



**verope** ®  
rely on

# General Catalog



verope AG is a Joint Venture company between Pierre Verreet, head and founder of verope, and Kiswire Ltd. from South Korea.

The concept of verope is to design and to manufacture high quality crane ropes that suit best the different requirements as well as to provide affordable high quality products and services to the market.

Over the past few years till today verope special wire ropes demonstrate in diverse and demanding crane applications worldwide their high performance and reliability. This is our incentive, to develop consistently further the company verope together with our partners.

“Over the past few years till today verope special wire ropes demonstrate in diverse and demanding crane applications worldwide their high performance and reliability.”

We are proud to present you with this catalog, in addition to proven also newly developed verope special wire ropes, recognized by leading crane manufacturers.

Besides continuous product development verope is increasingly investing in service and logistics. Our service centers in Singapore, China and Germany make an important contribution to the regional customer service today. verope AG products and services are certified by LRQA in accordance with ISO 9001:2008.

The ever-expanding verope team remains your reliable partner who advises you on the best and most competitive rope construction for your application. The basis for this is our high quality product range that you can rely on.

Your requirements are our focus.

**Pierre Verreet**

**verope AG**

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[info@verope.com](mailto:info@verope.com)

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# Product Overview

This catalog is designed to help our customers to select the appropriate special wire rope from our broad product range.

Please use the orange tab to the right in order to gain an overview and quickly switch from one product to another.

Using the blue tab to the left you can compare which rope is suitable for which application. Please note that each rope construction has specific product features, tailored to specific application requirements. For more information, refer to the individual product data sheets. We would be happy to advise you on the best rope construction that suits your application.

For your convenience we have added, alongside the relevant metric dimensions, commonly used English units by conversion such as lb/feet for the rope's length mass and tons (of 2000 lbs) for the rope's minimum breaking force.

Regarding the important discard criteria for visible broken wires we have converted our details to the International Standard ISO 4309. Detailed information can be found at the end of the product catalog and on our website.

Please also read the „Important Information“ on page 33!

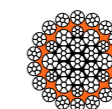
The data shown in this catalog are correct at the time of printing. Subject to modifications, the specifications may change, errors and omissions excepted!

## Remarks regarding the product selection when using the blue tap to the left

- 1) In case rotation-resistant rope is needed.
- 2) Used in steel mills, where high temperatures are involved.
- 3) Preferably on single layer drum.
- 4) Grab application.

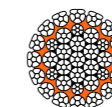
## Rotation-resistant ropes

**verotop P**  
P. 6-7



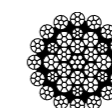
**verotop P** is a rotation-resistant rope with compacted strands and a rope core covered with a plastic layer.

**verotop XP**  
P. 8-9



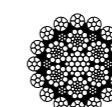
**verotop XP** is a rotary swaged rotation-resistant rope with compacted strands and a rope core covered with a plastic layer.

**verotop**  
P. 10-11



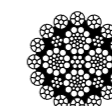
**verotop** is a very flexible rotation-resistant rope with compacted strands.

**verotop S**  
P. 12-13



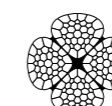
**verotop S** is a very flexible rotation-resistant rope with compacted outer strands and very high breaking strength.

**verotop E**  
P. 14-15



**verotop E** is a flexible rotation-resistant rope with compacted outer strands.

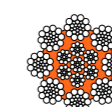
**vero 4**  
P. 16-17



**vero 4** is a 4-strand rotation-resistant rope with compacted strands.

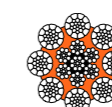
## Non-rotation resistant ropes

**verostar 8**  
P. 18-19



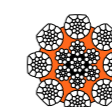
**verostar 8** is an 8-strand, non-rotation resistant rope with conventional strands and a rope core covered with a plastic layer.

**veropro 8**  
P. 20-21



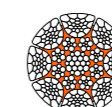
**veropro 8** is an 8-strand, non-rotation resistant rope with compacted outer strands and a rope core covered with a plastic layer.

**veropro 8 RS**  
P. 22-23



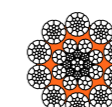
**veropro 8 RS** is a rotary swaged 8-strand, non-rotation resistant rope with compacted outer strands and a rope core covered with a plastic layer.

**veropower 8**  
P. 24-25



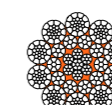
**veropower 8** is a rotary swaged 8-strand, non-rotation resistant rope in parallel lay construction with compacted outer strands and a rope core covered with a plastic layer.

**veropro 10**  
P. 26-27



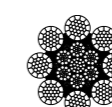
**veropro 10** is a very flexible 10-strand, non-rotation resistant rope with compacted strands and a rope core covered with a plastic layer.

**verotech 10**  
P. 28-29



**verotech 10** is a very flexible 10-strand, non-rotation resistant rope in parallel lay construction with compacted strands and a rope core covered with a plastic layer.

**verosteel 8**  
P. 30-31

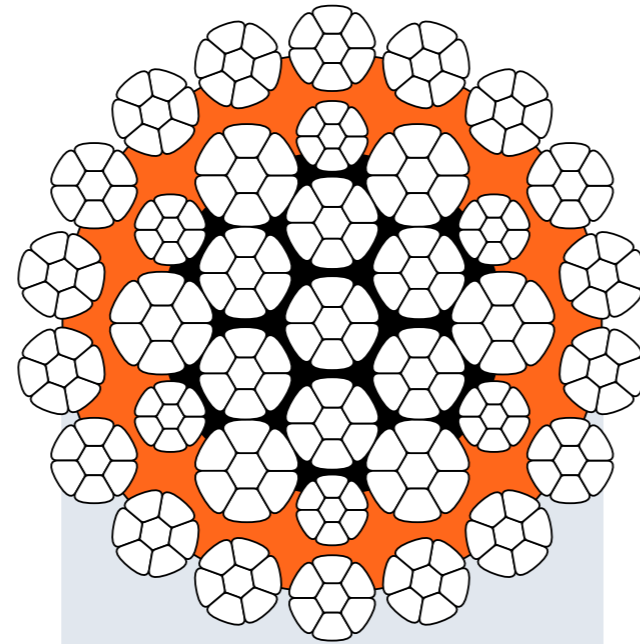


**verosteel 8** is an 8-strand, non-rotation resistant rope with compacted outer strands.

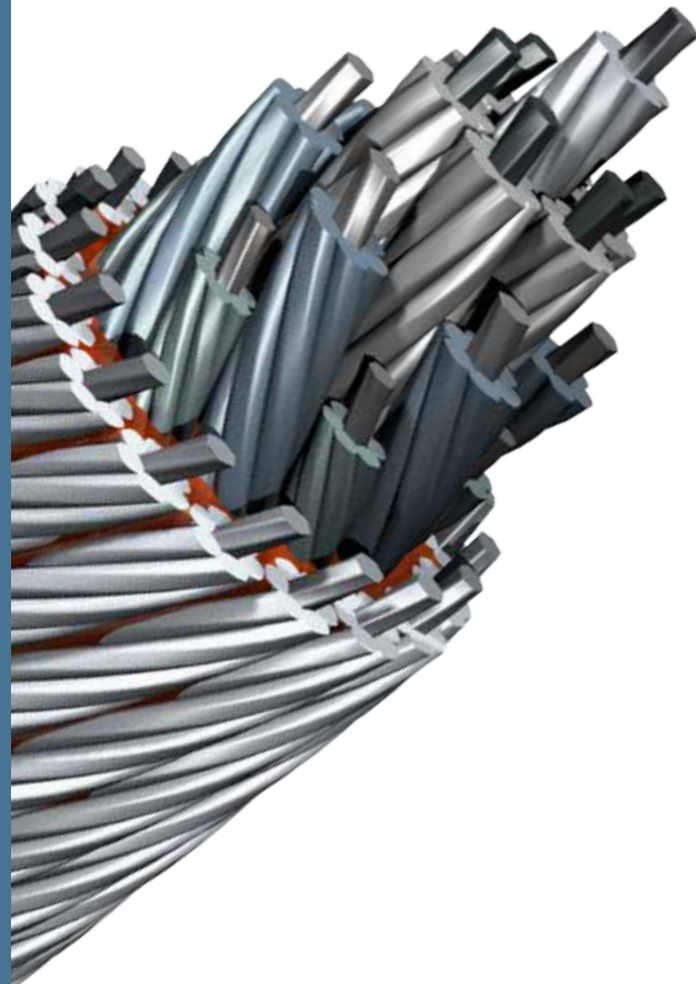
Provides a very stable rope structure and achieves excellent bending fatigue results.

# verotop P

is a rotation-resistant rope with compacted strands and a rope core covered with a plastic layer.



- verotop P has a very high breaking strength.
- verotop P provides a very stable rope structure and achieves excellent bending fatigue results.
- verotop P offers excellent crushing and very good abrasion resistance.
- verotop P possesses perfect spooling behavior on multilayer drum.
- verotop P can be used either with or without swivel.
- verotop P is a category 1 rotation-resistant rope in accordance with ASTM A1023.



The rope is fully lubricated. The finish available as standard is galvanized, bright finish on request. • Average fill factor 0.730 • Ordinary or Lang Lay available • Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309: RCN = 23-3 Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

2013 / 02

verotop P

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
16	5/8	1.248	241.7	24.6	260.0	26.5
17		1.408	272.8	27.8	293.5	29.9
18		1.579	305.8	31.2	329.0	33.6
19	3/4	1.759	340.8	34.7	366.6	37.4
20		1.949	377.6	38.5	406.2	41.4
21		2.149	416.3	42.4	447.8	45.7
22		2.359	456.9	46.6	491.5	50.1
22.2	7/8	2.402	465.2	47.4	500.5	51.0
23		2.578	499.3	50.9	537.2	54.8
24		2.807	543.7	55.4	584.9	59.6
25		3.046	590.0	60.2	634.7	64.7
25.4	1	3.144	609.0	62.1	655.2	66.8
26		3.294	638.1	65.1	686.5	70.0
27		3.553	688.1	70.2	740.3	75.5
28		3.821	740.1	75.5	796.2	81.2
28.6	1-1/8	3.986	772.1	78.7	830.6	84.7
29		4.099	793.9	81.0	854.0	87.1
30		4.386	849.6	86.6	914.0	93.2
31		4.683	907.1	92.5	975.9	99.5
32	1-1/4	4.990	966.6	98.6	1040	106.0
33		5.307	1028	104.8	1106	112.8
34		5.634	1091	111.3	1174	119.7
35	1-3/8	5.970	1156	117.9	1244	126.9
36		6.316	1223	124.7	1316	134.2
38	1-1/2	7.037	1363	139.0	1466	149.5
40		7.797	1510	154.0	1625	165.7
42		8.597	1665	169.8	1791	182.7
43		9.011	1745	178.0	1878	191.5
44		9.435	1827	186.4	1966	200.5
45	1-3/4	9.869	1911	194.9	2056	209.7
46		10.31	1997	203.7	2149	219.1
48		11.23	2175	221.8	2340	238.6
50	2	12.18	2360	240.6	2539	258.9

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>		
16	5/8	0.84	0.38	27.2	29.2
17		0.95	0.43	30.7	33.0
18		1.06	0.48	34.4	37.0
19	3/4	1.18	0.54	38.3	41.2
20		1.31	0.59	42.4	45.7
21		1.44	0.66	46.8	50.3
22		1.58	0.72	51.4	55.2
22.2	7/8	1.61	0.73	52.3	56.3
23		1.73	0.79	56.1	60.4
24		1.89	0.86	61.1	65.7
25		2.05	0.93	66.3	71.3
25.4	1	2.11	0.96	68.5	73.6
26		2.21	1.00	71.7	77.2
27		2.39	1.08	77.3	83.2
28		2.57	1.16	83.2	89.5
28.6	1-1/8	2.68	1.22	86.8	93.4
29		2.75	1.25	89.2	96.0
30		2.95	1.34	95.5	102.7
31		3.15	1.43	102.0	109.7
32	1-1/4	3.35	1.52	108.7	116.9
33		3.57	1.62	115.5	124.3
34		3.79	1.72	122.7	132.0
35	1-3/8	4.01	1.82	130.0	139.8
36		4.24	1.93	137.5	147.9
38	1-1/2	4.73	2.14	153.2	164.8
40		5.24	2.38	169.8	182.6
42		5.78	2.62	187.2	201.4
43		6.06	2.75	196.2	211.1
44		6.34	2.88	205.4	221.0
45	1-3/4	6.63	3.01	214.9	231.1
46		6.93	3.14	224.5	241.5
48		7.55	3.42	244.5	263.0
50	2	8.19	3.71	265.3	285.4

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

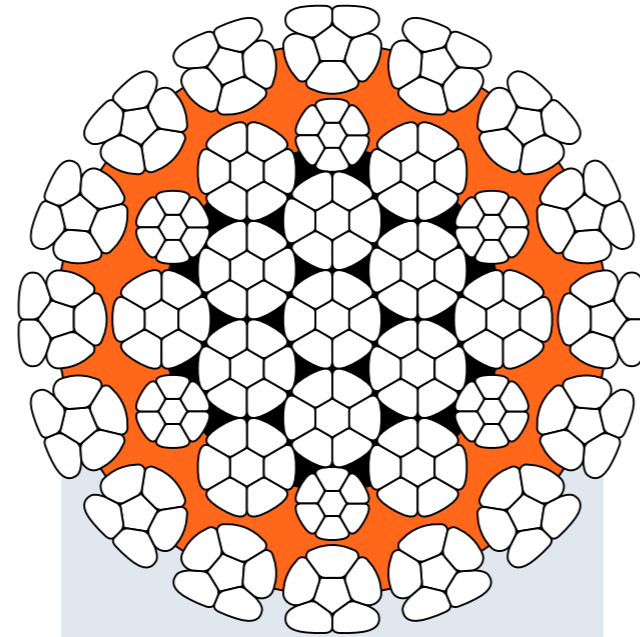
1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

