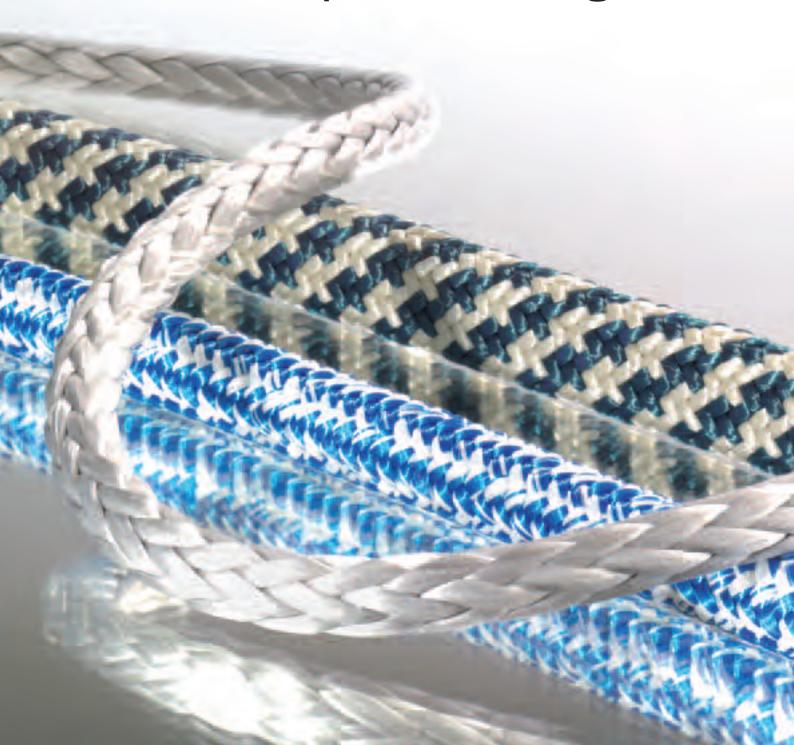


# LIROS Rope Catalogue







# LIROS Unlimited Rope Solutions

LIROS is now recognized as a world leader in the manufacture of Hi-Tec yachting ropes, kitesurf cords, paragliding lines and a wide range of industrial cordage. LIROS continue to manufacture in Germany in order that we can control every part of the production from start to finish.

All of the LIROS production is carefully monitored by experienced technicians during every stage of manufacture to ensure complete satisfaction in the most demanding applications. The unique and new process to 'LIROS LCS' (LIROS Coating System) has enabled us to improve the performance of the latest materials (PBO, Vectran® & Dyneema®) by thoroughly protecting them against the worst effects of abrasion as well as UV degradation.

We welcome all enquiries for our products as well as any individual requirements for custom projects. Do not hesitate to contact us..

Sven Rosenberger Karl Friedrich Rosenberger

Our company is certified and approved according to DIN EN ISO 9001 : 2008.

Production 100% Made in Germany.



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# Around the Rope – LIROS is there for you!

The LIROS Customer Service Team is proud to deliver solutions for all of your line, rope, and cordage needs - wholesale, retail, and direct-to-industry.

The master ropemakers at LIROS specialize in the processing and finishing of high-end halyards, sheets, mooring lines, industrial rope, and other performance products. Our experts will provide all the information you need to choose the right product for the job: dimensional sizing, working and breaking loads, splicing specifications.

Manufactured in Germany for German Quality



#### **LIROS Service Hotline**

(orders, technical support, special requests)

+49 (0) 92 93 80 02-014 7:30am - 5:00pm

We look forward to receiving your call! The LIROS Customer Service Team

# www.liros.com

# **LIROS HSS**

.... I I I Heat Stretch System

The unique LIROS pre-stretch system, calibrated under exacting temperature and tension conditions, is designed to minimize stretch in all ropes.

# LIROS LCS IIIIII LIROS Coating System

The LIROS LCS process improves resistance to abrasion, and protects against UV damage even in the latest materials by as much as 50%.

# LIROS DRS

● ● Dry Rope System

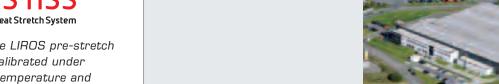
LIROS DRS is the durable water-repellent coating of technical ropes.

