verope
rely on

Deck Crane

Ship Unloader

Deck Cranes

Deck Crane **applications**

verope offers various ropes, rope end fittings and customized solutions for deck crane applications.

verope provides a global retailer network for special wire ropes to serve the customers wherever the products are needed.

verope offers the following services:

- Technical customer service
- Technical advice
- Rope inspections
- Theoretical rope service life calculation
- A broad range of rope tests such as:
  - Tensile test up to 2500 kN
  - Bending fatigue test for various rope diameters
  - Various tests to determine the rotational behavior of ropes
  - Elongation measurement
  - Modulus of elasticity determination
  - Test to measure the rope flexibility
  - Diameter reduction under load measurement
  - Lateral stiffness determination

verope sites:

verope AG/Headquarters – Zug, Switzerland

verope Service Center GmbH – Contwig, Germany

verope Distribution Singapore Pte. Ltd. – Singapore

verope USA – Houston, USA

LTI Steel Wire Rope Co. Ltd. – Shanghai, China

verope do Brasil – Resende, Brazil

Standard rope **end connections**

Open spelter socket: Metal or resin socketing

End stop: either metal-/resin socketing or swaged

Closed end socket: Metal or cast synthetic resin

Threaded socket swaged

Flemish eye ferrule-secured termination

Closed socket swaged

Ferrule-secured eye termination

Open socket swaged

Ferrule-secured thimble termination

Ferrule-secured open thimble termination

Ferrule-secured solid thimble termination

verope can also offer customer-specific solutions in addition to the standard rope end connections.
Special solutions on request.

Rope applications for **Deck Cranes**

Deck Crane

Ship Unloader

Deck **Crane**

Ship **Unloader**

verotop P

Hoist Rope

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

verotop XP

Hoist Rope

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

vero 4[1]

Hoist Rope

- 4-strand
- rotation-resistant
- compacted strands

veropro 8

Luffing Rope
Grab Rope[1]

- 8-strand
- non-rotation resistant
- compacted outer strands
- rope core covered with a plastic layer

veropro 8 RS

Luffing Rope
Grab Rope[1]

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

veropower 8[2]

Luffing Rope

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

veropro 10

Luffing Rope
Grab Rope[1]

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

[1] Grab operation | [2] For special applications

Special wire ropes for applications in **Deck Cranes**

verotop P

verotop XP

vero 4

veropro 8

veropro 8RS

veropower 8

veropro 10

verotop P

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

Update 2015/05

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	252.7	25.7
17		1.408	272.8	27.8	285.3	29.1
18		1.579	305.8	31.2	319.8	32.6
19	3/4	1.759	340.8	34.7	356.3	36.3
20		1.949	377.6	38.5	394.8	40.2
21		2.149	416.3	42.4	435.3	44.4
22		2.359	456.9	46.6	477.7	48.7
22.4		2.445	473.6	48.3	495.3	50.5
23		2.578	499.3	50.9	522.2	53.2
24		2.807	543.7	55.4	568.6	57.9
25		3.046	590.0	60.1	616.9	62.9
25.4	1	3.144	609.0	62.1	636.8	64.9
26		3.294	638.1	65	667.3	68
27		3.553	688.1	70.1	719.6	73.3
28		3.821	740.1	75.4	773.9	78.9
28.6	1-1/8	3.986	772.1	78.7	807.4	82.3
29		4.099	793.9	80.9	830.1	84.6
30		4.386	849.6	86.6	888.4	90.5
31		4.683	907.1	92.4	948.6	96.7
32	1-1/4	4.990	966.6	98.5	1011	103
33		5.307	1028	104.7	1075	109.5
34		5.634	1091	111.2	1141	116.3
35	1-3/8	5.970	1156	117.8	1209	123.2
36		6.316	1223	124.7	1279	130.4
38	1-1/2	7.037	1363	138.9	1425	145.2
40		7.797	1510	153.9	1579	160.9
42		8.597	1665	169.7	1741	177.4
43		9.011	1745	177.9	1825	186
44		9.435	1827	186.2	1911	194.7
45	1-3/4	9.869	1911	194.8	1999	203.7
46		10.312	1997	203.5	2089	212.8
48		11.228	2175	221.6	2274	231.7
50	2	12.183	2360	240.5	2468	251.5
52		13.178	2552	260.1	2669	272
54	2-1/8	14.211	2753	280.5	2878	293.3