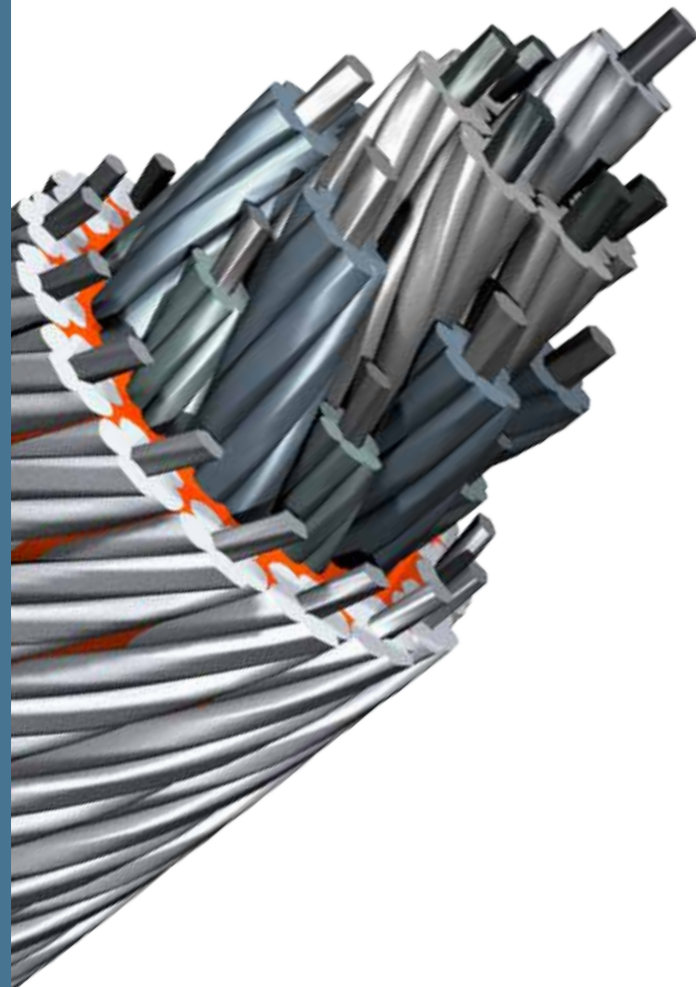
Offers superior crushing resistance and best resistance to abrasion.

# verotop XP

is a rotary swaged rotation-resistant rope with compacted strands and a rope core covered with a plastic layer.



- verotop XP is the strongest of all rotation-resistant ropes.
- verotop XP has a very stable rope structure and achieves good bending fatigue results.
- verotop XP offers superior crushing resistance and best resistance to abrasion.
- verotop XP possesses perfect spooling behavior on multilayer drum.
- verotop XP can be used either with or without swivel.
- verotop XP is a category 1 rotation-resistant rope in accordance with ASTM A1023.



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verotop XP

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
12		0.720	140.4	14.3	152.9	15.6
12.7	1/2	0.807	157.2	16.0	171.2	17.5
13		0.845	164.7	16.8	179.4	18.3
14		0.981	191.1	19.5	208.1	21.2
15		1.126	219.3	22.4	238.9	24.4
16	5/8	1.281	249.6	25.4	271.8	27.7
17		1.446	281.7	28.7	306.8	31.3
18		1.621	315.8	32.2	344.0	35.1
19	3/4	1.806	351.9	35.9	383.3	39.1
20		2.001	389.9	39.8	424.7	43.3
21		2.206	429.9	43.8	468.2	47.7
22		2.421	471.8	48.1	513.8	52.4
22.2	7/8	2.466	480.4	49.0	523.2	53.4
23		2.646	515.7	52.6	561.6	57.3
24		2.882	561.5	57.3	611.5	62.4
25		3.127	609.3	62.1	663.5	67.7
25.4	1	3.228	628.9	64.1	684.9	69.8
26		3.382	659.0	67.2	717.7	73.2
27		3.647	710.6	72.5	773.9	78.9
28		3.922	764.3	77.9	832.3	84.9
28.6	1-1/8	4.092	797.4	81.3	868.4	88.6
29		4.207	819.8	83.6	892.8	91.0
30		4.503	877.3	89.5	955.5	97.4
31		4.808	936.8	95.5	1020	104.0
32	1-1/4	5.123	998.2	101.8	1087	110.9
33		5.448	1062	108.3	1156	117.9
34		5.783	1127	114.9	1227	125.1
35	1-3/8	6.128	1194	121.8	1301	132.6
36		6.484	1263	128.8	1376	140.3
38	1-1/2	7.224	1408	143.5	1533	156.3
40		8.004	1560	159.0	1699	173.2
41.3	1-5/8	8.533	1663	169.6	1811	184.7
42		8.825	1720	175.3	1873	191.0
44		9.685	1887	192.4	2055	209.6
45	1-3/4	10.13	1974	201.3	2150	219.2
46		10.59	2063	210.3	2246	229.1
47.5	1-7/8	11.29	2199	224.3	2395	244.3
48		11.53	2246	229.0	2446	249.4

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
12		0.48	0.22	15.8	17.2
12.7	1/2	0.54	0.25	17.7	19.2
13		0.57	0.26	18.5	20.2
14		0.66	0.30	21.5	23.4
15		0.76	0.34	24.7	26.8
16	5/8	0.86	0.39	28.1	30.5
17		0.97	0.44	31.7	34.5
18		1.09	0.49	35.5	38.7
19	3/4	1.21	0.55	39.6	43.1
20		1.34	0.61	43.8	47.7
21		1.48	0.67	48.3	52.6
22		1.63	0.74	53.0	57.8
22.2	7/8	1.66	0.75	54.0	58.8
23		1.78	0.81	58.0	63.1
24		1.94	0.88	63.1	68.7
25		2.10	0.95	68.5	74.6
25.4	1	2.17	0.98	70.7	77.0
26		2.27	1.03	74.1	80.7
27		2.45	1.11	79.9	87.0
28		2.64	1.20	85.9	93.6
28.6	1-1/8	2.75	1.25	89.6	97.6
29		2.83	1.28	92.2	100.4
30		3.03	1.37	98.6	107.4
31		3.23	1.47	105.3	114.7
32	1-1/4	3.44	1.56	112.2	122.2
33		3.66	1.66	119.3	130.0
34		3.89	1.76	126.7	137.9
35	1-3/8	4.12	1.87	134.2	146.2
36		4.36	1.98	142.0	154.7
38	1-1/2	4.85	2.20	158.2	172.3
40		5.38	2.44	175.3	190.9
41.3	1-5/8	5.73	2.60	186.9	203.5
42		5.93	2.69	193.3	210.5
44		6.51	2.95	212.1	231.0
45	1-3/4	6.81	3.09	221.9	241.6
46		7.11	3.23	231.9	252.5
47.5	1-7/8	7.58	3.44	247.2	269.2
48		7.75	3.51	252.5	274.9

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

1) The values are indicative only. Authoritative figures remain the metric ones!

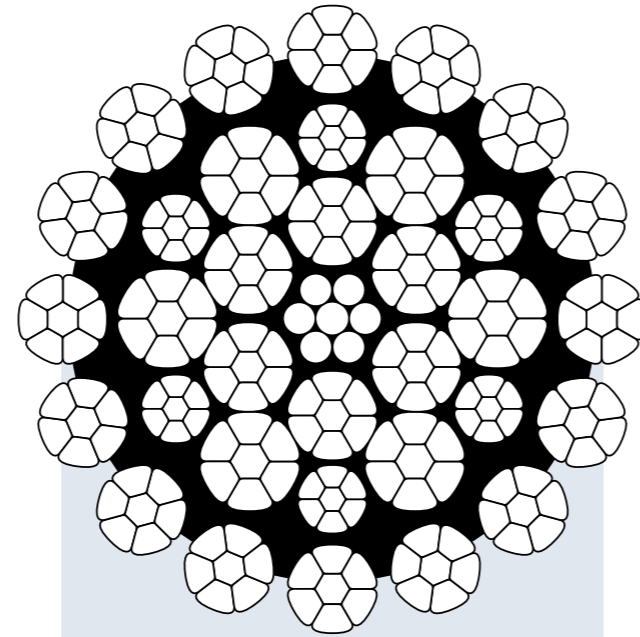
The rope is fully lubricated. The finish available as standard is galvanized, bright finish on request. • Average fill factor 0.745 • Ordinary or Lang Lay available • Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309: RCN = 23-1 Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

A superior balanced rope when resistance to rotation becomes most critical.

# verotop

is a very flexible rotation-resistant rope with compacted strands.



- verotop has a very high breaking strength.
- verotop achieves very good bending fatigue results.
- verotop offers excellent resistance to crushing and abrasion.
- verotop possesses perfect spooling behavior on multilayer drum.
- verotop can be used either with or without swivel.
- verotop is a category 1 rotation-resistant rope in accordance with ASTM A1023.



The rope is fully lubricated. The finish available is either bright or galvanized. • Average fill factor 0.738 • Lay type: Lang Lay Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309: RCN = 23-2 Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

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Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
8	5/16	0.313	61.1	6.2	65.7	6.7
9		0.397	77.3	7.9	83.2	8.5
10		0.490	95.4	9.7	102.7	10.5
11	7/16	0.593	115.5	11.8	124.2	12.7
12		0.705	137.4	14.0	147.8	15.1
12.7	1/2	0.790	153.9	15.7	165.6	16.9
13		0.828	161.3	16.4	173.5	17.7
14		0.960	187.0	19.1	201.2	20.5
15		1.102	214.7	21.9	231.0	23.6
16	5/8	1.254	244.3	24.9	262.8	26.8
17		1.415	275.8	28.1	296.7	30.3
18		1.587	309.2	31.5	332.6	33.9
19	3/4	1.768	344.5	35.1	370.6	37.8
20		1.959	381.7	38.9	410.7	41.9
21		2.160	420.8	42.9	452.7	46.2
22		2.371	461.9	47.1	496.9	50.7
22.2	7/8	2.414	470.3	48.0	506.0	51.6
23		2.591	504.8	51.5	543.1	55.4
24		2.821	549.7	56.1	591.3	60.3
25		3.061	596.4	60.8	641.6	65.4
25.4	1	3.160	615.7	62.8	662.3	67.5
26		3.311	645.1	65.8	694.0	70.8
27		3.571	695.7	70.9	748.4	76.3
28		3.840	748.2	76.3	804.9	82.1
28.6	1-1/8	4.006	780.6	79.6	839.7	85.6
29		4.119	802.6	81.8	863.4	88.0
30		4.408	858.9	87.6	924.0	94.2
31		4.707	917.1	93.5	986.6	100.6
32	1-1/4	5.015	977.2	99.6	1051	107.2
33		5.334	1039	106.0	1118	114.0
34		5.662	1103	112.5	1187	121.0
35	1-3/8	6.000	1169	119.2	1258	128.2
36		6.348	1237	126.1	1331	135.7
38	1-1/2	7.072	1378	140.5	1482	151.2
40		7.837	1527	155.7	1643	167.5
41		8.233	1604	163.6	1726	176.0
42		8.640	1683	171.7	1811	184.7
43		9.056	1764	179.9	1898	193.6
44		9.482	1848	188.4	1988	202.7
45	1-3/4	9.918	1932	197.1	2079	212.0
46		10.36	2019	205.9	2172	221.5
48		11.29	2199	224.2	2365	241.2
50	2	12.25	2386	243.3	2567	261.7
52		13.24	2580	263.1	2776	283.1

verotop

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
8	5/16	0.21	0.10	6.9	7.4
9		0.27	0.12	8.7	9.3
10		0.33	0.15	10.7	11.5
11	7/16	0.40	0.18	13.0	14.0
12		0.47	0.21	15.4	16.6
12.7	1/2	0.53	0.24	17.3	18.6
13		0.56	0.25	18.1	19.5
14		0.65	0.29	21.0	22.6
15		0.74	0.34	24.1	26.0
16	5/8	0.84	0.38	27.5	29.5
17		0.95	0.43	31.0	33.3
18		1.07	0.48	34.8	37.4
19	3/4	1.19	0.54	38.7	41.7
20		1.32	0.60	42.9	46.2
21		1.45	0.66	47.3	50.9
22		1.59	0.72	51.9	55.9
22.2	7/8	1.62	0.74	52.9	56.9
23		1.74	0.79	56.7	61.0
24		1.90	0.86	61.8	66.5
25		2.06	0.93	67.0	72.1
25.4	1	2.12	0.96	69.2	74.4
26		2.22	1.01	72.5	78.0
27		2.40	1.09	78.2	84.1
28		2.58	1.17	84.1	90.5
28.6	1-1/8	2.69	1.22	87.7	94.4
29		2.77	1.26	90.2	97.0
30		2.96	1.34	96.5	103.9
31		3.16	1.43	103.1	110.9
32	1-1/4	3.37	1.53	109.8	118.2
33		3.58	1.63	116.8	125.7
34		3.80	1.73	124.0	133.4
35	1-3/8	4.03	1.83	131.4	141.4
36		4.27	1.93	139.0	149.6
38	1-1/2	4.75	2.16	154.9	166.6
40		5.27	2.39	171.6	184.6
41		5.53	2.51	180.3	194.0
42		5.81	2.63	189.2	203.6
43		6.09	2.76	198.3	213.4
44		6.37	2.89	207.7	223.4
45	1-3/4	6.66	3.02	217.2	233.7
46		6.96	3.16	227.0	244.2
48		7.58	3.44	247.1	265.9
50	2	8.23	3.73	268.2	288.5
52		8.90	4.04	290.0	312.0

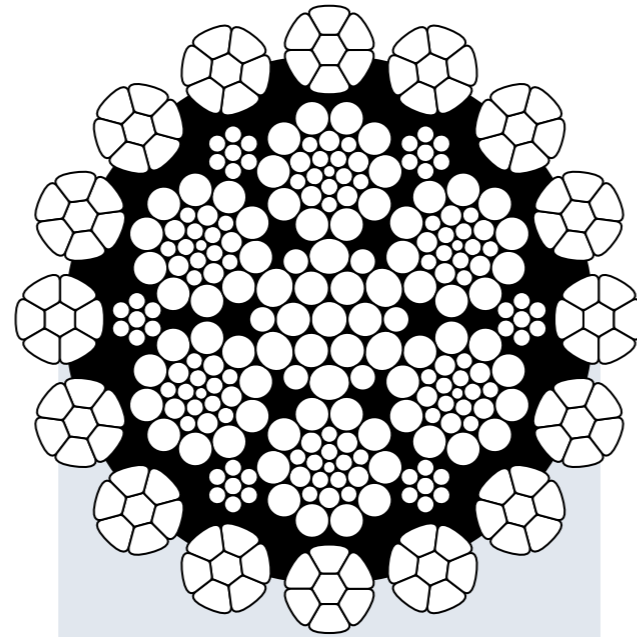
1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

Provides excellent breaking strength and very good resistance to rotation.

