

Recommended Line Diameters

Regatta

sail surface (m ²)	10	20	30	40	50	60	70	80	90	100
Racer-XTR 02008	–	–	8	8	8	10	10	12	12	14
Racer Hybrid 02026	–	–	8	8	8	10	10	12	12	14
Racer Vision 02027	–	–	8	8	8	10	10	12	12	14
Racer 02001	–	6	8	10	10	12	12	14	14	16
Regatta 02000	5	6	8	10	10	12	12	14	14	16
Dynamic 02004/02028	6	8	10	12	14	14	14	–	–	–
D-Pro 01505/01508	4	5	6	8	8	9	9	10	12	14
Control-XTR 02024/02224	5	6	8	8	8	10	10	12	12	14
V-Force 04000	6	8	8	10	12	–	–	–	–	–

Cruising

sail surface (m ²)	10	20	30	40	50	60	70	80	90	100
Racer 02001	–	6	8	10	10	12	12	14	14	16
Regatta 02000	5	6	8	10	10	12	12	14	14	16
Dynamic 02004/02028	6	8	10	12	12	14	14	–	–	–
TopGrip 01540	6	8	10	12	14	14	14	–	–	–
Herkules 00154/01550/01552	6	8	10	12	14	14	14	16	16	18
Top-Cruising 00152/01528	6	8	10	12	14	14	14	16	16	18
Prestretch 00121/00122	6	8	10	12	–	–	–	–	–	–
Allround 00151	8	10	12	14	14	16	–	–	–	–
Seastar 00162/00172	6	8	10	12	14	14	16	18	18	–

For guy ropes, choose a heavier diameter



Always choose the right stopper based on your line's diameter.
The wrong stopper size can damage your line.

Recommended Mooring Lines



Mooring Lines

	Boat Size (ft)	20–27	33	40	46	52–60	65–73	78–85	90–105	110–118	124–131
	Boat Size (m)	6–8	10	12	14	16–18	20–22	24–26	28–32	34–36	38–40
	Displacement (t)	<1	2	5	12	20	25	30	40	70	>80
catalogue		Ø mm	Ø mm	Ø mm	Ø mm	Ø mm	Ø mm	Ø mm	Ø mm	Ø mm	Ø mm
22	Super Yacht Mooring 01300	–	–	–	–	–	–	–	24	24	28
24	Porto 00133	10	12	14	16	18	20	22	24	–	–
25	Squareline 01047/01049	10	12	14	16	18	20	22	24	26	28
27	PES-3-strand 00111/01110	10	12	14	16	18	20	22	24	26	28
26	Holiday 01083	12	14	16	–	–	–	–	–	–	–
26	Moorex 12 00132	12	14	16	18	20	22	24	26	28	30
29	Latina 00110	10	12	14	16	18	20	22	22	24	26
23	Handy Elastic 00136/00137	10	12	14	16	18	20	22	22	24	26



Always secure any watercraft with at least 4 mooring lines.
Length of lines: Two lines @ 1.5x boat-length and two lines @ 1.0x boat-length (m)

INFO

LIROS manufactures materials, which are subject to customary fluctuations. All published technical data are therefore only for general reference and comply with the average results achieved in the manufacturing process. Alterations in design, technology and manufacture are subject to change at any time.

We recommend visual inspection of every line, before and after use. Lines should be removed from use if the load-bearing portion shows evidence of damage, even through normal wear and tear.

Please find safety instructions for LIROS ropes on [www.liros.com/support/technical informationen](http://www.liros.com/support/technical-informationen)

LIROS products for personal safety and for lifting loads are specially labelled. Technical specifications are not binding and do not set the customer free from his duty to check if the products are suitable for the intended operation and purpose.

LIROS splices are guaranteed up to 80% of the stated linear breaking load!!

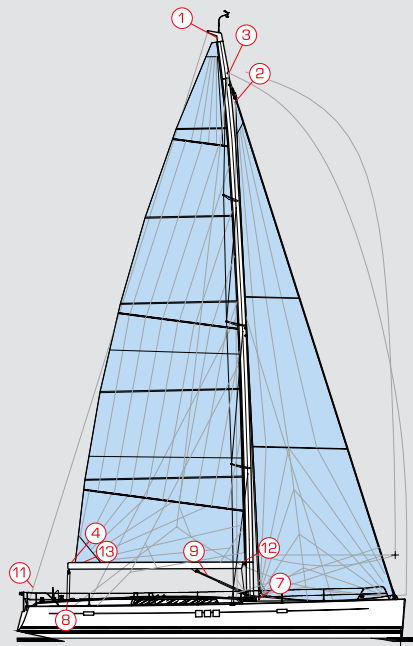
Please find splicing instructions for LIROS ropes on www.liros.com/support/downloads

Care instructions: LIROS quality lines may be washed in mild detergent on „delicate“ cycle at 30°C, packed in a cotton bag.