* 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[1] of 2000 lbs	
				Rope grade	
mm*	Inch	lb/ft[1]	kg/ft[1]	1960	2160
16	5/8	0.84	0.38	27.2	28.4
17		0.95	0.43	30.7	32.1
18		1.06	0.48	34.4	35.9
19	3/4	1.18	0.54	38.3	40.1
20		1.31	0.59	42.4	44.4
21		1.44	0.66	46.8	48.9
22		1.58	0.72	51.4	53.7
22.4		1.64	0.75	53.2	55.7
23		1.73	0.79	56.1	58.7
24		1.89	0.86	61.1	63.9
25		2.05	0.93	66.3	69.3
25.4	1	2.11	0.96	68.5	71.6
26		2.21	1	71.7	75
27		2.39	1.08	77.3	80.9
28		2.57	1.16	83.2	87
28.6	1-1/8	2.68	1.22	86.8	90.8
29		2.75	1.25	89.2	93.3
30		2.95	1.34	95.5	99.9
31		3.15	1.43	102	106.6
32	1-1/4	3.35	1.52	108.6	113.6
33		3.57	1.62	115.5	120.8
34		3.79	1.72	122.7	128.3
35	1-3/8	4.01	1.82	130	135.9
36		4.24	1.93	137.5	143.8
38	1-1/2	4.73	2.15	153.2	160.2
40		5.24	2.38	169.8	177.5
42		5.78	2.62	187.2	195.7
43		6.06	2.75	196.2	205.1
44		6.34	2.88	205.4	214.8
45	1-3/4	6.63	3.01	214.9	224.7
46		6.93	3.14	224.5	234.8
48		7.55	3.42	244.5	255.6
50	2	8.19	3.71	265.2	277.4
52		8.85	4.02	286.9	300
54		9.55	4.33	309.4	323.5

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 0.730 • 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

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.

verotop XP

Offers superior crushing resistance and best resistance to abrasion.

Update 2015/05

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	171.2	17.4
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	24.3
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	39.7	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
22.4		2.510	489.1	49.8	532.7	54.3
23		2.646	515.7	52.5	561.6	57.2
24		2.882	561.5	57.2	611.5	62.3
25		3.127	609.3	62.1	663.5	67.6
25.4	1	3.228	628.9	64.1	684.9	69.8
26		3.382	659.0	67.1	717.7	73.1
27		3.647	710.6	72.4	773.9	78.9
28		3.922	764.3	77.9	832.3	84.8
28.6	1-1/8	4.092	797.4	81.3	868.4	88.5
29		4.207	819.8	83.5	892.8	91
30		4.503	877.3	89.4	955.5	97.4
31		4.808	936.8	95.5	1020	104
32	1-1/4	5.123	998.2	101.7	1087	110.8
33		5.448	1062	108.2	1156	117.8
34		5.783	1127	114.8	1227	125.1
35	1-3/8	6.128	1194	121.7	1301	132.5
36		6.484	1263	128.7	1376	140.2
38	1-1/2	7.224	1408	143.4	1533	156.2
40		8.004	1560	158.9	1699	173.1
41.3	1-5/8	8.533	1663	169.4	1811	184.5
42		8.825	1720	175.2	1873	190.8
44		9.685	1887	192.3	2055	209.4
45	1-3/4	10.131	1974	201.2	2150	219.1
46		10.586	2063	210.2	2246	228.9
47.5	1-7/8	11.288	2199	224.1	2395	244.1
48		11.526	2246	228.9	2446	249.3