# verotop S

is a very flexible rotation-resistant rope with compacted outer strands and very high breaking strength.



- verotop S is the strongest of all compacted rotation-resistant ropes.
- verotop S achieves very good bending fatigue results.
- verotop S offers excellent resistance to crushing and abrasion.
- verotop S possesses perfect spooling behavior on multilayer drum.
- verotop S can be used either with or without swivel.
- verotop S is a category 1 rotation-resistant rope in accordance with ASTM A1023.



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verotop S

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
13		0.847	166.0	16.9	177.5	18.1
14		0.982	192.5	19.6	205.9	21.0
15		1.127	221.0	22.5	236.3	24.1
16	5/8	1.283	251.4	25.6	268.9	27.4
17		1.448	283.8	28.9	303.5	31.0
18		1.623	318.2	32.4	340.3	34.7
19	3/4	1.809	354.5	36.2	379.2	38.7
20		2.004	392.8	40.1	420.1	42.8
21		2.210	433.1	44.2	463.2	47.2
22		2.425	475.3	48.5	508.3	51.8
22.2	7/8	2.469	484.0	49.4	517.6	52.8
23		2.651	519.5	53.0	555.6	56.7
24		2.886	565.7	57.7	605.0	61.7
25		3.132	613.8	62.6	656.4	66.9
25.4	1	3.233	633.6	64.6	677.6	69.1
26		3.387	663.9	67.7	710.0	72.4
27		3.653	715.9	73.0	765.7	78.1
28		3.928	770.0	78.5	823.4	84.0
28.6	1-1/8	4.099	803.3	81.9	859.1	87.6
29		4.214	825.9	84.2	883.3	90.1
30		4.510	883.9	90.1	945.3	96.4
31		4.815	943.8	96.2	1009	102.9
32	1-1/4	5.131	1006	102.5	1075	109.7
33		5.457	1069	109.1	1144	116.6
34		5.792	1135	115.8	1214	123.8
35	1-3/8	6.138	1203	122.7	1287	131.2
36		6.494	1273	129.8	1361	138.8
38	1-1/2	7.235	1418	144.6	1517	154.7
40		8.017	1571	160.2	1680	171.4

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
13		0.57	0.26	18.7	20.0
14		0.66	0.30	21.6	23.1
15		0.76	0.34	24.8	26.6
16	5/8	0.86	0.39	28.3	30.2
17		0.97	0.44	31.9	34.1
18		1.09	0.49	35.8	38.2
19	3/4	1.22	0.55	39.9	42.6
20		1.35	0.61	44.2	47.2
21		1.48	0.67	48.7	52.1
22		1.63	0.74	53.4	57.1
22.2	7/8	1.66	0.75	54.4	58.2
23		1.78	0.81	58.4	62.5
24		1.94	0.88	63.6	68.0
25		2.10	0.95	69.0	73.8
25.4	1	2.17	0.99	71.2	76.2
26		2.28	1.03	74.6	79.8
27		2.45	1.11	80.5	86.1
28		2.64	1.20	86.5	92.6
28.6	1-1/8	2.75	1.25	90.3	96.6
29		2.83	1.28	92.8	99.3
30		3.03	1.37	99.4	106.2
31		3.24	1.47	106.1	113.5
32	1-1/4	3.45	1.56	113.0	120.9
33		3.67	1.66	120.2	128.6
34		3.89	1.77	127.6	136.5
35	1-3/8	4.12	1.87	135.2	144.6
36		4.36	1.98	143.1	153.0
38	1-1/2	4.86	2.21	159.4	170.5
40		5.39	2.44	176.6	188.9

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

1) The values are indicative only. Authoritative figures remain the metric ones!

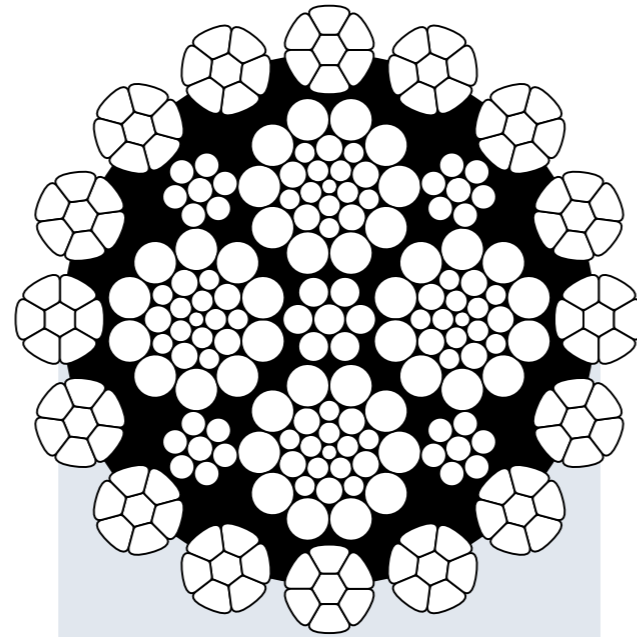
The rope is fully lubricated. The finish available is either bright or galvanized. • Average fill factor 0.755 • Lay type: Lang Lay Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309: RCN = 23-2 Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

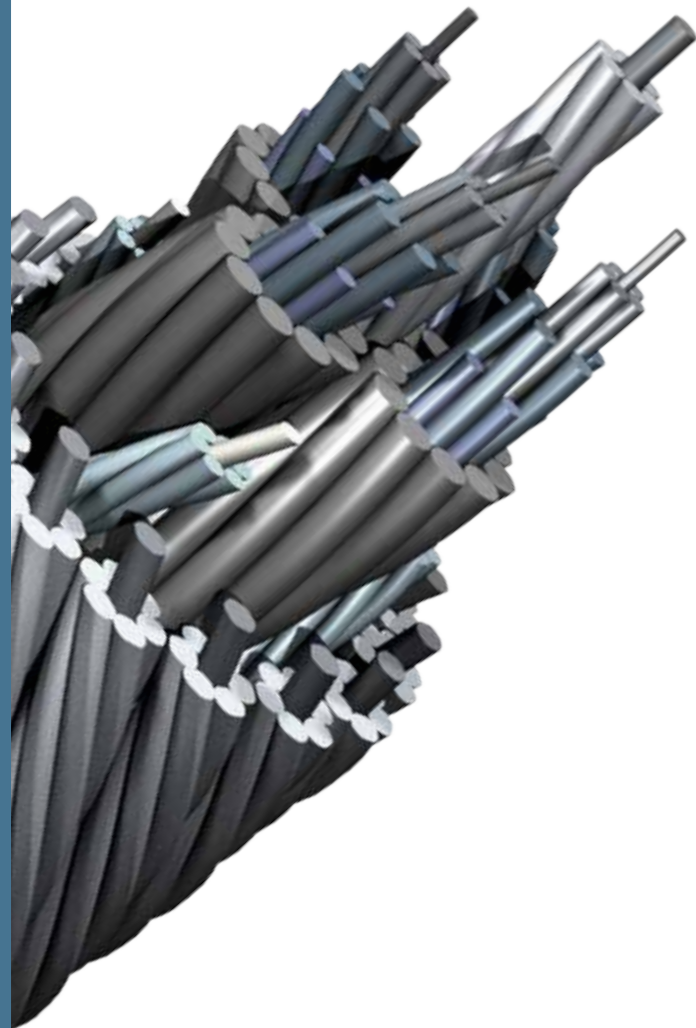
Combines high breaking strength and good rotation resistance with remarkable efficiency.

# verotop E

is a flexible rotation-resistant rope with compacted outer strands.



- verotop E has a high breaking strength.
- verotop E achieves very good bending fatigue results.
- verotop E offers great resistance to crushing and abrasion.
- verotop E possesses perfect spooling behavior on multilayer drum.
- verotop E can be used either with or without swivel.
- verotop E is a category 1 rotation-resistant rope in accordance with ASTM A1023.



The rope is fully lubricated. The finish available is either bright or galvanized. • Average fill factor 0.700 • Lay type: Lang Lay Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309: RCN = 23-2 Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

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verotop E

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
8	5/16	0.305	55.2	5.6	60.3	6.1
9		0.387	69.8	7.1	76.3	7.8
10		0.477	86.2	8.8	94.2	9.6
11	7/16	0.577	104.3	10.6	113.9	11.6
12		0.687	124.1	12.7	135.6	13.8
13		0.806	145.7	14.9	159.1	16.2
14		0.935	169.0	17.2	184.6	18.8
15		1.074	194.0	19.8	211.9	21.6
16	5/8	1.222	220.7	22.5	241.1	24.6
18		1.546	279.3	28.5	305.1	31.1
19	3/4	1.723	311.2	31.7	340.0	34.7
20		1.909	344.8	35.2	376.7	38.4
22		2.310	417.2	42.5	455.8	46.5
23		2.524	456.0	46.5	498.2	50.8
24		2.749	496.5	50.6	542.4	55.3
25		2.983	538.8	54.9	588.6	60.0
26		3.226	582.7	59.4	636.6	64.9
27		3.479	628.4	64.1	686.5	70.0
28		3.741	675.8	68.9	738.3	75.3
29		4.013	725.0	73.9	792.0	80.8
30		4.295	775.8	79.1	847.5	86.4
32	1-1/4	4.887	882.7	90.0	964.3	98.3
34		5.517	996.5	101.6	1089	111.0
35	1-3/8	5.846	1056	107.7	1154	117.6
36		6.185	1117	113.9	1220	124.5
38	1-1/2	6.891	1245	126.9	1360	138.7
40		7.635	1379	140.6	1507	153.6

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
8	5/16	0.21	0.09	6.2	6.8
9		0.26	0.12	7.8	8.6
10		0.32	0.15	9.7	10.6
11	7/16	0.39	0.18	11.7	12.8
12		0.46	0.21	14.0	15.2
13		0.54	0.25	16.4	17.9
14		0.63	0.29	19.0	20.7
15		0.72	0.33	21.8	23.8
16	5/8	0.82	0.37	24.8	27.1
18		1.04	0.47	31.4	34.3
19	3/4	1.16	0.53	35.0	38.2
20		1.28	0.58	38.8	42.3
22		1.55	0.70	46.9	51.2
23		1.70	0.77	51.3	56.0
24		1.85	0.84	55.8	61.0
25		2.00	0.91	60.6	66.2
26		2.17	0.98	65.5	71.6
27		2.34	1.06	70.6	77.2
28		2.51	1.14	76.0	83.0
29		2.70	1.22	81.5	89.0
30		2.89	1.31	87.2	95.3
32	1-1/4	3.28	1.49	99.2	108.4
34		3.71	1.68	112.0	122.4
35	1-3/8	3.93	1.78	118.7	129.7
36		4.16	1.89	125.6	137.2
38	1-1/2	4.63	2.10	139.9	152.8
40		5.13	2.33	155.0	169.4

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

1) The values are indicative only. Authoritative figures remain the metric ones!

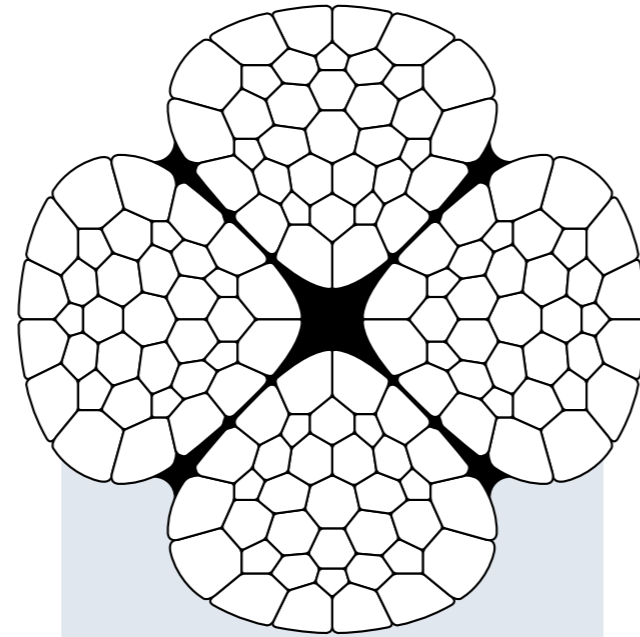
Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.