#### LIROS online

Our LIROS Webstore offers you:

- product availability
- turnaround time
- direct online ordering
- payment options
- enquiry submission

For access, just send your request to: info@liros.com



**Production** 

High tech production Made in Germany



Technology

Modern machine technology is essential for LIROS high tech products.



Laboratory

Technical development of Unlimited Rope Solutions



Testing

Continuous quality control



#### Logistics

IT based stock system is the solution for fast deliveries



**Splicing department Customized Solutions** for Rope application





## LIROS Racer XTR

#### 02008

Ø

mm

8

10

12

14

16

18

20

22

24

Breaking

4700

6900

9900

13000

15200

18500

21700

24600

28000

strength kg kg/100 m

LIROS Racer XTR with its high-tech construction is ideally suited to coverstripping for the ultimate in weight reduction. A special mixture of heatresistant hybrid fibres, in conjunction with high-tenacity Polyester in the cover, delivers the best in abrasion resistance. A multipurpose rope for high-tech racing yachts and for cruisers, LIROS Racer XTR offers the perfect balance between cover and core guaranteeing the full power transmission to the complete rope.

- · Strip the cover for extreme performance
- Excellent high temperature abrasion resistance
- · Hybrid fibre prevents cover melting
- Excellent cohesion between cover and core
- · Perfect for halyards and other low stretch applications
- · Very low stretch

Dynosmus*		
Dyneema*	MITA	
	Dynasma*	



#### Colours

419 Beige-Orange 420
Beige-White
421 Beige-Yellow
422 Beige-Burgundy
263 Beige-Steel-Blue

50% Hybrid fibers Cover 50% Polyester

32-plaited

Dyneema® SK78 Core

with coloured XTR-Grip-Coating

Weight

5.3

6.5

9.3

12.1

15.6

18.0

22.2

27.0

32.0

Length of

spool m

200

200

200

150

100

100

100

100

100

12-plaited

Construction 32-plaited

# LIROS Racer Pro

#### 02005

A new product designed for the highest level of competition, used by some of the best America's Cup teams, as well as on the Vendée Globe and other Grand Prix events. LIROS Racer Pro has been designed to be particularly effective when used without the cover. Both cover and the core work equally well on winches and clutches. Racer Pro is ideal for both sheets and halyards. Note: core is the same colour as the cover.

- Stretch characteristics < 1 %</li>
- · Designed for use without cover
- · Matching colour core and cover
- LIROS-Heat-Stretch-System
- easy to splice and remove cover
- More advanced Dyneema SK78 for low stretch characteristics

#### Colours





Ø mm	Breaking strength kg	Weight kg/100 m	Length of spool m
8	4700	5.3	200
10	6900	7.5	200
12	9900	9.6	200
14	13000	12.7	150
16	15200	161	100

Polyester high twisted Cover

32-plaited

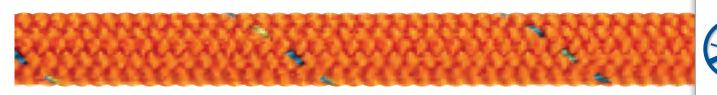
Core Dyneema® SK78

with XTR-Grip-Coating coloured

Construction 8 mm 24-plaited from 10 mm 32-plaited







# **LIROS Racer**

#### 02001

New Dyneema® rope with a very high breaking load and low stretch features a specially-engineered 32-plait cover of high quality spin-dyed Polyester and core made out of the new generation Dyneema® fibre. For halyards and sheets. Very suitable for winches.