* 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[1] of 2000 lbs	
				Rope grade	
mm*	Inch	lb/ft[1]	kg/ft[1]	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	0.3	21.5	23.4
15		0.76	0.34	24.7	26.8
16	5/8	0.86	0.39	28	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	57.8
22.4		1.69	0.77	55	59.9
23		1.78	0.81	58	63.1
24		1.94	0.88	63.1	68.7
25		2.1	0.95	68.5	74.6
25.4	1	2.17	0.98	70.7	77
26		2.27	1.03	74.1	80.7
27		2.45	1.11	79.9	87
28		2.64	1.2	85.9	93.6
28.6	1-1/8	2.75	1.25	89.6	97.6
29		2.83	1.28	92.1	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	129.9
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	154.7
38	1-1/2	4.85	2.2	158.2	172.3
40		5.38	2.44	175.3	190.9
41.3	1-5/8	5.73	2.6	186.9	203.5
42		5.93	2.69	193.3	210.5
44		6.51	2.95	212.1	231
45	1-3/4	6.81	3.09	221.9	241.6
46		7.11	3.23	231.8	252.5
47.5	1-7/8	7.58	3.44	247.2	269.2
48		7.75	3.51	252.4	274.9

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

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.

vero 4

Suits best for harshest working conditions with dynamic impact loads.

Update 2015/05

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	59.7	6.1
9		0.341	70.8	7.2	75.5	7.7
10		0.421	87.4	8.9	93.2	9.5
11	7/16	0.510	105.8	10.8	112.8	11.5
12		0.607	125.9	12.8	134.3	13.7
13		0.712	147.7	15.1	157.6	16.1
14		0.826	171.3	17.5	182.7	18.6
15		0.948	196.7	20	209.8	21.4
16	5/8	1.078	223.8	22.8	238.7	24.3
18		1.365	283.2	28.9	302.1	30.8
19	3/4	1.521	315.6	32.2	336.6	34.3
20		1.685	349.7	35.6	373.0	38
22		2.039	423.1	43.1	451.3	46
24		2.426	503.5	51.3	537.0	54.7
25		2.633	546.4	55.7	582.7	59.4
26		2.848	591.0	60.2	630.3	64.2
27		3.071	637.3	64.9	679.7	69.3
28		3.303	685.4	69.8	731.0	74.5
29		3.543	735.2	74.9	784.1	79.9
30		3.791	786.8	80.2	839.1	85.5
31		4.048	840.1	85.6	896.0	91.3
32	1-1/4	4.314	895.2	91.2	954.8	97.3
33		4.587	952.0	97	1015	103.5
33.5		4.727	981.1	100	1046	106.6
34		4.870	1011	103	1078	109.8
35	1-3/8	5.160	1071	109.1	1142	116.4
36		5.459	1133	115.5	1208	123.1

* 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[1] of 2000 lbs	
				Rope grade	
mm*	Inch	lb/ft[1]	kg/ft[1]	1960	2160
8	5/16	0.18	0.08	6.3	6.7
9		0.23	0.1	8	8.5
10		0.28	0.13	9.8	10.5
11	7/16	0.34	0.16	11.9	12.7
12		0.41	0.18	14.1	15.1
13		0.48	0.22	16.6	17.7
14		0.55	0.25	19.3	20.5
15		0.64	0.29	22.1	23.6
16	5/8	0.72	0.33	25.2	26.8
18		0.92	0.42	31.8	34
19	3/4	1.02	0.46	35.5	37.8
20		1.13	0.51	39.3	41.9
22		1.37	0.62	47.6	50.7
24		1.63	0.74	56.6	60.4
25		1.77	0.8	61.4	65.5
26		1.91	0.87	66.4	70.8
27		2.06	0.94	71.6	76.4
28		2.22	1.01	77	82.2
29		2.38	1.08	82.6	88.1
30		2.55	1.16	88.4	94.3
31		2.72	1.23	94.4	100.7
32	1-1/4	2.9	1.32	100.6	107.3
33		3.08	1.4	107	114.1
33.5		3.18	1.44	110.3	117.6
34		3.27	1.48	113.6	121.1
35	1-3/8	3.47	1.57	120.4	128.4
36		3.67	1.66	127.3	135.8

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

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

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.