Suits best for harshest working conditions with dynamic impact loads.

# vero 4

is a 4-strand rotation-resistant rope with compacted strands.



- vero 4 has a high breaking strength.
- vero 4 is a very robust rope construction.
- vero 4 offers excellent resistance to crushing and abrasion.
- vero 4 may not be used with a swivel.



The rope is fully lubricated and available with galvanized finish. • Average fill factor 0.631 • Lay type: Ordinary Lay • Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309: RCN = 22  
Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

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vero 4

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
8	5/16	0.270	55.9	5.7	61.0	6.2
9		0.341	70.8	7.2	77.2	7.9
10		0.421	87.4	8.9	95.3	9.7
11	7/16	0.510	105.8	10.8	115.3	11.8
12		0.607	125.9	12.8	137.2	14.0
13		0.712	147.7	15.1	161.0	16.4
14		0.826	171.3	17.5	186.7	19.0
15		0.948	196.7	20.1	214.4	21.9
16	5/8	1.078	223.8	22.8	243.9	24.9
18		1.365	283.2	28.9	308.7	31.5
19	3/4	1.521	315.6	32.2	343.9	35.1
20		1.685	349.7	35.7	381.1	38.9
22		2.039	423.1	43.1	461.1	47.0
24		2.426	503.5	51.3	548.8	56.0
25		2.633	546.4	55.7	595.4	60.7
26		2.848	591.0	60.3	644.0	65.7
27		3.071	637.3	65.0	694.5	70.8
28		3.303	685.4	69.9	746.9	76.2
29		3.543	735.2	75.0	801.2	81.7
30		3.791	786.8	80.2	857.4	87.4
31		4.048	840.1	85.7	915.6	93.4
32	1-1/4	4.314	895.2	91.3	975.6	99.5
33		4.587	952.0	97.1	1038	105.8
34		4.870	1011	103.1	1101	112.3
35	1-3/8	5.160	1071	109.2	1167	119.0
36		5.459	1133	115.5	1235	125.9

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>		
8	5/16	0.18	0.08	6.3	6.9
9		0.23	0.10	8.0	8.7
10		0.28	0.13	9.8	10.7
11	7/16	0.34	0.16	11.9	13.0
12		0.41	0.18	14.2	15.4
13		0.48	0.22	16.6	18.1
14		0.55	0.25	19.3	21.0
15		0.64	0.29	22.1	24.1
16	5/8	0.72	0.33	25.2	27.4
18		0.92	0.42	31.8	34.7
19	3/4	1.02	0.46	35.5	38.7
20		1.13	0.51	39.3	42.8
22		1.37	0.62	47.6	51.8
24		1.63	0.74	56.6	61.7
25		1.77	0.80	61.4	66.9
26		1.91	0.87	66.4	72.4
27		2.06	0.94	71.6	78.1
28		2.22	1.01	77.0	84.0
29		2.38	1.08	82.6	90.1
30		2.55	1.16	88.4	96.4
31		2.72	1.23	94.4	102.9
32	1-1/4	2.90	1.31	100.6	109.7
33		3.08	1.40	107.0	116.6
34		3.27	1.48	113.6	123.8
35	1-3/8	3.47	1.57	120.4	131.2
36		3.67	1.66	127.4	138.8

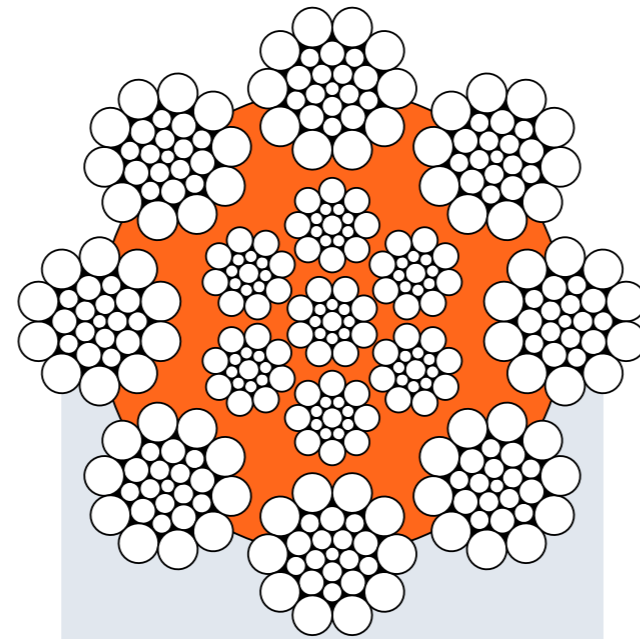
1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

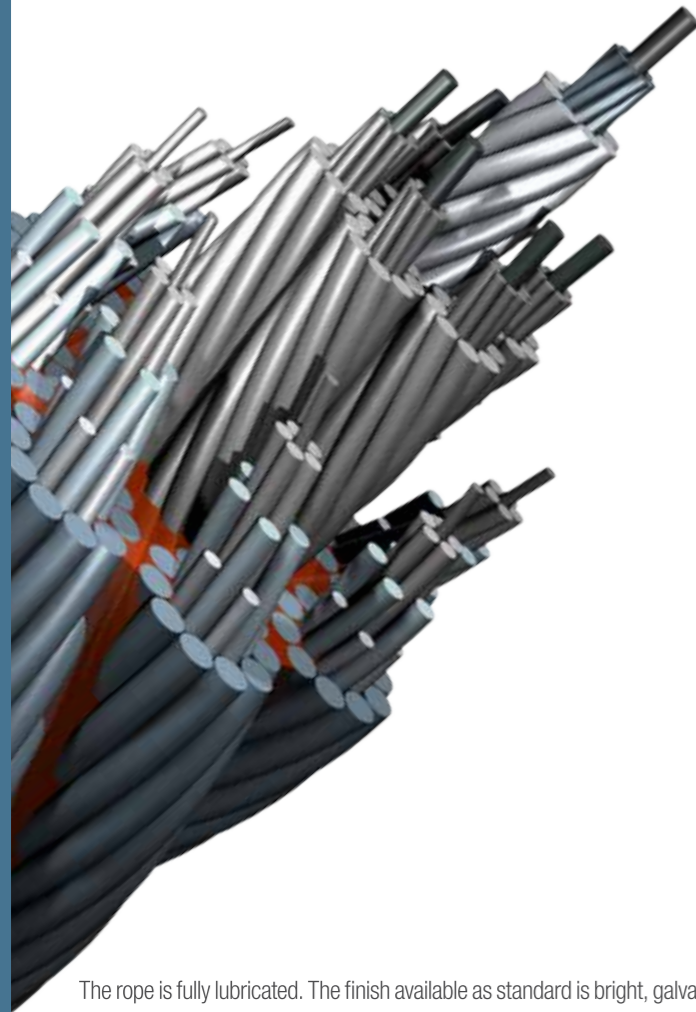
Achieves best service life in reeving systems with single layer drums.

# verostar 8

is an 8-strand, non-rotation resistant rope with conventional strands and a rope core covered with a plastic layer.



- verostar 8 has a high breaking strength.
- verostar 8 has a very stable rope structure and achieves good bending fatigue results.
- verostar 8 achieves best service life in reeving systems with single layer drums.
- verostar 8 may not be used with a swivel.



The rope is fully lubricated. The finish available as standard is bright, galvanized finish on request. • Average fill factor 0.610 • Ordinary or Lang Lay available  
 Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309 • Nominal rope diameter till 42 mm RCN = 09 • Nominal rope diameter 43 mm to 48 mm RCN = 11 • Nominal rope diameter above 48 mm RCN = 13  
 Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

verostar 8

2013 / 02

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1770		1960	
mm*	inch	kg/m	kN	t	kN	t
8	5/16	0.276	47.9	4.9	53.0	5.4
9		0.349	60.6	6.2	67.1	6.8
10		0.431	74.8	7.6	82.8	8.4
11	7/16	0.522	90.5	9.2	100.2	10.2
12		0.621	107.7	11.0	119.3	12.2
12.7	1/2	0.695	120.6	12.3	133.6	13.6
13		0.729	126.4	12.9	140.0	14.3
14		0.845	146.6	14.9	162.3	16.6
15		0.970	168.3	17.2	186.3	19.0
16	5/8	1.104	191.5	19.5	212.0	21.6
17		1.246	216.2	22.0	239.4	24.4
18		1.397	242.3	24.7	268.3	27.4
19	3/4	1.557	270.0	27.5	299.0	30.5
20		1.725	299.2	30.5	331.3	33.8
21		1.902	329.8	33.6	365.2	37.2
22		2.087	362.0	36.9	400.9	40.9
22.2	7/8	2.125	368.6	37.6	408.2	41.6
23		2.281	395.7	40.3	438.1	44.7
24		2.484	430.8	43.9	477.1	48.6
25		2.695	467.5	47.7	517.6	52.8
25.4	1	2.782	482.5	49.2	534.3	54.5
26		2.915	505.6	51.6	559.9	57.1
27		3.143	545.2	55.6	603.8	61.6
28		3.380	586.4	59.8	649.3	66.2
28.6	1-1/8	3.527	611.8	62.4	677.4	69.1
29		3.626	629.0	64.1	696.5	71.0
30		3.881	673.1	68.6	745.4	76.0
31		4.144	718.8	73.3	795.9	81.2
32	1-1/4	4.415	765.9	78.1	848.1	86.5
33		4.696	814.5	83.1	901.9	92.0
34		4.984	864.6	88.2	957.4	97.6
35	1-3/8	5.282	916.2	93.4	1015	103.5
36		5.588	969.3	98.8	1073	109.5
38	1-1/2	6.226	1080	110.1	1196	122.0
40		6.899	1197	122.0	1325	135.1
41.3	1-5/8	7.355	1276	130.1	1413	144.1
42		7.606	1319	134.5	1461	149.0
44		8.348	1448	147.7	1603	163.5
45	1-3/4	8.731	1515	154.4	1677	171.0
46		9.124	1583	161.4	1753	178.7
47.5	1-7/8	9.729	1688	172.1	1869	190.6
48		9.934	1723	175.7	1908	194.6
50	2	10.78	1870	190.7	2071	211.1
52		11.66	2022	206.2	2239	228.4
54	2-1/8	12.57	2181	222.4	2415	246.3
56		13.52	2346	239.2	2597	264.9
58		14.51	2516	256.6	2786	284.1
60	2-3/8	15.52	2693	274.6	2982	304.0

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1770	1960
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1770	1960
8	5/16	0.19	0.08	5.4	6.0
9		0.23	0.11	6.8	7.5
10		0.29	0.13	8.4	9.3
11	7/16	0.35	0.16	10.2	11.3
12		0.42	0.19	12.1	13.4
12.7	1/2	0.47	0.21	13.6	15.0
13		0.49	0.22	14.2	15.7
14		0.57	0.26	16.5	18.2
15		0.65	0.30	18.9	20.9
16	5/8	0.74	0.34	21.5	23.8
17		0.84	0.38	24.3	26.9
18		0.94	0.43	27.2	30.2
19	3/4	1.05	0.47	30.3	33.6
20		1.16	0.53	33.6	37.2
21		1.28	0.58	37.1	41.1
22		1.40	0.64	40.7	45.1
22.2	7/8	1.43	0.65	41.4	45.9
23		1.53	0.70	44.5	49.2
24		1.67	0.76	48.4	53.6
25		1.81	0.82	52.5	58.2
25.4	1	1.87	0.85	54.2	60.1
26		1.96	0.89	56.8	62.9
27		2.11	0.96	61.3	67.9
28		2.27	1.03	65.9	73.0
28.6	1-1/8	2.37	1.08	68.8	76.1
29		2.44	1.11	70.7	78.3
30		2.61	1.18	75.7	83.8
31		2.78	1.26	80.8	89.5
32	1-1/4	2.97	1.35	86.1	95.3
33		3.16	1.43	91.6	101.4
34		3.35	1.52	97.2	107.6
35	1-3/8	3.55	1.61	103.0	114.0
36		3.76	1.70	109.0	120.7
38	1-1/2	4.18	1.90	121.4	134.4
40		4.64	2.10	134.5	149.0
41.3	1-5/8	4.94	2.24	143.4	158.8
42		5.11	2.32	148.3	164.2
44		5.61	2.54	162.8	180.2
45	1-3/4	5.87	2.66	170.2	188.5
46		6.13	2.78	177.9	197.0
47.5	1-7/8	6.54	2.97	189.7	210.0
48		6.68	3.03	193.7	214.5
50	2	7.24	3.29	210.2	232.7
52		7.83	3.55	227.3	251.7
54	2-1/8	8.45	3.83	245.1	271.5
56		9.09	4.12	263.6	291.9
58		9.75	4.42	282.8	313.2
60	2-3/8	10.43	4.73	302.7	335.1

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

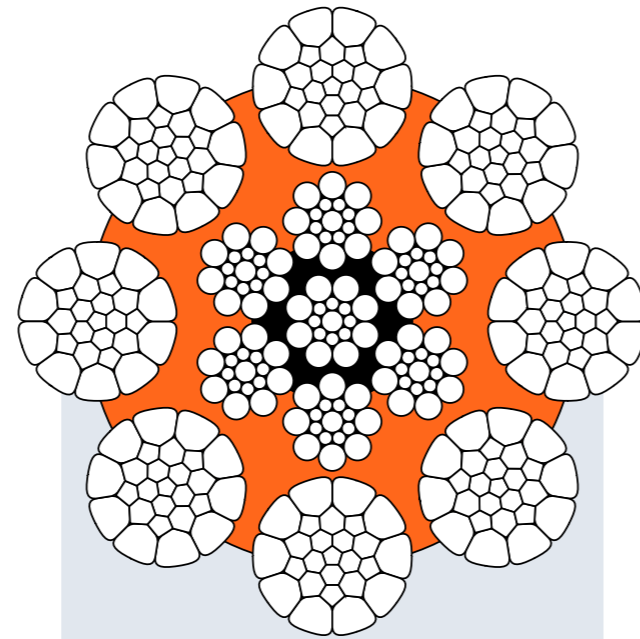
1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