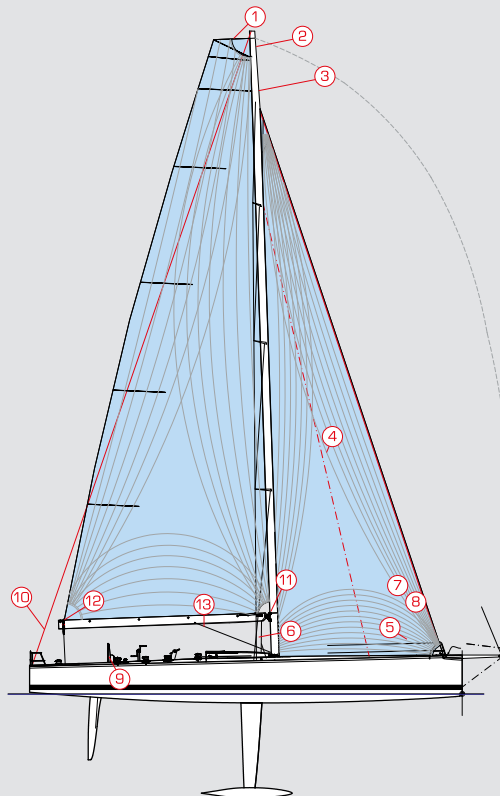
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LIROS usage recommendations



Cruising boat



Racing boat

Our recommendations for LIROS items reflect our many years' experience racing and cruising.

Source: Hanse Yachts / Judel Vrolijk

REGATTA

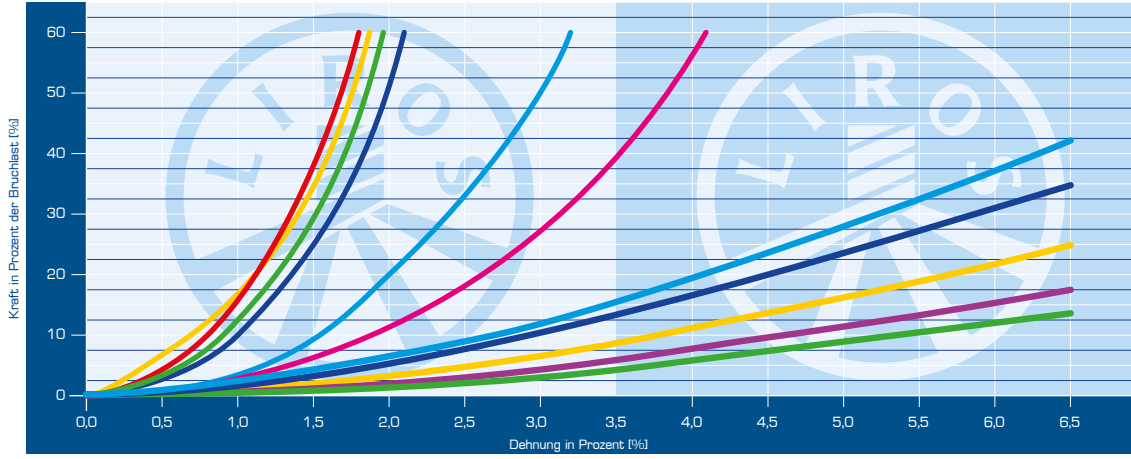
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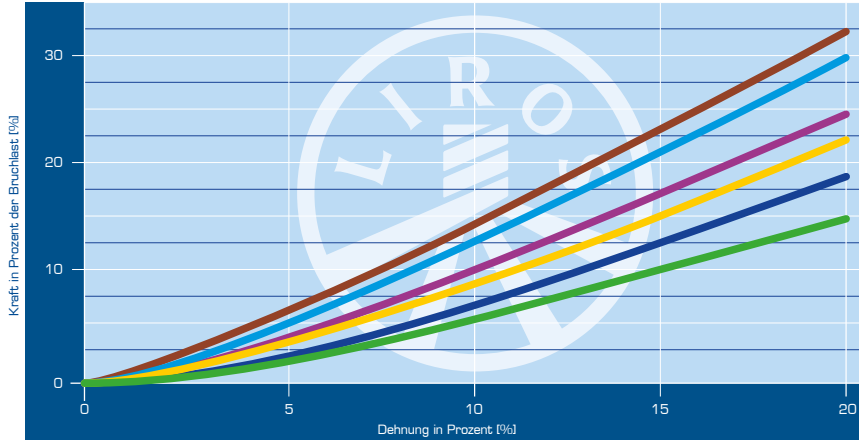
Performance

Cruising



- LIROS V-Force, LIROS V-Plus
- LIROS D-Pro, D-Pro Vision
- LIROS Racer Vision, LIROS Racer Hybrid
- LIROS Racer, LIROS Regatta 2000
- LIROS Dynamic Color
- LIROS Dynasoft
- LIROS Herkules/Herkules Color/Herkules Vision, LIROS Top Grip, LIROS Top Cruising, LIROS Top Cruising Color
- LIROS Seastar
- LIROS Prestretch
- LIROS Allround, LIROS Standard
- LIROS Nautic