- Stretch characteristics < 1.5%
- · extremely high breaking strength
- · easy handling, nonkinking
- · for halyards and sheets, winch suitability
- LIROS-Heat-Stretch-System





#### Colours

Colours			
***	171 Red	<b>,</b>	010 Blue
***	032 Burgundy		130 Navy-Blue
	150 Orange		228 White
*	086 Green	•	205 Silver
*,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	162 Racing-Gree	en	

Ø mm	Breaking strength kg	Weight kg/100 m	Length of spool m
6	2500	2.7	200
8	3800	5.1	200
10	5000	7.1	200
12	7200	8.5	200
14	9500	11.5	150
16	12600	14.4	100
18	15300	17.9	100
20	18500	23.7	100
22	20000	28.5	100

Cover Core

Polyester high twisted Dyneema® SK78 with additional inner cover plait

Construction

6-8 mm 24-plaited from 10 mm 32-plaited



# LIROS Regatta 2000

#### 02000

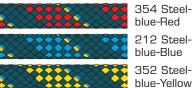
Very low stretch rope for halyards, spinnaker and genoa sheets, with high tenacity, light weight and long durability. A top-performance rope, Regatta 2000's plaited cover gives excellent resistance to abrasion. The coated Dyneema® SK78 core helps minimize movement between the two layers when under extreme load.

- Stretch characteristics < 1.5%
- High performance Polyester in the cover makes it extremely resistant to abrasion
- also fullcoloured available (see Herkules Color p. 10)
- LIROS-Heat-Stretch-System

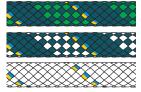




#### Colours (Steel-Blue with marker yarn)



354 Steelblue-Red 212 Steelblue-Blue 352 Steel-



353 Steelblue-Green 213 Steelblue-White 228 White

Cover Special polyester high twisted 1:1-plaited Covered Dyneema® SK78 with additional cover plait Core

Construction 2-3 mm 16-plaited from 4 mm 1:1-plaited

Ø mm	Breaking strength kg	Weight kg/100 m	Length of spool m
2	270	0.3	250
2.5	390	0.5	250
3	550	0.7	250
4	800	1.1	250
5	1100	1.5	250
6	2500	2.5	200
8	3800	4.2	200
10	5000	6.1	200
12	7200	8.8	200
14	9500	13.2	150
16	12600	15.0	100
18	15300	18.0	100
20	18500	23.6	100
22	20000	28.2	100
24	23000	32.1	100



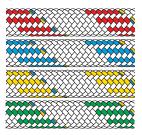
# LIROS Dynamic plus

#### 02004

New halyard or sheet rope using Dyneema® SK78. Light weight and low stretch, ideal for cruiser / racer yachtsmen. Highly flexible and non-kinking due to the new 32-plait cover. LIROS Dynamic Plus is equally effective as a high performance sheet.

- Stretch characteristics < 2%
- flexible abrasion resistant cover
- non kinking
- LIROS-Heat-Stretch-System
- easy to splice and remove cover

#### Colours



236 White-Red 229 White-Blue 231 White-Yellow 232

White-Green





Ø mm	Breaking strength kg	Weight kg/100 m	J
3	500	0.7	250
4	710	1.1	250
5	870	1.7	250
6	1200	2.1	200
8	2300	3.8	200
10	3100	6.9	200
12	4800	8.9	200
14	6500	11.9	150

3-8 mm

Cover Core

Polyester high twisted Dyneema® SK78 with additional inner cover plait

Construction

24-plaited 10-14 mm 32-plaited

#### LIROS D-Pro

#### 01505

100% pure Dyneema® rope with the latest in coating technology. Impregnated with a special PU, for more than 75% better resistance to abrasion. Our pre-stretching process further improves the overall performance. LIROS D-Pro is a pure Dyneema® rope, not just a Dyneema® core. 70% better performance overall, compared to conventional polyester-covered Dyneema®. A multi-purpose rope with plenty of applications on every sailing yacht. 12-braid construction for extremely easy splicing. Ideal replacement for stainless steel wire.