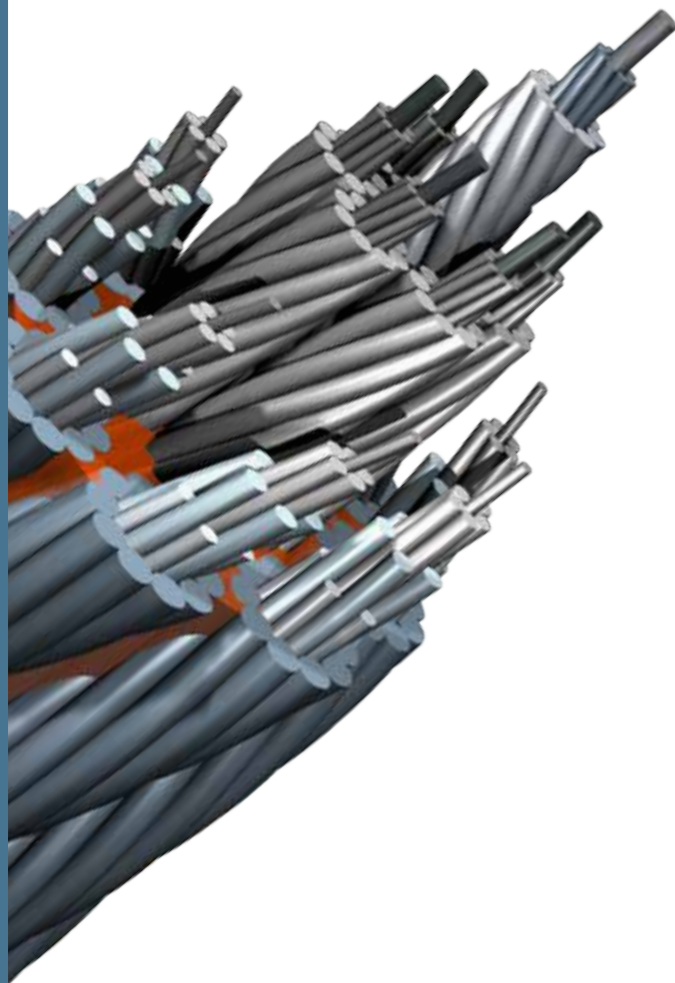
Rope with very high structural stability, achieves excellent bending fatigue results.

# veropro 8

is an 8-strand, non-rotation resistant rope with compacted outer strands and a rope core covered with a plastic layer.



- veropro 8 has a very high breaking strength.
- veropro 8 has a very stable rope structure and achieves excellent bending fatigue results.
- veropro 8 offers excellent resistance to crushing and abrasion.
- veropro 8 possesses perfect spooling behavior on multilayer drum.
- veropro 8 may not be used with a swivel.



The rope is fully lubricated. The finish available as standard is galvanized, bright finish on request. • Average fill factor 0.666 • Ordinary or Lang Lay available  
 Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309 • Nominal rope diameter till 42 mm RCN = 09 • Nominal rope diameter 43 mm to 48 mm RCN = 11 • Nominal rope diameter above 48 mm RCN = 13  
 Further details: [www.veropro.com/en/RCN](http://www.veropro.com/en/RCN)

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veropro 8

Nominal rope diameter		Approx mass	Minimum breaking force					
			Rope grade					
			1770		1960		2160	
mm*	inch	kg/m	kN	t	kN	t	kN	t
8	5/16	0.288	52.7	5.4	58.1	5.9	62.2	6.3
9		0.364	66.7	6.8	73.5	7.5	78.7	8.0
10		0.450	82.4	8.4	90.7	9.3	97.2	9.9
11	7/16	0.544	99.7	10.2	109.8	11.2	117.6	12.0
12		0.648	118.7	12.1	130.7	13.3	139.9	14.3
12.7	1/2	0.726	132.9	13.6	146.3	14.9	156.7	16.0
13		0.760	139.3	14.2	153.3	15.6	164.2	16.7
14		0.882	161.5	16.5	177.8	18.1	190.4	19.4
15		1.012	185.4	18.9	204.1	20.8	218.6	22.3
16	5/8	1.152	210.9	21.5	232.3	23.7	248.7	25.4
17		1.300	238.1	24.3	262.2	26.7	280.8	28.6
18		1.457	267.0	27.2	294.0	30.0	314.8	32.1
19	3/4	1.624	297.5	30.3	327.5	33.4	350.8	35.8
20		1.799	329.6	33.6	362.9	37.0	388.7	39.6
21		1.984	363.4	37.1	400.1	40.8	428.5	43.7
22		2.177	398.8	40.7	439.1	44.8	470.3	48.0
22.2	7/8	2.217	406.1	41.4	447.2	45.6	478.9	48.8
23		2.380	435.9	44.4	480.0	48.9	514.0	52.4
24		2.591	474.6	48.4	522.6	53.3	559.7	57.1
25		2.812	515.0	52.5	567.1	57.8	607.3	61.9
25.4	1	2.902	531.6	54.2	585.4	59.7	626.9	63.9
26		3.041	557.0	56.8	613.4	62.5	656.8	67.0
27		3.279	600.7	61.3	661.4	67.4	708.3	72.2
28		3.527	646.0	65.9	711.3	72.5	761.8	77.7
28.6	1-1/8	3.680	674.0	68.7	742.2	75.7	794.8	81.0
29		3.783	693.0	70.7	763.1	77.8	817.2	83.3
30		4.049	741.6	75.6	816.6	83.3	874.5	89.2
31		4.323	791.9	80.7	871.9	88.9	933.8	95.2
32	1-1/4	4.606	843.8	86.0	929.1	94.7	995.0	101.5
33		4.899	897.3	91.5	988.1	100.8	1058	107.9
34		5.200	952.5	97.1	1049	107.0	1123	114.5
35	1-3/8	5.511	1009	102.9	1111	113.3	1190	121.4
36		5.830	1068	108.9	1176	119.9	1259	128.4
38	1-1/2	6.496	1190	121.3	1310	133.6	1403	143.1
40		7.198	1318	134.4	1452	148.0	1555	158.5
41.3	1-5/8	7.673	1405	143.3	1548	157.8	1657	169.0
42		7.935	1454	148.2	1601	163.2	1714	174.8
44		8.709	1595	162.7	1757	179.1	1881	191.8
45	1-3/4	9.109	1669	170.2	1837	187.4	1968	200.6
46		9.519	1744	177.8	1920	195.8	2056	209.7
47.5	1-7/8	10.15	1859	189.6	2047	208.8	2192	223.6
48		10.36	1898	193.6	2090	213.2	2239	228.3
50	2	11.25	2060	210.1	2268	231.3	2429	247.7
52		12.16	2228	227.2	2453	250.2	2627	267.9
54	2-1/8	13.12	2403	245.0	2646	269.8	2833	288.9
56		14.11	2584	263.5	2845	290.1		
58		15.13	2772	282.7	3052	311.2		
60	2-3/8	16.19	2966	302.5	3266	333.1		

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs		
				Rope grade		
				1770	1960	2160
mm*	inch	lb/ft	kg/ft	1770	1960	2160
8	5/16	0.19	0.09	5.9	6.5	7.0
9		0.24	0.11	7.5	8.3	8.8
10		0.30	0.14	9.3	10.2	10.9
11	7/16	0.37	0.17	11.2	12.3	13.2
12		0.44	0.20	13.3	14.7	15.7
12.7	1/2	0.49	0.22	14.9	16.4	17.6
13		0.51	0.23	15.7	17.2	18.5
14		0.59	0.27	18.2	20.0	21.4
15		0.68	0.31	20.8	22.9	24.6
16	5/8	0.77	0.35	23.7	26.1	28.0
17		0.87	0.40	26.8	29.5	31.6
18		0.98	0.44	30.0	33.0	35.4
19	3/4	1.09	0.49	33.4	36.8	39.4
20		1.21	0.55	37.0	40.8	43.7
21		1.33	0.60	40.8	45.0	48.2
22		1.46	0.66	44.8	49.4	52.9
22.2	7/8	1.49	0.68	45.6	50.3	53.8
23		1.60	0.73	49.0	54.0	57.8
24		1.74	0.79	53.3	58.7	62.9
25		1.89	0.86	57.9	63.7	68.3
25.4	1	1.95	0.88	59.8	65.8	70.5
26		2.04	0.93	62.6	68.9	73.8
27		2.20	1.00	67.5	74.3	79.6
28		2.37	1.07	72.6	80.0	85.6
28.6	1-1/8	2.47	1.12	75.8	83.4	89.3
29		2.54	1.15	77.9	85.8	91.9
30		2.72	1.23	83.4	91.8	98.3
31		2.90	1.32	89.0	98.0	105.0
32	1-1/4	3.10	1.40	94.8	104.4	111.8
33		3.29	1.49	100.9	111.1	118.9
34		3.49	1.59	107.1	117.9	126.3
35	1-3/8	3.70	1.68	113.5	124.9	133.8
36		3.92	1.78	120.0	132.2	141.5
38	1-1/2	4.36	1.98	133.7	147.3	157.7
40		4.84	2.19	148.2	163.2	174.8
41.3	1-5/8	5.16	2.34	158.0	174.0	186.3
42		5.33	2.42	163.4	179.9	192.7
44		5.85	2.65	179.3	197.4	211.4
45	1-3/4	6.12	2.78	187.6	206.5	221.2
46		6.40	2.90	196.0	215.8	231.1
47.5	1-7/8	6.82	3.09	209.0	230.1	246.4
48		6.96	3.16	213.4	235.0	251.6
50	2	7.56	3.43	231.6	255.0	273.0
52		8.17	3.71	250.4	275.8	295.3
54	2-1/8	8.81	4.00	270.1	297.4	318.5
56		9.48	4.30	290.5	319.8	
58		10.17	4.61	311.6	343.1	
60	2-3/8	10.88	4.94	333.4	367.2	

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

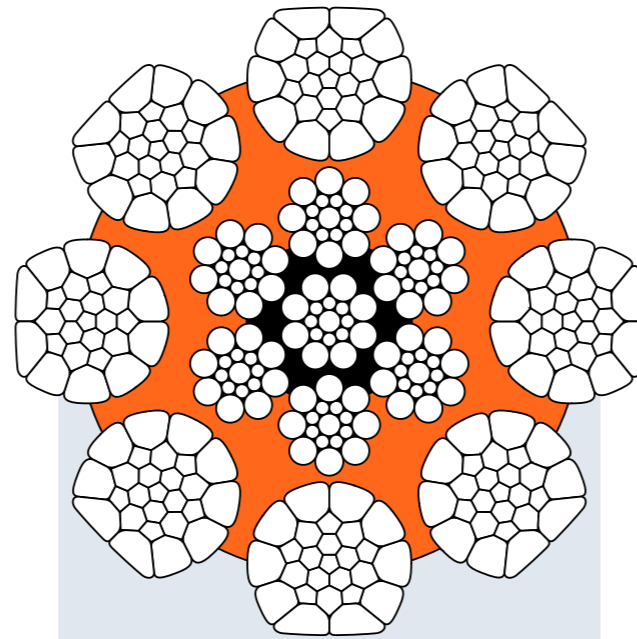
1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

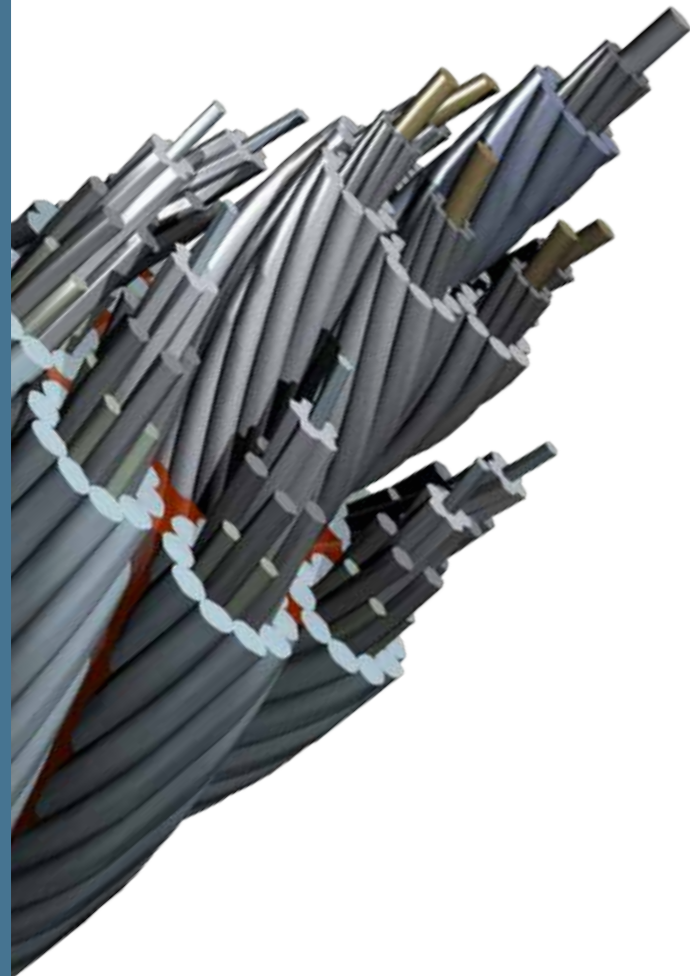
Provides excellent resistance to abrasion and has a very high breaking strength.