vero**pro 8**

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

Update 2015/05

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	52.1	5.3	57.7	5.9	60.6	6.2
9		0.364	66.0	6.7	73.0	7.4	76.7	7.8
10		0.450	81.5	8.3	90.1	9.2	94.7	9.6
11	7/16	0.544	98.6	10	109.1	11.1	114.6	11.7
12		0.648	117.3	12	129.8	13.2	136.3	13.9
12.7	1/2	0.726	131.4	13.4	145.4	14.8	152.7	15.6
13		0.760	137.7	14	152.3	15.5	160.0	16.3
14		0.882	159.7	16.3	176.7	18	185.6	18.9
15		1.012	183.3	18.7	202.8	20.7	213.0	21.7
16	5/8	1.152	208.6	21.3	230.7	23.5	242.4	24.7
17		1.300	235.5	24	260.5	26.5	273.6	27.9
18		1.457	264.0	26.9	292.0	29.8	306.8	31.3
19	3/4	1.624	294.2	30	325.4	33.2	341.8	34.8
20		1.799	325.9	33.2	360.5	36.7	378.7	38.6
21		1.984	359.3	36.6	397.5	40.5	417.5	42.5
22		2.177	394.4	40.2	436.2	44.5	458.3	46.7
22.4		2.257	408.9	41.7	452.2	46.1	475.1	48.4
23		2.380	431.0	43.9	476.8	48.6	500.9	51
24		2.591	469.3	47.8	519.1	52.9	545.4	55.6
25		2.812	509.3	51.9	563.3	57.4	591.8	60.3
25.4	1	2.902	525.7	53.6	581.5	59.3	610.8	62.2
26		3.041	550.8	56.1	609.3	62.1	640.0	65.2
27		3.279	594.0	60.5	657.0	67	690.2	70.3
28		3.527	638.8	65.1	706.6	72	742.3	75.6
28.6	1-1/8	3.680	666.5	67.9	737.2	75.1	774.5	78.9
29		3.783	685.3	69.8	758.0	77.2	796.3	81.1
30		4.049	733.4	74.7	811.1	82.7	852.1	86.8
31		4.323	783.1	79.8	866.1	88.3	909.9	92.7
32	1-1/4	4.606	834.4	85	922.9	94	969.5	98.8
33		4.899	887.4	90.4	981.5	100	1031	105.1
34		5.200	941.9	96	1042	106.2	1095	111.5
35	1-3/8	5.511	998.2	101.7	1104	112.5	1160	118.2
36		5.830	1056	107.6	1168	119	1227	125
38	1-1/2	6.496	1177	119.9	1301	132.6	1367	139.3
40		7.198	1304	132.9	1442	146.9	1515	154.4
41.3	1-5/8	7.673	1390	141.6	1537	156.7	1615	164.6
42		7.935	1437	146.5	1590	162	1670	170.2
44		8.709	1578	160.7	1745	177.8	1833	186.8
45	1-3/4	9.109	1650	168.1	1825	186	1917	195.4
46		9.519	1724	175.7	1907	194.3	2003	204.2
47.5	1-7/8	10.150	1838	187.3	2034	207.2	2136	217.7
48		10.364	1877	191.3	2077	211.6	2181	222.3
50	2	11.246	2037	207.6	2253	229.6	2367	241.2
52		12.164	2203	224.5	2437	248.3	2560	260.9
54	2-1/8	13.117	2376	242.1	2628	267.8	2761	281.3
56		14.107	2555	260.4	2826	288		
58		15.133	2741	279.3	3032	309		
60	2-3/8	16.194	2933	298.9	3245	330.6		

