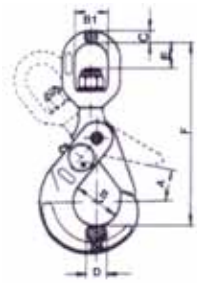
NEVER EXCEED WORKING LOAD LIMITS!

Failure to follow these instructions can result in serious property damage, injury or death!

- **ONLY USE V-LINE GRADE 80 CHAINS** or higher for overhead lifting
- **ALWAYS** inspect chain slings, load chain and components before use
- For more information see grade 80 & 100 warnings and information found in the chain section of this catalogue

V-LINE GRADE 80 SELF LOCKING SWIVEL HOOKS

- Alloy Steel – Quenched and Tempered
- Meet or exceed ASTM A-952-96 standard
- Meet EN1677 standard (20,000 cycle fatigue test)
- Permanently embossed with VGD, size, model number and trace code
- Approved for overhead lifting when all components are grade 80
- Fast and easy assembly without the need for special tools
- Suitable for infrequent, non-continuous rotation under load
- The latch on this hook automatically closes when pulling force is applied
- Proof tested to 2.5 times the Working Load Limit (WLL)
- Design factor 4:1



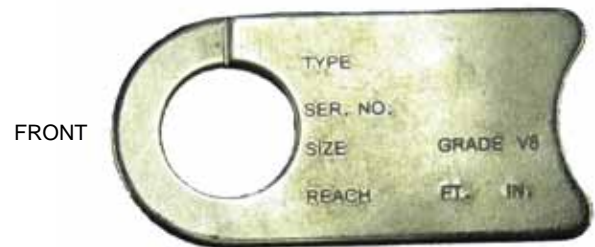
Model No.	Chain Size	Dimensions (inches)							WLL (lbs)	Weight (lbs)	Vanguard Code
		A	B	B1	C	D	E	F			
VSLG 7/8	9/32 - 5/16	1.42	1.73	1.42	0.55	0.83	1.26	7.32	4,500	2.64	3969 00161
VSLG 10	3/8	1.65	2.20	1.65	0.65	1.10	1.63	8.90	7,100	4.95	3969 00241
VSLG 13	1/2	2.05	2.76	2.09	0.79	1.34	2.07	11.30	12,000	9.09	3969 00321
VSLG 16	5/8	2.60	3.23	2.40	0.91	1.61	1.97	13.23	18,100	16.83	3969 00401

SLING IDENTIFICATION TAGS

- Pre-stamped metal tag
- Markings include sling type, working load limit (WLL), reach, serial number, chain size and grade

Sling Type	Vanguard Code
Single Leg	3963 0001
Multiple Leg	3963 0002

* Tags may not be exactly as shown



Warning:

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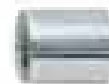
Failure to follow these instructions can result in serious property damage, injury or death!

- **ONLY USE V-LINE GRADE 80 CHAINS** or higher for overhead lifting
- **ALWAYS** inspect chain slings, load chain and components before use
- For more information see grade 80 & 100 warnings and information found in the chain section of this catalogue

V-LINE CHAIN & ACCESSORIES

V-LINE GRADE 80 STANDARD SPARE PARTS LISTING

Model No.	Chain Size (inches)	Vanguard Code
Steel Collar		
V-60	9/32	3956 10161
V-61	3/8	3956 10241
V-62	1/2	3956 10321
V-63	5/8	3956 10401
V-64	3/4	3956 10481
Load Pin		
V-90 / VSC-7/8	9/32	3950 10161
V-80SU	9/32	3950 10162
V-91 / V-81SU / VSC-10	3/8	3950 10241
V-92 / V-82SU / VSC-13	1/2	3950 10321
VSC-16	5/8	3950 10401
V-93 / V-83SU	5/8	3950 10402
V-94	3/4	3950 10481
V-84SU	3/4	3950 10482
Cast Latch Kit		
V-80LKU	9/32 - 5/16	3961 10161
V-81LKU	3/8	3961 10241
V-82LKU	1/2	3961 10321
V-83LKU	5/8	3961 10401
V-84LKU	3/4	3961 10481
Trigger Kit Assembly		
VSC-7/8 / VSL-7/8 / VSLG-7/8	9/32 - 5/16	3969 10161
VSC-10 / VSL-10 / VSLG-10	3/8	3969 10241
VSC-13 / VSL-13 / VSLG-13	1/2	3969 10321
VSC-16 / VSL-16 / VSLG-16	5/8	3969 10401



Warning:

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Failure to follow these instructions can result in serious property damage, injury or death!

- **ONLY USE V-LINE GRADE 80 CHAINS** or higher for overhead lifting
- **ALWAYS** inspect chain slings, load chain and components before use
- For more information see grade 80 & 100 warnings and information found in the chain section of this catalogue



CONVERSIONS

To Convert	Multiply By	To Obtain	To Convert	Multiply By	To Obtain
Miles (statute)	1.609	Kilometers	0.621		Miles (statute)
Yards	0.914	Meters	1.094		Yards
Feet	0.305	Meters	3.281		Feet
Inches	25.400	Millimeters	0.039		Inches
Short Tons	0.907	Metric Tons	1.102		Short Tons
Long Tons	1.016	Metric Tons	0.984		Long Tons
Pounds	0.454	Kilograms	2.205		Pounds
Pounds	0.00444	Kilo newtons	224.8		Pounds
Pounds per Foot	1.488	Kilos per Meter	0.672		Pounds per Foot
Pounds per sq. ft.	4.882	Kilos per sq. m	0.205		Pounds per sq. ft.
Pounds per sq. in.	0.070	Kilos per sq. cm	14.223		Pounds per sq. in.
Square Inches	645.200	Sq. Millimeters	0.002		Square Inches
Cubic Inches	16.387	Cubic Centimeters	0.061		Cubic Inches
Cubic Feet	0.028	Cubic Meters	35.310		Cubic Feet
Cubic Yards	0.765	Cubic Meters	1.308		Cubic Yards
U.S. Gallons	3.785	Liters	0.264		U.S. Gallons
Imperial Gallons	4.546	Liters	0.220		Imperial Gallons
Cubic Feet	28.320	Liters	0.035		Cubic Feet
Diameter	3.142	Circumference	0.318		Diameter
Deg. Fahrenheit	$.5556 \times (F^{\circ} - 32)$	Degrees Celsius	$(1.8 \times C^{\circ}) + 32$		Deg. Fahrenheit
1 Statute Mile -	1760 Yards -	5280 Feet -	1.60934 Km		
1 Nautical Mile -	6080 Feet -	1.85318 Km			
1 Fathom -	6 Feet -	1.82880 Meters			
1 Rod -	5.5 Yards -	16.5 Feet -	5.02919 Meters		