# veropro 8 RS

is a rotary swaged 8-strand, non-rotation resistant rope with compacted outer strands and a rope core covered with a plastic layer.



- veropro 8 RS has a very high breaking strength.
- veropro 8 RS has a very stable rope structure and achieves excellent bending fatigue results.
- veropro 8 RS offers superior crushing resistance and best resistance to abrasion.
- veropro 8 RS possesses excellent spooling behavior on multilayer drum.
- veropro 8 RS may not be used with a swivel.



The rope is fully lubricated. The finish available as standard is galvanized, bright finish on request. • Average fill factor 0.685 • Ordinary or Lang Lay available  
 Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309 • Nominal rope diameter till 42 mm RCN = 09 • Nominal rope diameter 43 mm to 48 mm RCN = 11 • Nominal rope diameter above 48 mm RCN = 13  
 Further details: [www.veropro.com/en/RCN](http://www.veropro.com/en/RCN)

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veropro 8 RS

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
12		0.666	134.4	13.7	144.7	14.8
12.7	1/2	0.746	150.5	15.3	162.1	16.5
13		0.782	157.7	16.1	169.9	17.3
14		0.907	182.9	18.7	197.0	20.1
15		1.041	210.0	21.4	226.2	23.1
16	5/8	1.184	238.9	24.4	257.3	26.2
17		1.337	269.7	27.5	290.5	29.6
18		1.499	302.4	30.8	325.7	33.2
19	3/4	1.670	336.9	34.4	362.9	37.0
20		1.851	373.3	38.1	402.1	41.0
21		2.040	411.5	42.0	443.3	45.2
22		2.239	451.7	46.1	486.5	49.6
22.2	7/8	2.280	459.9	46.9	495.4	50.5
23		2.448	493.7	50.3	531.7	54.2
24		2.665	537.5	54.8	579.0	59.0
25		2.892	583.3	59.5	628.2	64.1
25.4	1	2.985	602.1	61.4	648.5	66.1
26		3.128	630.9	64.3	679.5	69.3
27		3.373	680.3	69.4	732.8	74.7
28		3.627	731.6	74.6	788.1	80.4
28.6	1-1/8	3.785	763.3	77.8	822.2	83.8
29		3.891	784.8	80.0	845.4	86.2
30		4.164	839.9	85.6	904.7	92.3
31		4.446	896.8	91.5	966.0	98.5
32	1-1/4	4.738	955.6	97.4	1029	105.0
33		5.039	1016	103.6	1095	111.6
34		5.349	1079	110.0	1162	118.5
35	1-3/8	5.668	1143	116.6	1231	125.6
36		5.996	1209	123.3	1303	132.8
38	1-1/2	6.681	1348	137.4	1452	148.0
40		7.403	1493	152.3	1608	164.0
41.3	1-5/8	7.892	1592	162.3	1715	174.8
42		8.162	1646	167.9	1773	180.8
44		8.957	1807	184.2	1946	198.4
45	1-3/4	9.369	1890	192.7	2036	207.6
46		9.790	1975	201.4	2127	216.9
47.5	1-7/8	10.44	2106	214.7	2268	231.3
48		10.66	2150	219.3	2316	236.2

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
12		0.45	0.20	15.1	16.3
12.7	1/2	0.50	0.23	16.9	18.2
13		0.53	0.24	17.7	19.1
14		0.61	0.28	20.6	22.1
15		0.70	0.32	23.6	25.4
16	5/8	0.80	0.36	26.9	28.9
17		0.90	0.41	30.3	32.7
18		1.01	0.46	34.0	36.6
19	3/4	1.12	0.51	37.9	40.8
20		1.24	0.56	42.0	45.2
21		1.37	0.62	46.3	49.8
22		1.50	0.68	50.8	54.7
22.2	7/8	1.53	0.70	51.7	55.7
23		1.64	0.75	55.5	59.8
24		1.79	0.81	60.4	65.1
25		1.94	0.88	65.6	70.6
25.4	1	2.01	0.91	67.7	72.9
26		2.10	0.95	70.9	76.4
27		2.27	1.03	76.5	82.4
28		2.44	1.11	82.2	88.6
28.6	1-1/8	2.54	1.15	85.8	92.4
29		2.61	1.19	88.2	95.0
30		2.80	1.27	94.4	101.7
31		2.99	1.36	100.8	108.6
32	1-1/4	3.18	1.44	107.4	115.7
33		3.39	1.54	114.2	123.0
34		3.59	1.63	121.3	130.6
35	1-3/8	3.81	1.73	128.5	138.4
36		4.03	1.83	135.9	146.4
38	1-1/2	4.49	2.04	151.5	163.2
40		4.97	2.26	167.8	180.8
41.3	1-5/8	5.30	2.41	178.9	192.7
42		5.48	2.49	185.0	199.3
44		6.02	2.73	203.1	218.7
45	1-3/4	6.30	2.86	212.4	228.8
46		6.58	2.98	222.0	239.1
47.5	1-7/8	7.01	3.18	236.7	254.9
48		7.16	3.25	241.7	260.3

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

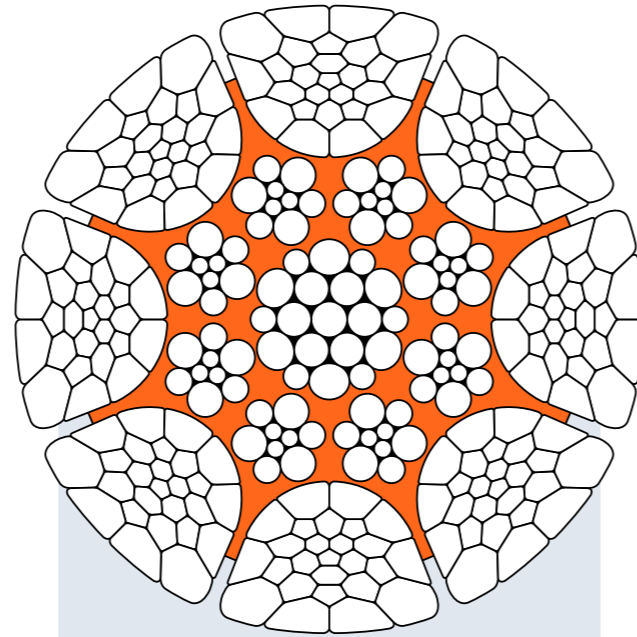
1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

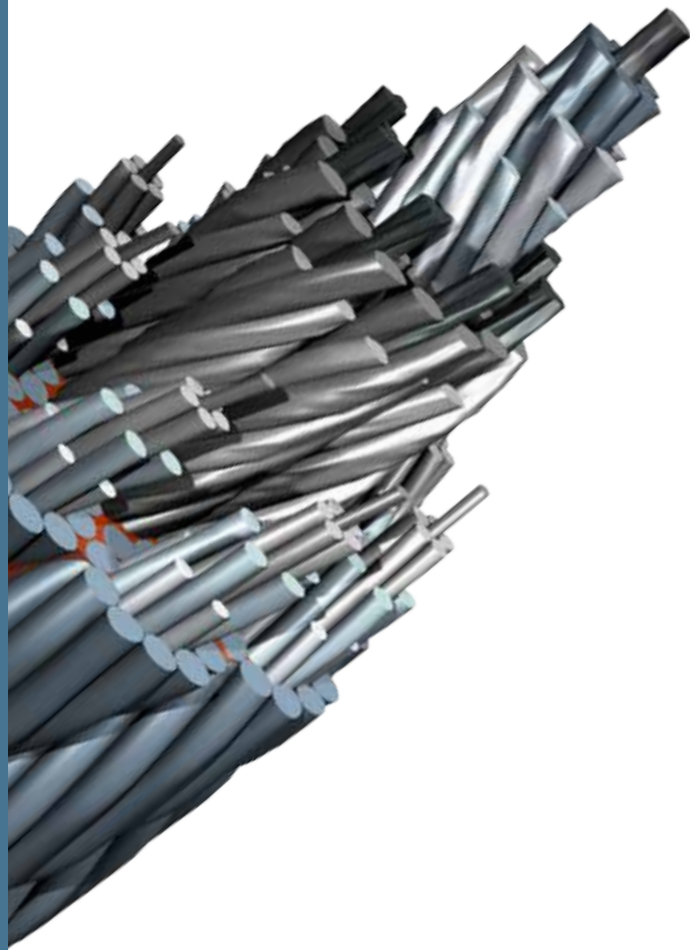
Provides the highest breaking strength of all non-rotation resistant ropes and offers superior resistance to drum crushing.

# veropower 8

is a rotary swaged 8-strand, non-rotation resistant rope in parallel lay construction with compacted outer strands and a rope core covered with a plastic layer.



- veropower 8 is the strongest of all non-rotation resistant ropes.
- veropower 8 has a very stable rope structure and achieves good bending fatigue results.
- veropower 8 offers superior crushing resistance and excellent resistance to abrasion.
- veropower 8 possesses perfect spooling behavior on multilayer drum.
- veropower 8 may not be used with a swivel.



The rope is fully lubricated. The finish available as standard is galvanized, bright finish on request. • Average fill factor 0.747 • Lay type: Ordinary Lay Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309 • Nominal rope diameter till 40 mm RCN = 09 • Nominal rope diameter 41 mm to 46 mm RCN = 11 • Nominal rope diameter above 46 mm RCN = 13 Further details: [www.veropower.com/en/RCN](http://www.veropower.com/en/RCN)

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veropower 8

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
12		0.717	147.4	15.0	159.7	16.3
12.7	1/2	0.803	165.1	16.8	178.8	18.2
13		0.842	173.0	17.6	187.4	19.1
14		0.976	200.6	20.5	217.3	22.2
15		1.121	230.3	23.5	249.5	25.4
16	5/8	1.275	262.0	26.7	283.9	28.9
17		1.440	295.8	30.2	320.5	32.7
18		1.614	331.6	33.8	359.3	36.6
19	3/4	1.798	369.5	37.7	400.3	40.8
20		1.992	409.4	41.7	443.5	45.2
21		2.197	451.3	46.0	489.0	49.9
22		2.411	495.3	50.5	536.7	54.7
22.2	7/8	2.455	504.4	51.4	546.5	55.7
23		2.635	541.4	55.2	586.6	59.8
24		2.869	589.5	60.1	638.7	65.1
25		3.113	639.6	65.2	693.0	70.7
25.4	1	3.214	660.3	67.3	715.4	72.9
26		3.367	691.8	70.5	749.6	76.4
27		3.631	746.1	76.1	808.4	82.4
28		3.905	802.4	81.8	869.3	88.6
28.6	1-1/8	4.074	837.1	85.4	907.0	92.5
29		4.189	860.7	87.8	932.5	95.1
30		4.483	921.1	93.9	998.0	101.8
31		4.787	983.5	100.3	1066	108.7
32	1-1/4	5.101	1048	106.9	1135	115.8
33		5.424	1115	113.6	1208	123.1
34		5.758	1183	120.6	1282	130.7
35	1-3/8	6.102	1254	127.8	1358	138.5
36		6.455	1326	135.3	1437	146.5
38	1-1/2	7.193	1478	150.7	1601	163.3
40		7.970	1637	167.0	1774	180.9
41.3	1-5/8	8.496	1746	178.0	1891	192.9
42		8.787	1805	184.1	1956	199.5
44		9.643	1981	202.0	2147	218.9
45	1-3/4	10.09	2072	211.3	2245	229.0
46		10.54	2166	220.8	2346	239.3
47.5	1-7/8	11.24	2309	235.5	2502	255.1
48		11.48	2358	240.4	2555	260.5

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
12		0.48	0.22	16.6	17.9
12.7	1/2	0.54	0.24	18.6	20.1
13		0.57	0.26	19.4	21.1
14		0.66	0.30	22.5	24.4
15		0.75	0.34	25.9	28.0
16	5/8	0.86	0.39	29.4	31.9
17		0.97	0.44	33.2	36.0
18		1.08	0.49	37.3	40.4
19	3/4	1.21	0.55	41.5	45.0
20		1.34	0.61	46.0	49.9
21		1.48	0.67	50.7	55.0
22		1.62	0.73	55.7	60.3
22.2	7/8	1.65	0.75	56.7	61.4
23		1.77	0.80	60.9	65.9
24		1.93	0.87	66.3	71.8
25		2.09	0.95	71.9	77.9
25.4	1	2.16	0.98	74.2	80.4
26		2.26	1.03	77.8	84.3
27		2.44	1.11	83.9	90.9
28		2.62	1.19	90.2	97.7
28.6	1-1/8	2.74	1.24	94.1	101.9
29		2.81	1.28	96.7	104.8
30		3.01	1.37	103.5	112.2
31		3.22	1.46	110.6	119.8
32	1-1/4	3.43	1.55	117.8	127.6
33		3.64	1.65	125.3	135.7
34		3.87	1.76	133.0	144.1
35	1-3/8	4.10	1.86	140.9	152.7
36		4.34	1.97	149.1	161.5
38	1-1/2	4.83	2.19	166.1	180.0
40		5.36	2.43	184.1	199.4
41.3	1-5/8	5.71	2.59	196.2	212.6
42		5.90	2.68	202.9	219.9
44		6.48	2.94	222.7	241.3
45	1-3/4	6.78	3.07	233.0	252.4
46		7.08	3.21	243.4	263.7
47.5	1-7/8	7.55	3.43	259.6	281.2
48		7.71	3.50	265.0	287.2