* 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[1] of 2000 lbs		
				Rope grade		
mm*	Inch	lb/ft[1]	kg/ft[1]	1770	1960	2160
8	5/16	0.19	0.09	5.9	6.5	6.8
9		0.24	0.11	7.4	8.2	8.6
10		0.3	0.14	9.2	10.1	10.6
11	7/16	0.37	0.17	11.1	12.3	12.9
12		0.44	0.2	13.2	14.6	15.3
12.7	1/2	0.49	0.22	14.8	16.3	17.2
13		0.51	0.23	15.5	17.1	18
14		0.59	0.27	18	19.9	20.9
15		0.68	0.31	20.6	22.8	23.9
16	5/8	0.77	0.35	23.4	25.9	27.2
17		0.87	0.4	26.5	29.3	30.8
18		0.98	0.44	29.7	32.8	34.5
19	3/4	1.09	0.5	33.1	36.6	38.4
20		1.21	0.55	36.6	40.5	42.6
21		1.33	0.6	40.4	44.7	46.9
22		1.46	0.66	44.3	49	51.5
22.4		1.52	0.69	46	50.8	53.4
23		1.6	0.73	48.4	53.6	56.3
24		1.74	0.79	52.8	58.4	61.3
25		1.89	0.86	57.2	63.3	66.5
25.4	1	1.95	0.88	59.1	65.4	68.7
26		2.04	0.93	61.9	68.5	71.9
27		2.2	1	66.8	73.9	77.6
28		2.37	1.08	71.8	79.4	83.4
28.6	1-1/8	2.47	1.12	74.9	82.9	87
29		2.54	1.15	77	85.2	89.5
30		2.72	1.23	82.4	91.2	95.8
31		2.9	1.32	88	97.4	102.3
32	1-1/4	3.1	1.4	93.8	103.7	109
33		3.29	1.49	99.7	110.3	115.9
34		3.49	1.59	105.9	117.1	123
35	1-3/8	3.7	1.68	112.2	124.1	130.4
36		3.92	1.78	118.7	131.3	137.9
38	1-1/2	4.36	1.98	132.3	146.3	153.7
40		4.84	2.19	146.5	162.1	170.3
41.3	1-5/8	5.16	2.34	156.2	172.8	181.5
42		5.33	2.42	161.6	178.7	187.7
44		5.85	2.66	177.3	196.1	206
45	1-3/4	6.12	2.78	185.5	205.1	215.5
46		6.4	2.9	193.8	214.4	225.2
47.5	1-7/8	6.82	3.09	206.6	228.6	240.1
48		6.96	3.16	211	233.4	245.2
50	2	7.56	3.43	229	253.3	266.1
52		8.17	3.71	247.7	273.9	287.8
54	2-1/8	8.81	4	267.1	295.4	310.3
56		9.48	4.3	287.2	317.7	
58		10.17	4.61	308.1	340.8	
60	2-3/8	10.88	4.94	329.7	364.7	

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 0.666 • 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 43mm to 48mm RCN=11 Nominal rope diameter above 48mm RCN=13 • Further details: 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.

veropro 8 RS

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

Update 2015/05

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	14.7
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	18.6	197.0	20.1
15		1.041	210.0	21.4	226.1	23
16	5/8	1.184	238.9	24.3	257.3	26.2
17		1.337	269.7	27.5	290.5	29.6
18		1.499	302.4	30.8	325.6	33.2
19	3/4	1.670	336.9	34.3	362.8	37
20		1.851	373.3	38	402.0	41
21		2.040	411.5	41.9	443.2	45.2
22		2.239	451.7	46	486.5	49.6
22.4		2.322	468.2	47.7	504.3	51.4
23		2.448	493.7	50.3	531.7	54.2
24		2.665	537.5	54.8	578.9	59
25		2.892	583.3	59.4	628.2	64
25.4	1	2.985	602.1	61.4	648.4	66.1
26		3.128	630.9	64.3	679.4	69.2
27		3.373	680.3	69.3	732.7	74.7
28		3.627	731.6	74.6	788.0	80.3
28.6	1-1/8	3.785	763.3	77.8	822.1	83.8
29		3.891	784.8	80	845.3	86.1
30		4.164	839.9	85.6	904.6	92.2
31		4.446	896.8	91.4	965.9	98.4
32	1-1/4	4.738	955.6	97.4	1029	104.9
33		5.039	1016	103.6	1095	111.5
34		5.349	1079	109.9	1162	118.4
35	1-3/8	5.668	1143	116.5	1231	125.5
36		5.996	1209	123.2	1303	132.7
38	1-1/2	6.681	1348	137.3	1451	147.9
40		7.403	1493	152.2	1608	163.9
41.3	1-5/8	7.892	1592	162.2	1714	174.7
42		8.162	1646	167.7	1773	180.7
44		8.957	1807	184.1	1946	198.3
45	1-3/4	9.369	1890	192.6	2035	207.4
46		9.790	1975	201.2	2127	216.7
47.5	1-7/8	10.439	2106	214.6	2268	231.1
48		10.660	2150	219.1	2316	236

