

Superline nylon & polyester

The efficiency of nylon and polyester fibre is considerably improved by using Superline construction. This construction is perfectly balanced and consists of central cores with a braided cover. The cover is compact and protects the inner core.

The advantage of this construction is that only the cores are the load-bearing elements. Thanks to the long-lay construction of the cores the rope has a higher breaking strength diam for diam than conventional 3- or 8-strand ropes. For the same reason the elongation of this type of rope is reduced.

Marsiline is another version of Superline polyester. The very compact construction in combination with a thin 100% polyester tear and wear resistant cover provides optimised diam/strength ratio.

- Very high abrasion resistance
- Excellent diameter/strength ratio
- Designed for use on winches
- Extended fatigue life
- Torque free



Superline polyester with 3-strand twisted cores

Construction

Core:

12-strand plaited core

or

assembly of 3-strand twisted ropes half of which lefthand and half and right-hand lay

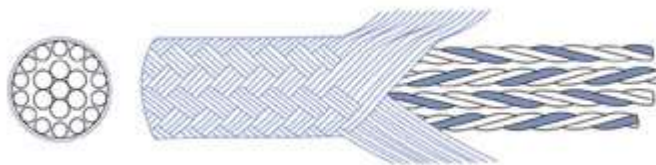
Protective outer braided cover:

Superline nylon: 100% nylon cover

Superline polyester: 100% polyester cover

or

50% polyester and 50% supermix (blend of polyester and high tenacity polypropylene) cover



Marsiline: compact 100% polyester cover

Properties

Nylon (Polyamide)

Relative density	1,14
Temperature resistance	Can be used below 0° C Melting point 218° C (Nylon 6)
UV resistance	Excellent - fully stabilised
Extension	Breaking stretch of 31% (new rope) reduces to 25% (worked rope)
Flexibility	Good - becomes harder during use
Chemical resistance	Good resistance to alkalis - limited to acids

Polyester

Relative density	1,38 (can vary slightly - depending on cover)
Temperature resistance	Flexible down to -40° C Melting point 260° C
UV resistance	Excellent - fully stabilised

<i>Extension</i>	Breaking stretch of 14% (new rope) reduces to 12% (worked rope) unchanged wet or dry
<i>Flexibility</i>	Remains flexible - no water absorption
<i>Chemical resistance</i>	Good - except to alkalis
Length measured under reference tension according to EN ISO 9554	

Typical applications

Hawsers and springs for ship's mooring - Towing pennants - Single point mooring - Tension winch mooring - Ropes for cable laying and oceanographic research

Superline nylon

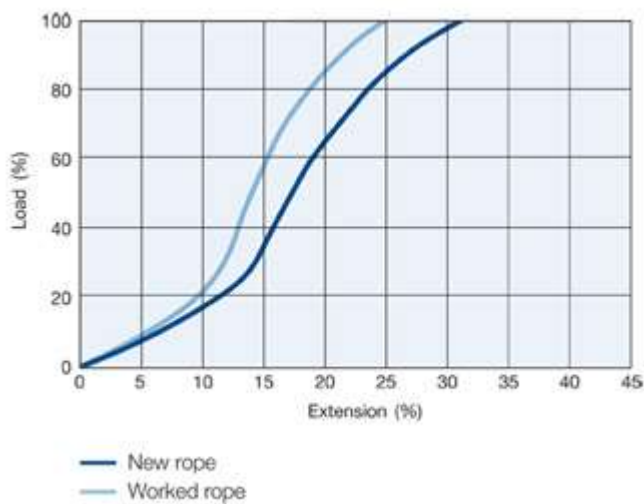
Diam. Ø	Circ.	Mass	Min. breaking load	
			T	kN
mm	inch "	kg/100m		
16	2	19,1	7,3	71,6
18	2 ¼	21,8	8,4	82,4
20	2 ½	34,1	12,4	122
22	2 ¾	43,2	15,2	149
24	3	49,1	17,8	175
28	3 ½	57,5	21,1	207
32	4	75,1	27,7	272
36	4 ½	86,5	33	324
40	5	103	40,9	401
44	5 ½	117	47,5	466
48	6	128	58,2	571
52	6 ½	172	68,2	669
56	7	184	78,7	772
60	7 ½	208	90,3	886
64	8	245	103	1010
68	8 ½	275	118	1157
72	9	312	129	1265
80	10	385	161	1579
88	11	482	205	2010
96	12	532	232	2275
104	13	629	273	2677
112	14	680	308	3020
120	15	817	352	3452
128	16	919	395	3874
136	17	1018	444	4354
144	18	1119	488	4786
152	19	1266	553	5423
160	20	1413	605	5933
168	21	1516	650	6374
176	22	1620	697	6835
184	23	1723	762	7473
192	24	1874	840	8238

Superline polyester and marsiline

Diam. Ø	Circ.	Mass	Superline Polyester	Marsiline
			Min. breaking load	Min. breaking load

mm	inch	kg/100m	T	kN	T	kN
16	2	18	8,1	79,4		
18	2 ¼	28	11,6	114		
20	2 ½	32	12,9	127		
22	2 ¾	36	15,1	148		
24	3	45	18,5	181		
28	3 ½	55	22,5	221		
32	4	77	30,5	299	36	353
36	4 ½	87	36,4	357	47	461
40	5	112	46,3	454	55	539
44	5 ½	137	58,2	571	67	657
48	6	165	69,1	678	83	814
52	6 ½	206	84,7	831	99	971
56	7	227	95	932	119	1167
60	7 ½	248	105	1030	134	1314
64	8	280	118	1157	150	1471
68	8 ½	316	133	1304	175	1716
72	9	391	168	1648	190	1863
80	10	456	198	1942	230	2256
88	11	577	248	2432	285	2795
96	12	664	283	2775	330	3236
104	13	730	313	3069	385	3776
112	14	863	371	3638		
120	15	950	410	4021		
128	16	1077	455	4462		
136	17	1255	532	5217		
144	18	1389	590	5786		
152	19	1520	648	6355		
160	20	1699	725	7110		
168	21	1832	782	7669		
176	22	2054	878	8610		
184	23	2231	954	9355		
192	24	2408	1030	10101		

Load VS Extension (Nylon)



Load VS Extension (Polyester & Marsilene)