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

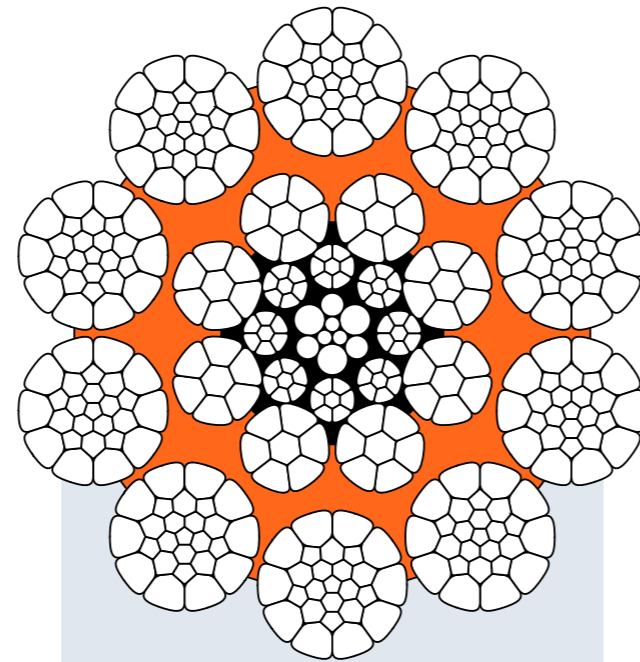
1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

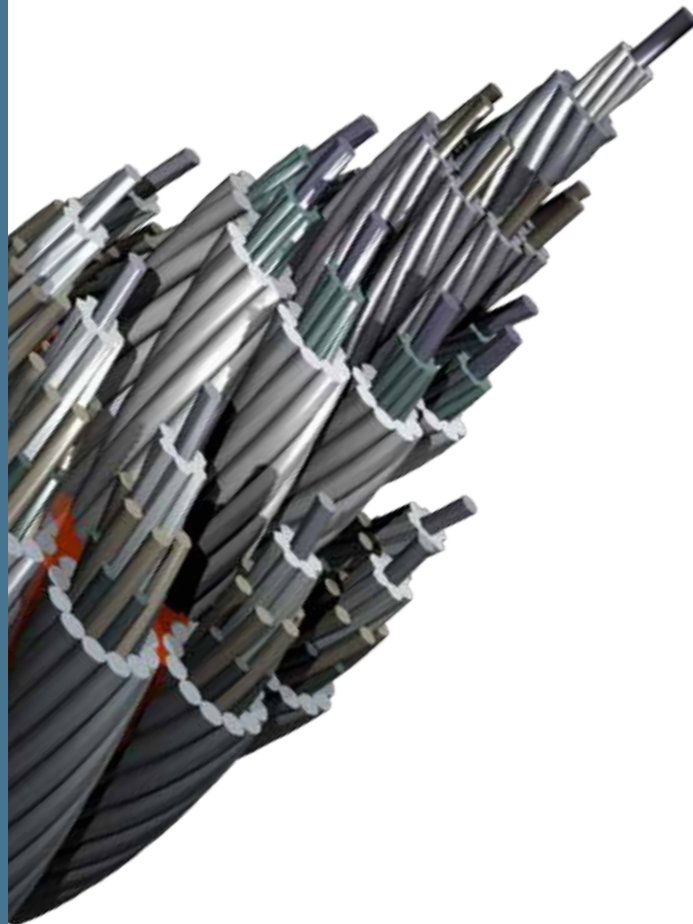
Extremely flexible rope with very high breaking strength, achieves excellent bending fatigue results.

# veropro 10

is a very flexible 10-strand, non-rotation resistant rope with compacted strands and a rope core covered with a plastic layer.



- veropro 10 has a very high breaking strength.
- veropro 10 has a very stable rope structure and achieves excellent bending fatigue results.
- veropro 10 offers excellent resistance to crushing and abrasion.
- veropro 10 possesses perfect spooling behavior on multilayer drum.
- veropro 10 may not be used with a swivel.



The rope is fully lubricated. The finish available as standard is galvanized, bright finish on request. • Average fill factor 0.683 • Ordinary or Lang Lay available • Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309: RCN = 11 Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

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veropro 10

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
30		4.152	828.0	84.4	891.6	90.9
32	1-1/4	4.724	942.1	96.1	1014	103.4
34		5.333	1063	108.4	1145	116.8
36		5.979	1192	121.6	1284	130.9
38	1-1/2	6.662	1328	135.5	1431	145.9
40		7.381	1472	150.1	1585	161.6
42		8.138	1623	165.5	1748	178.2
44		8.931	1781	181.6	1918	195.6
46		9.762	1947	198.5	2096	213.8
48		10.63	2120	216.1	2283	232.8
50	2	11.53	2300	234.5	2477	252.6
52		12.47	2488	253.7	2679	273.2
54	2-1/8	13.45	2683	273.6	2889	294.6
56		14.47	2885	294.2	3107	316.8
58		15.52	3095	315.6	3333	339.8
60	2-3/8	16.61	3312	337.7	3566	363.7
62		17.73	3536	360.6	3808	388.3
64	2-1/2	18.90	3768	384.3	4058	413.8
66	2-5/8	20.10	4007	408.6	4315	440.0
68		21.33	4254	433.8	4581	467.1
70	2-3/4	22.61	4508	459.7	4854	495.0

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
30		2.79	1.27	93.1	100.2
32	1-1/4	3.17	1.44	105.9	114.0
34		3.58	1.63	119.5	128.7
36		4.02	1.82	134.0	144.3
38	1-1/2	4.48	2.03	149.3	160.8
40		4.96	2.25	165.5	178.2
42		5.47	2.48	182.4	196.4
44		6.00	2.72	200.2	215.6
46		6.56	2.98	218.8	235.6
48		7.14	3.24	238.3	256.6
50	2	7.75	3.52	258.5	278.4
52		8.38	3.80	279.6	301.1
54	2-1/8	9.04	4.10	301.5	324.7
56		9.72	4.41	324.3	349.2
58		10.43	4.73	347.9	374.6
60	2-3/8	11.16	5.06	372.3	400.9
62		11.92	5.41	397.5	428.1
64	2-1/2	12.70	5.76	423.6	456.1
66	2-5/8	13.50	6.13	450.4	485.1
68		14.33	6.50	478.2	514.9
70	2-3/4	15.19	6.89	506.7	545.6

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

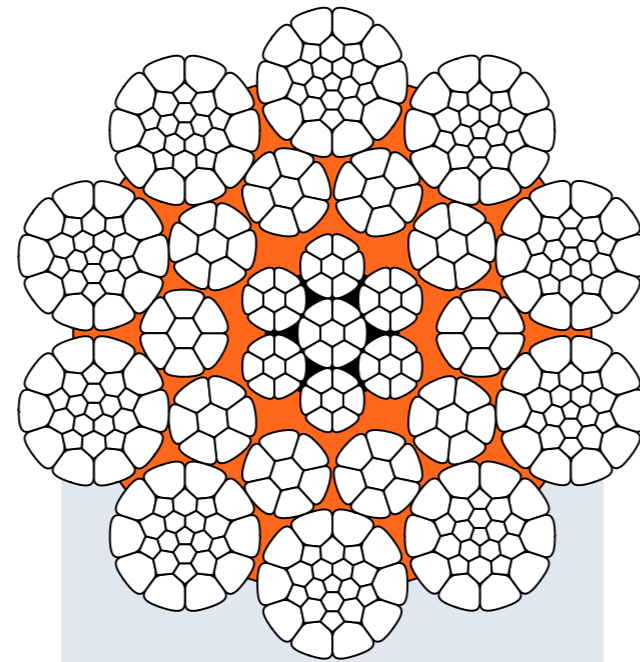
1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

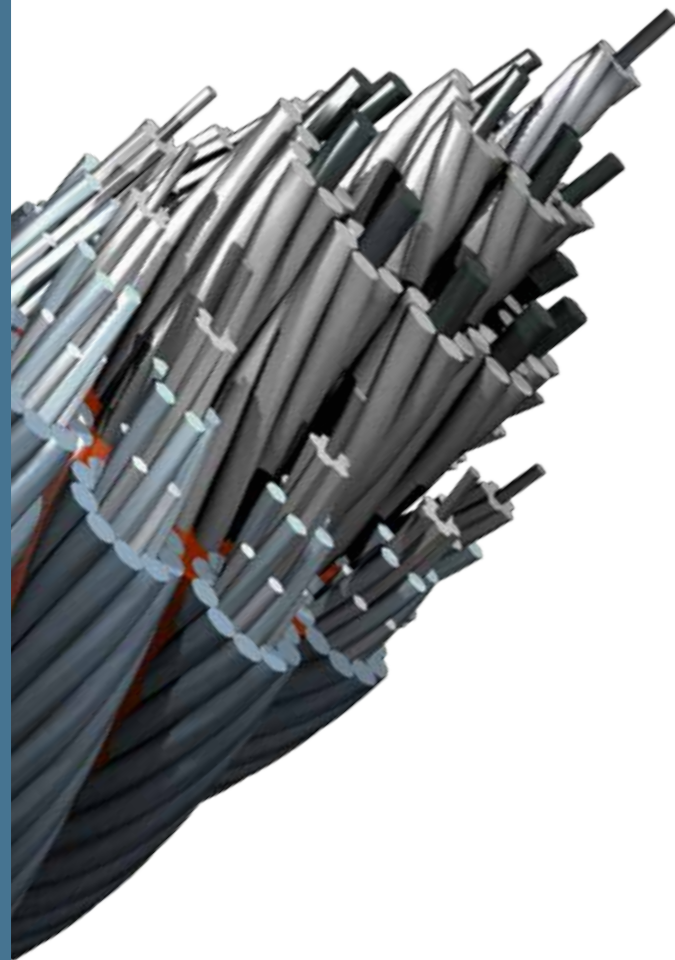
Combines unmatched bending fatigue resistance with excellent breaking strength.

# verotech 10

is a very flexible 10-strand, non-rotation resistant rope in parallel lay construction with compacted strands and a rope core covered with a plastic layer.



- verotech 10 provides excellent breaking strength.
- verotech 10 has a very stable rope structure and achieves unmatched bending fatigue resistance.
- verotech 10 offers excellent resistance to crushing and abrasion.
- verotech 10 possesses perfect spooling behavior on multilayer drum.
- verotech 10 may not be used with a swivel.



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Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
6		0.178	34.9	3.6	38.0	3.9
7		0.242	47.5	4.8	51.7	5.3
8	5/16	0.316	62.0	6.3	67.6	6.9
9		0.400	78.5	8.0	85.5	8.7
10		0.494	96.9	9.9	105.6	10.8
11	7/16	0.598	117.3	12.0	127.7	13.0
12		0.712	139.5	14.2	152.0	15.5
12.7	1/2	0.797	156.3	15.9	170.2	17.4
13		0.836	163.8	16.7	178.4	18.2
14		0.969	189.9	19.4	206.9	21.1
15		1.112	218.0	22.2	237.5	24.2
16	5/8	1.266	248.1	25.3	270.2	27.6
17		1.429	280.1	28.6	305.1	31.1
18		1.602	314.0	32.0	342.0	34.9
19	3/4	1.785	349.8	35.7	381.0	38.9
20		1.978	387.6	39.5	422.2	43.1
21		2.180	427.4	43.6	465.5	47.5
22		2.393	469.0	47.8	510.9	52.1
22.2	7/8	2.437	477.6	48.7	520.2	53.0
23		2.616	512.6	52.3	558.4	56.9
24		2.848	558.2	56.9	608.0	62.0
25		3.090	605.7	61.8	659.7	67.3
25.4	1	3.190	625.2	63.8	681.0	69.4
26		3.342	655.1	66.8	713.5	72.8
27		3.604	706.5	72.0	769.5	78.5
28		3.876	759.8	77.5	827.5	84.4
28.6	1-1/8	4.044	792.7	80.8	863.4	88.0
29		4.158	815.0	83.1	887.7	90.5
30		4.450	872.2	88.9	950.0	96.9
31		4.751	931.3	95.0	1014	103.4
32	1-1/4	5.063	992.3	101.2	1081	110.2
33		5.384	1055	107.6	1149	117.2
34		5.716	1120	114.2	1220	124.4

verotech 10

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
6		0.12	0.05	3.9	4.3
7		0.16	0.07	5.3	5.8
8	5/16	0.21	0.10	7.0	7.6
9		0.27	0.12	8.8	9.6
10		0.33	0.15	10.9	11.9
11	7/16	0.40	0.18	13.2	14.4
12		0.48	0.22	15.7	17.1
12.7	1/2	0.54	0.24	17.6	19.1
13		0.56	0.25	18.4	20.1
14		0.65	0.30	21.3	23.3
15		0.75	0.34	24.5	26.7
16	5/8	0.85	0.39	27.9	30.4
17		0.96	0.44	31.5	34.3
18		1.08	0.49	35.3	38.4
19	3/4	1.20	0.54	39.3	42.8
20		1.33	0.60	43.6	47.5
21		1.47	0.66	48.0	52.3
22		1.61	0.73	52.7	57.4
22.2	7/8	1.64	0.74	53.7	58.5
23		1.76	0.80	57.6	62.8
24		1.91	0.87	62.7	68.3
25		2.08	0.94	68.1	74.2
25.4	1	2.14	0.97	70.3	76.5
26		2.25	1.02	73.6	80.2
27		2.42	1.10	79.4	86.5
28		2.60	1.18	85.4	93.0
28.6	1-1/8	2.72	1.23	89.1	97.0
29		2.79	1.27	91.6	99.8
30		2.99	1.36	98.0	106.8
31		3.19	1.45	104.7	114.0
32	1-1/4	3.40	1.54	111.5	121.5
33		3.62	1.64	118.6	129.2
34		3.84	1.74	125.9	137.2

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

1) The values are indicative only. Authoritative figures remain the metric ones!