* 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[1] of 2000 lbs	
				Rope grade	
mm*	Inch	lb/ft[1]	kg/ft[1]	1960	2160
12		0.45	0.2	15.1	16.3
12.7	1/2	0.5	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		0.7	0.32	23.6	25.4
16	5/8	0.8	0.36	26.9	28.9
17		0.9	0.41	30.3	32.6
18		1.01	0.46	34	36.6
19	3/4	1.12	0.51	37.9	40.8
20		1.24	0.56	42	45.2
21		1.37	0.62	46.3	49.8
22		1.5	0.68	50.8	54.7
22.4		1.56	0.71	52.6	56.7
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		2.1	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
30		2.8	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
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	163.1
40		4.97	2.26	167.8	180.8
41.3	1-5/8	5.3	2.41	178.9	192.7
42		5.48	2.49	185	199.3
44		6.02	2.73	203.1	218.7
45	1-3/4	6.3	2.86	212.4	228.8
46		6.58	2.98	222	239
47.5	1-7/8	7.01	3.18	236.7	254.9
48		7.16	3.25	241.7	260.3

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 0.685 • 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 42mm RCN=09 • Nominal rope diameter 43mm to 48mm RCN=11 Nominal rope diameter above 48mm RCN=13 • Further details: 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.

veropower 8

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

Update 2015/05

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	158.8	16.2
12.7	1/2	0.803	165.1	16.8	177.9	18.1
13		0.842	173.0	17.6	186.4	19
14		0.976	200.6	20.4	216.2	22
15		1.121	230.3	23.5	248.2	25.3
16	5/8	1.275	262.0	26.7	282.3	28.8
17		1.440	295.8	30.1	318.7	32.5
18		1.614	331.6	33.8	357.3	36.4
19	3/4	1.798	369.5	37.6	398.1	40.6
20		1.992	409.4	41.7	441.2	45
21		2.197	451.3	46	486.4	49.6
22		2.411	495.3	50.5	533.8	54.4
22.4		2.499	513.5	52.3	553.4	56.4
23		2.635	541.4	55.2	583.4	59.5
24		2.869	589.5	60.1	635.3	64.7
25		3.113	639.6	65.2	689.3	70.2
25.4	1	3.214	660.3	67.3	711.5	72.5
26		3.367	691.8	70.5	745.6	76
27		3.631	746.1	76	804.0	81.9
28		3.905	802.4	81.8	864.7	88.1
28.6	1-1/8	4.074	837.1	85.3	902.1	91.9
29		4.189	860.7	87.7	927.5	94.5
30		4.483	921.1	93.9	992.6	101.1
31		4.787	983.5	100.2	1060	108
32	1-1/4	5.101	1048	106.8	1129	115.1
33		5.424	1115	113.6	1201	122.4
34		5.758	1183	120.6	1275	129.9
35	1-3/8	6.102	1254	127.8	1351	137.7
36		6.455	1326	135.2	1429	145.7
38	1-1/2	7.193	1478	150.6	1593	162.3
40		7.970	1637	166.9	1765	179.8
41.3	1-5/8	8.496	1746	177.9	1881	191.7
42		8.787	1805	184	1946	198.2
44		9.643	1981	201.9	2135	217.6
45	1-3/4	10.09	2072	211.2	2233	227.6
46		10.54	2166	220.7	2334	237.8
47.5	1-7/8	11.24	2309	235.3	2488	253.6
48		11.48	2358	240.3	2541	258.9