- Stretch characteristics < 1 %
- · best choice for all applications with extreme loads
- high UV light resistance, LIROS-Heat-Stretch-System
- easy to splice with an extra cover it can be used individually
- · very high breaking strength at smallest diameter and lowest weight





#### Colours



316 Carbon
228 White

Ø mm	Breaking strength kg	Weight kg/100 m	Length of spool m
1	195	0.09	100
1.5	230	0.13	100
2	410	0.18	100
2.5	580	0.35	100
3	950	0.46	100
4	1300	0.70	100
5	2600	1.30	100
6	4300	2.30	100
8	5300	3.50	100
9	7500	4.90	100
10	9000	6.00	100
12	11900	7.20	100
14	14500	9.50	100
16	19200	13.10	100

**Material** Construction Coated Dyneema® SK78

12-plaited,

heat set and covered



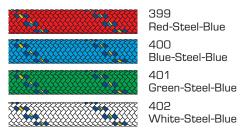
# LIROS Vectran®-Olympic

#### 04000

High-tech rope, manufactured of Vectran®. Extremely low stretch, high strength, comparable to wire. High durability and resistance to abrasion, its 32-plait cover makes it very resistant in stoppers and cleats, ideal for halyards and backstays.

- Stretch characteristics < 1 %
- extremely low stretch quality
- high durability and resistance to abrasion
- very resistant in stoppers
- · Middle cover combines core and outer cover perfectly

C	o	lo	ш	rs



Ø mm	Breaking strength kg	Weight kg/100 m	U
2	165	0.3	250
3	530	0.7	250
4	780	1.3	250
5	930	1.7	250
6	1500	2.4	200
8	2700	5.6	200
10	3700	8.0	200
12	5200	10.5	200

Cover	Polyester	
Core	Vectran® with additional	
	inner cover pla	it
Construction	Ø 2 – 5 mm	16-plait

Ø 6 mm 24-plaited from Ø 8 mm 32-plaited



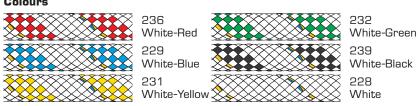
#### **LIROS** Herkules

#### 00154

Very resilient, extremely multi-functional rope of the highest quality, specially designed for sheets, halyards and trim lines, suitable for yachts of every size. Very durable and low stretch, easily spliced to wire — thermo fixed. Very good adhesion on winch drums, abrasion resistant cover, non-kinking. Best choice for cruising yachts.

- Stretch characteristics < 5%
- · very high quality line for the demanding cruising yacht sailor
- · universally usable as sheet, halyard or control line
- easy to splice and absolutely nonkinking
- excellent abrasion resistance

#### Colours



Cover	Polyester 1:1-plaited
Core	high tenacity braided Polyester

Ø mm	Breaking strength kg	Length of spool m
4	400	250
5	650	250
6	800	200
8	1600	200
10	2500	200
12	3500	200
14	4500	150
16	5000	100
18	6300	100
20	7000	100
22	8000	100
24	9000	100



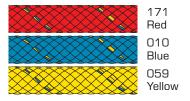
## **LIROS Herkules Color**

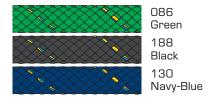
#### 01550

Very resilient, extremely multi-functional rope of the highest quality, specially designed for sheets, halyards and trim lines, suitable for yachts of every size. Very durable and low stretch, easily spliced to wire — thermo fixed. Very good adhesion on winch drums, abrasion resistant cover, non-kinking. Best choice for cruising yachts.

- Stretch characteristics < 5 %
- The pure coloured alternative to LIROS Herkules with high quality spin-dyed Polyester in the cover.

#### Colours





Cover Polyester spin-dyed, 1:1-plaitedCore High tenacity braided Polyester

Ø mm	Breaking strength kg	٠ ا
4	400	250
5	650	250
6	800	200
8	1600	200
10	2500	200
12	3500	200
14	4500	150
16	5000	100
18	6300	100
20	7000	100
22	8000	100
24	9000	100



# LIROS TopGrip

#### 01540

The new generation of high quality cruising sheets. LIROS TopGrip has been specially developed for use on all cruising yachts up to 50 feet. Maximum grip on winch drums delivers great control and easy handling in all situations.

- Stretch characteristics < 5 %
- High quality matt yarn giving easy handling
- Maximum grip
- Best abrasion resistance
- Very durable construction
- New modern design

#### **Colours**



236 White-Red 232 White-Green



229 White-Blue 407 White-Sand

Ø mm	Breaking strength kg	U
6	800	200
8	1350	200
10	2200	200
12	3000	200
14	4200	150

#### Cover

Polyester Grip fibre and Polyester spin-dyed 1:1 plaited

#### Core

High tenacity Polyester, braided





#### 00152

Very high tensile strength, nonkinking, long lasting sheet made of 100% Polyester. For use as mainsail and headsail and spinnaker sheets. Ideal for blue water sailing, easy to splice — heat set.