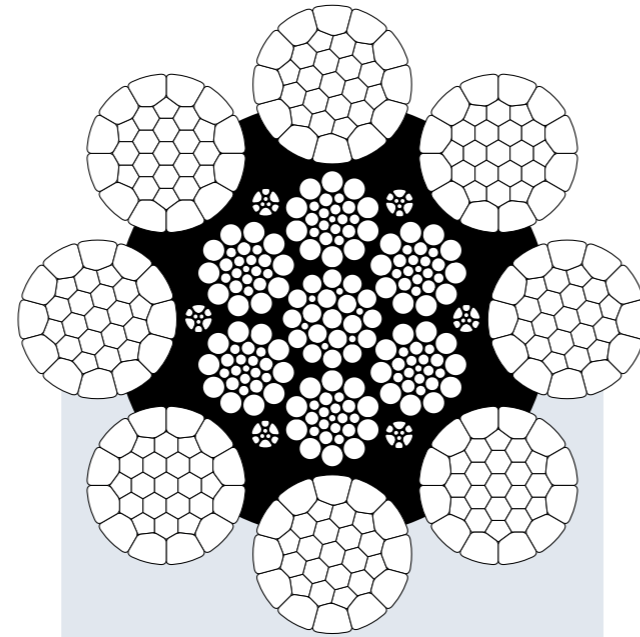
The rope is fully lubricated. The finish available as standard is galvanized, bright finish on request. • Average fill factor 0.732 • Lay type: Ordinary Lay Rope Category Number (RCN) to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309: RCN = 11 Further details: [www.verope.com/en/RCN](http://www.verope.com/en/RCN)

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.

Offers best general properties at high ambient temperatures.

# verosteel 8

is an 8-strand, non-rotation resistant rope with compacted outer strands.



- verosteel 8 has a high breaking strength.
- verosteel 8 has a stable rope structure and achieves good bending fatigue results.
- verosteel 8 offers excellent resistance to crushing and abrasion.
- verosteel 8 possesses perfect spooling behavior on multilayer drum.
- verosteel 8 may not be used with a swivel.



The rope is fully lubricated. The finish available as standard is galvanized, bright finish on request. • Average fill factor 0.702 • Ordinary or Lang Lay available  
 Rope Category Number to determine the number of visible broken outer wires, signaling discard of rope acc. ISO 4309 • Nominal rope diameter  
 till 42 mm RCN = 09 • Nominal rope diameter 43 mm to 48 mm RCN = 11 • Nominal rope diameter above 48 mm RCN = 13  
 Further details: [www.veropec.com/en/RCN](http://www.veropec.com/en/RCN)

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verosteel 8

Nominal rope diameter		Approx mass	Minimum breaking force			
			Rope grade			
			1960		2160	
mm*	inch	kg/m	kN	t	kN	t
16	5/8	1.164	235.1	24.0	256.1	26.1
17		1.315	265.5	27.1	289.1	29.5
18		1.474	297.6	30.3	324.1	33.1
19	3/4	1.642	331.6	33.8	361.1	36.8
20		1.819	367.4	37.5	400.1	40.8
21		2.006	405.1	41.3	441.2	45.0
22		2.202	444.6	45.3	484.2	49.4
23		2.406	485.9	49.5	529.2	54.0
24		2.620	529.1	54.0	576.2	58.8
25		2.843	574.1	58.5	625.2	63.8
26		3.075	620.9	63.3	676.2	69.0
27		3.316	669.6	68.3	729.3	74.4
28		3.566	720.1	73.4	784.3	80.0
29		3.825	772.5	78.8	841.3	85.8
30		4.094	826.7	84.3	900.3	91.8
31		4.371	882.7	90.0	961.4	98.0
32	1-1/4	4.658	940.6	95.9	1024	104.5
33		4.953	1000	102.0	1089	111.1
34		5.258	1062	108.3	1156	117.9
35	1-3/8	5.572	1125	114.7	1225	125.0
36		5.895	1190	121.4	1296	132.2
37		6.227	1257	128.2	1370	139.7
38	1-1/2	6.568	1326	135.3	1445	147.3
39		6.918	1397	142.5	1522	155.2
40		7.278	1470	149.9	1601	163.2
41		7.646	1544	157.5	1682	171.5
42		8.024	1620	165.2	1765	179.9
43		8.410	1698	173.2	1850	188.6
44		8.806	1778	181.3	1937	197.5
45	1-3/4	9.211	1860	189.7	2026	206.6
46		9.625	1944	198.2	2117	215.9
47		10.05	2029	206.9	2210	225.3
48		10.48	2116	215.8	2305	235.0
49		10.92	2205	224.9	2402	244.9
50	2	11.37	2296	234.2	2501	255.0

Nominal rope diameter		Approx mass		Minimum breaking force tons <sup>1</sup> of 2000 lbs	
				Rope grade	
				1960	2160
mm*	inch	lb/ft <sup>1</sup>	kg/ft <sup>1</sup>	1960	2160
16	5/8	0.78	0.35	26.4	28.8
17		0.88	0.40	29.8	32.5
18		0.99	0.45	33.5	36.4
19	3/4	1.10	0.50	37.3	40.6
20		1.22	0.55	41.3	45.0
21		1.35	0.61	45.5	49.6
22		1.48	0.67	50.0	54.4
23		1.62	0.73	54.6	59.5
24		1.76	0.80	59.5	64.8
25		1.91	0.87	64.5	70.3
26		2.07	0.94	69.8	76.0
27		2.23	1.01	75.3	82.0
28		2.40	1.09	80.9	88.2
29		2.57	1.17	86.8	94.6
30		2.75	1.25	92.9	101.2
31		2.94	1.33	99.2	108.1
32	1-1/4	3.13	1.42	105.7	115.1
33		3.33	1.51	112.4	122.5
34		3.53	1.60	119.4	130.0
35	1-3/8	3.74	1.70	126.5	137.7
36		3.96	1.80	133.8	145.7
37		4.18	1.90	141.3	153.9
38	1-1/2	4.41	2.00	149.1	162.4
39		4.65	2.11	157.0	171.0
40		4.89	2.22	165.2	179.9
41		5.14	2.33	173.6	189.0
42		5.39	2.45	182.1	198.4
43		5.65	2.56	190.9	207.9
44		5.92	2.68	199.9	217.7
45	1-3/4	6.19	2.81	209.1	227.7
46		6.47	2.93	218.5	237.9
47		6.75	3.06	228.1	248.4
48		7.04	3.19	237.9	259.1
49		7.34	3.33	247.9	270.0
50	2	7.64	3.47	258.1	281.1

\* Standard tolerance: +2% to +4%, other tolerances possible upon agreement. Other and special rope diameters are available upon request.

1) The values are indicative only. Authoritative figures remain the metric ones!

Errors and omissions excepted! The cross-section shows a typical rope diameter and can vary within the range. Subject to modifications, this may change the specifications. Relevant is our website.



# Rope Category Number RCN

The correct allocation of our verope special wire ropes for determining the replacement state based on visible wire breaks according to ISO 4309.

The International Standard ISO 4309 - „Cranes – Wire ropes - Care and maintenance, inspection and discard“, 4th edition 08/2010- provides comprehensive information. A frequent discard criteria, among many others discussed in detail by the standard, is the number of visible broken wires. Depending on the rope construction, categorized by the Rope Category Number RCN acc. to standard's annex G, the relevant crane classification M1 to M8 and given system such as a single- or multi-layer drum, the discard criteria can be determined by the number of visible broken wires. This means besides the rope construction it is also the relevant machine used its design and classification that determines the discard criteria. Therefore it is no longer possible to give a general number of visible broken wires for a given rope construction, signaling discard. To give you the correct allocation of your verope special wire rope to this International Standard ISO 4309, please find below the respective classification of the "Rope Category Number RCN". Please note that within a rope construction its RCN-number may change depending on rope's nominal diameter. With this information, you can now determine in compliance with the actual type of your application the number of visible broken wires, signaling discard of the rope.

If you have any further questions regarding discard please don't hesitate to contact us. We are happy to assist you!

## Rotation-resistant ropes

verope high performance wire rope construction	Number of load-bearing wires in the outer strands	Rope category number RCN acc. ISO 4309	Number of visible broken wires acc. ISO 4309 <sup>1</sup>			
			relevant rope parts see footnote <sup>2</sup>		relevant rope parts see footnote <sup>3/4</sup>	
			over a length of		over a length of	
			6 x d <sup>5</sup>	30 x d <sup>5</sup>	6 x d <sup>5</sup>	30 x d <sup>5</sup>
vero 4	144	22	2	4	4	8
verotop XP	96	23-1	2	4	4	8
verotop verotop S verotop E	112	23-2	3	5	5	10
verotop P	126	23-3	3	5	6	11

## Non-rotation resistant ropes

verope high performance wire rope construction	Nominal rope diameter d (mm)	Number of load-bearing wires in the outer strands	Rope category number RCN acc. ISO 4309	Number of visible broken wires acc. ISO 4309 <sup>1</sup>						
				relevant rope parts see footnote <sup>2</sup>			relevant rope parts see footnote <sup>3/4</sup>			
				Class M1 to M4 or class unknown <sup>6</sup>			All classes M1 to M8			
				Ordinary lay		Lang lay	Ordinary and Lang lay			
				over a length of			over a length of			
6 x d <sup>5</sup>	30 x d <sup>5</sup>	6 x d <sup>5</sup>	30 x d <sup>5</sup>	6 x d <sup>5</sup>	30 x d <sup>5</sup>					
verostar 8 veropro 8 veropro 8 RS verosteel 8	till 42	208	09	9	18	4	9	18	36	
	43 to 48	248	11	10	21	5	10	20	42	
	above 48	288	13	12	24	6	12	24	48	
veropower 8	till 40	208	09	9	18	4	9	18	36	
	41 bis 46	248	11	10	21	5	10	20	42	
	above 46	288	13	12	24	6	12	24	48	
verotech 10 veropro 10	all diameters	260	11	10	21	5	10	20	42	

### Note

- 1) Please note that a counted broken wire always has two ends.
  - 2) Shall be applied exclusively to those sections of rope running only over steel sheaves and/or spooling on a single-layer drum. The wire breaks are randomly distributed.
  - 3) Shall be applied exclusively to those sections of rope spooling on a multi-layer drum.
  - 4) The values are valid only in conjunction with footnote 3 and apply to deterioration that occurs at the cross-over zones and interference between wraps due to fleet angle effects.
- Note: These values do not apply to those sections of rope running only over sheaves but do not spool on the multi-layer drum!
- 5) d=nominal rope diameter
  - 6) Twice the number of broken wires listed may be applied to ropes on mechanisms whose classification is known to be M5 to M8.

# Important Information

Please note that wrong selection and use of wire ropes can be dangerous!

With the following information, we would like to bring your attention to a few key points for proper selection, use and monitoring of wire ropes. In addition to general technical literature on wire ropes, national and international standards your verope team is happy to assist regarding all rope related questions you may have. Don't hesitate to contact us!

→ Wire ropes must be properly transported, stored, set up and maintained.  
Please refer to the relevant literature on these topics.

→ Always inspect wire rope and wire rope termination for wear, damage or abuse before use!  
Never use wire rope or wire rope termination that is worn out, damaged or abused!

→ Never overload or shock load a wire rope.

→ Please note that very high or very low ambient temperatures may dramatically change the behavior of the wire rope as well as the wire rope termination.  
Please contact us if there is any doubt regarding the safe use in a certain environment.

→ Please note that any termination assembled by verope must not be modified!

→ Wire ropes and wire rope terminations are regarded as expendable products. For safe and proper use, maintenance and inspection are required. Wire ropes and wire rope terminations have to be discarded when the results of inspection indicate that a further use would be unsafe.  
Please refer to applicable international or national standards in their relevant version (e.g. ISO 4309, EN 12385 and EN 13411), other general technical literature or regulations concerning inspection, examination and discard criteria for both wire ropes and wire rope terminations.

→ Our products are subject to modifications, this may change the specifications.  
Relevant is always our website.

→ The cross-section on our data sheet shows a typical rope diameter and can vary within the range.

**Protect yourself and others – failure of wire rope or wire rope termination may cause serious injury or death!**

# Worldwide service and distribution



With our stock-keeping program at the different verope service centers, we are able to bridge the distance between our modern rope production facility and joint venture partner Kiswire in both South Korea and Malaysia and our customers day to day requirements locally.

Our service and logistics centers in

- Contwig, Germany
- Shanghai, China
- Singapore
- Houston, USA

are able to turn on short notice any inquiries into action.

Cover nur zur Vollständigkeit (+ korrekte Seitenzahlen).  
Verwendet wird die separate Coverdatei - danke.



- 1) verope AG/Headquarters – Zug, Switzerland
- 2) verope Service Center GmbH – Contwig, Germany
- 3) verope Distribution Singapore Pte Ltd – Singapore
- 4) verope USA – Houston, USA
- 5) LTI Steel Wire Rope Co., Ltd. – Shanghai, China

verope has a worldwide network of professional dealers who expertly select the correct high performance rope to suit your requirements regionally.

Cover nur zur Vollständigkeit  
(+ korrekte Seitenzahlen).  
Verwendet wird die separate  
Coverdatei - danke.

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 Kiswire