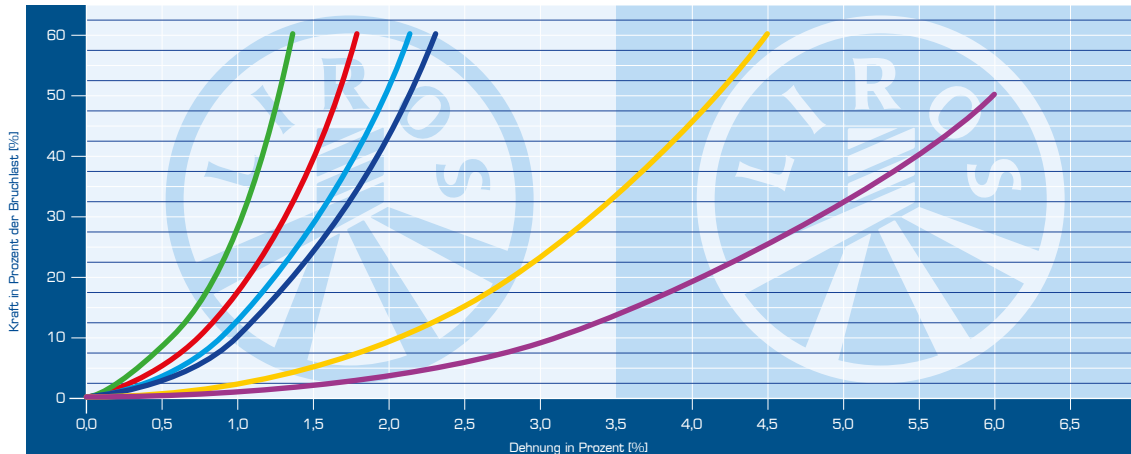
Mooring



- LIROS Squareline PP, LIROS Polyestertauwerk, LIROS Nautic
- LIROS Polyamidtauwerk
- LIROS Porto, LIROS Super Yacht Mooring
- LIROS Moorex 12, LIROS Holiday
- LIROS Squareline Polyester
- LIROS Handy-Elastic

Magic Dinghy Performance

Magic








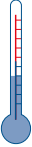
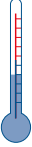
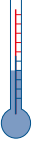


- LIROS Magic XTR, LIROS Magic Control XTR
- LIROS D-Pro, LIROS D-Pro Vision
- LIROS Magic Pro, LIROS Magic Race
- LIROS Magic Edge
- LIROS Magic Sport, LIROS Spi
- LIROS Magic Sheet

Comparing summary of synthetic fibres

Material							
	Polyamid (PA) 6 and 6,6	Polyester (PES)	Polypropylene (PP) multifilament high-strength	Polyethylene high-strength (HMPE)	Aramid	LCP	PBO
Brand	Perlon Nylon			Dyneema® Spectra®	Twaron® Kevlar® Technora®	Vectran®	Zylon®
Yarn strength							
cN/dtex	7 – 8	7 – 9	6 – 7	28 – 40	20 – 25	22 – 25	ca. 37
Specific weight							
kg/dm³	1,14	1,38	0,91	0,96	1,44	1,41	1,52
Strength loss due to humidity							
%	5 – 10	0	0	0	0	0	0
Water absorption							
%	1 – 7	0,5 – 2	0	0	2 – 5	1	0,6
Knot tenacity (residual value breaking strength)							
%	60 – 65	55 – 60	55 – 65	35 – 50	30 – 40	30 – 35	35 – 55
Light resistance							
	good	very good	adequate	very good	poor	adequate	poor
Breaking stretch							
%	16 – 27	10 – 16	12 – 20	2 – 3	2 – 4	2 – 3	2,5
Abrasion resistance	very good	very good	fair	very good	adequate	very good	adequate

Reaction of synthetic ropes under different conditions

Material							
	Polyamide (PA) 6 / 6,6	Polyester (PES)	Polypropylene (PP)	Polyethylene (PE, (HMPE)	Aramid	LCP	PBO
Brand	Perlon Nylon			Dyneema® Spectra®	Twaron® Kevlar® Technora®	Vectran®	Zylon®
 Washing temp. °C	40	40	30	30	60	60	60
 Acids (50% concentr.) 25 °C / 100 °C Rest %	17 / 5-10	80 / 0	no reaction	no reaction	good resistance	very good resistance	good resistance
 Gasoline	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction
 Diesel and Oil	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction
 Solvents	minimal reaction	minimal reaction	minimal reaction	minimal reaction	minimal reaction	minimal reaction	minimal reaction
 Alkalien (Leaches)	resistant against weak alkalis	resistant against weak alkalis at 20 °C	resistant against weak alkalis	resistant	resistant against weak alkalis	resistant	resistant
 Insulating properties	good (when dry)	excellent	excellent	excellent	good (when dry)	excellent	excellent
 Highest temp. Short load approx. °C	130	170	80	70	400	200	550
 Range Exposure approx. °C	170	225	140	120	-	-	-
 Melting point approx. °C	215	260	170	150	chars at approx. 500 °C	330	chars at approx. 650 °C



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