* 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[1] of 2000 lbs	
				Rope grade	
mm*	Inch	lb/ft[1]	kg/ft[1]	1960	2160
12		0.48	0.22	16.6	17.9
12.7	1/2	0.54	0.24	18.6	20
13		0.57	0.26	19.4	21
14		0.66	0.3	22.5	24.3
15		0.75	0.34	25.9	27.9
16	5/8	0.86	0.39	29.4	31.7
17		0.97	0.44	33.2	35.8
18		1.08	0.49	37.3	40.2
19	3/4	1.21	0.55	41.5	44.8
20		1.34	0.61	46	49.6
21		1.48	0.67	50.7	54.7
22		1.62	0.74	55.7	60
22.4		1.68	0.76	57.7	62.2
23		1.77	0.8	60.9	65.6
24		1.93	0.87	66.3	71.4
25		2.09	0.95	71.9	77.5
25.4	1	2.16	0.98	74.2	80
26		2.26	1.03	77.8	83.8
27		2.44	1.11	83.9	90.4
28		2.62	1.19	90.2	97.2
28.6	1-1/8	2.74	1.24	94.1	101.4
29		2.81	1.28	96.7	104.3
30		3.01	1.37	103.5	111.6
31		3.22	1.46	110.5	119.1
32	1-1/4	3.43	1.56	117.8	126.9
33		3.64	1.65	125.3	135
34		3.87	1.76	133	143.3
35	1-3/8	4.1	1.86	140.9	151.9
36		4.34	1.97	149.1	160.7
38	1-1/2	4.83	2.19	166.1	179
40		5.36	2.43	184.1	198.3
41.3	1-5/8	5.71	2.59	196.2	211.4
42		5.9	2.68	202.9	218.7
44		6.48	2.94	222.7	240
45	1-3/4	6.78	3.08	232.9	251
46		7.08	3.21	243.4	262.3
47.5	1-7/8	7.55	3.43	259.5	279.7
48		7.71	3.5	265	285.6

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 0.747 • 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 40mm RCN=09 • Nominal rope diameter 41mm to 46mm RCN=11 Nominal rope diameter above 46mm RCN=13 • Further details: 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.

vero**pro 10**

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

Update 2015/05

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	1014.4	103.4
34		5.333	1063.5	108.4	1145.2	116.7
36		5.979	1192.3	121.5	1283.9	130.8
38	1-1/2	6.662	1328.4	135.4	1430.5	145.8
40		7.381	1472.0	150	1585.1	161.5
42		8.138	1622.8	165.4	1747.5	178.1
44		8.931	1781.1	181.5	1917.9	195.4
46		9.762	1946.7	198.4	2096.3	213.6
48		10.629	2119.6	216	2282.5	232.6
50	2	11.533	2299.9	234.4	2476.7	252.4
52		12.474	2487.6	253.5	2678.8	273
54	2-1/8	13.452	2682.6	273.4	2888.8	294.4
56		14.467	2885.0	294	3106.8	316.6
58		15.519	3094.8	315.4	3332.6	339.6
60	2-3/8	16.608	3311.9	337.5	3566.4	363.4
62		17.733	3536.4	360.4	3808.1	388.1
64	2-1/2	18.896	3768.2	384	4057.8	413.5
66	2-5/8	20.095	4007.4	408.4	4315.4	439.7
68		21.332	4254.0	433.5	4580.9	466.8
70	2-3/4	22.605	4507.9	459.4	4854.3	494.7

* 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[1] of 2000 lbs	
				Rope grade	
mm*	Inch	lb/ft[1]	kg/ft[1]	1960	2160
30	1-1/4	2.79	1.27	93.1	100.2
32		3.17	1.44	105.9	114
34		3.58	1.63	119.5	128.7
36	1-1/2	4.02	1.82	134	144.3
38		4.48	2.03	149.3	160.8
40		4.96	2.25	165.4	178.2
42		5.47	2.48	182.4	196.4
44		6	2.72	200.2	215.6
46		6.56	2.98	218.8	235.6
48	2	7.14	3.24	238.2	256.6
50		7.75	3.52	258.5	278.4
52	2-1/8	8.38	3.8	279.6	301.1
54		9.04	4.1	301.5	324.7
56		9.72	4.41	324.3	349.2
58	2-3/8	10.43	4.73	347.9	374.6
60		11.16	5.06	372.3	400.9
62	2-1/2	11.92	5.41	397.5	428
64	2-5/8	12.7	5.76	423.5	456.1
66		13.5	6.13	450.4	485
68	2-3/4	14.33	6.5	478.1	514.9
70		15.19	6.89	506.7	545.6

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 0.683
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

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.

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