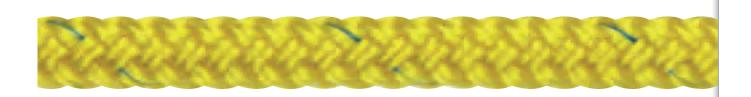
- Stretch characteristics < 5%
- the traditional sheet for sailing yachts of every size
- nonkinking, with abrasion resistant cover, high strength
- allround line, easy to splice

•		
Co	lou	rs

236 White-Red	232 White-Green
229 White-Blue	239 White-Black
231 White-Yellow	228 White

CoverPolyester high tenacityCorePolyester high tenacity plaitedConstructionØ 4 - 10 mm16-plaitedfrom Ø 12 mm20-plaited

Ø mm	Breaking strength kg	J
		<u>'</u>
4	450	250
5	780	250
6	1100	200
7	1300	200
8	1650	200
10	2700	200
12	3200	200
14	3800	150
16	5000	100
18	6500	100
20	7300	100



# **LIROS Top-Cruising-Color**

#### 01528

Very high tensile strength, nonkinking, long lasting sheet out of 100% Polyester. Line for use as mainsail and headsail and spinnaker sheets. Ideal for blue water sailing, easy to splice — heat set.

- $\bullet \ Stretch \ characteristics < 5\%$
- The coloured alternative to LIROS Top-Cruising with high quality spin-dyed Polyester in the cover.

<b>n</b> - I	011	ınc



**Cover** Polyester spin-dyed

Core Polyester high tenacity plaited

Construction Ø 6 – 10 mm 16-plaited from Ø 12 mm 20-plaited

Ø		Breaking	Length of
	mm	strength kg	spool m
	6	1100	200
	8	1650	200
	10	2700	200
	12	3200	200
	14	3800	150





#### LIROS Prestretch

#### 00121/00122

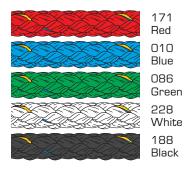
For use as halyards and control lines for yachts of every size - heat set. 3-strand or 8-plait Polyester. White with LIROS blue/gold fleck or coloured with LIROS blue/gold fleck.

- Stretch characteristics < 4 %
- low stretch, inexpensive Polyester halyard for smaller boats and traditional cruising yachts
- 3-strand, very easy to splice (Ref. 00121)

#### Colours 00121

## 171 Red 010 Blue 086 Green 228 White

#### Colours 00122



	Ø mm	Breaking strength kg	J
00121	4	420	250
	5	600	250
	6	820	200
	8	1400	200
White	10	2300	200
White	12	2800	200
00122	4	420	250
	5	580	250
	6	800	200
	8	1500	200
	10	2300	200

#### Construction

00121 Polyester, 3-strand, heat set 00122 Polyester, 8-plaited, heat set

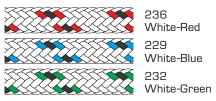


#### LIROS Allround

00151

Low-cost allround sheet and spinnaker sheet made of high tenacity fibres for cruising yacht sailors, minimal water absorption, easy to handle and resistant to abrasion - heat set.

- Stretch characteristics < 8%
- low-cost, winch suitable sheet, easy to handle
- cover construction with good abrasion resistance
- minimal water absorption, qualified for yachts up to 40 feet



Cover Polyester

Core High tenacity Polypropylene Multifilament plaited

Ø 6 – 12 mm 16-plaited Construction from Ø 14 mm 20-plaited

mm	strength kg	spool m
6	800	200
8	1400	200
10	2200	200
12	2600	200
14	3300	150
16	3900	100

Breaking

Length of



## **LIROS Seastar**

#### 00162

High quality, allround sheet for cruising yachts, with very flexible, soft, easy to grip matt cover. Ideal for dinghy sailors — excellent handling and flexibility — non kinking.

- Stretch characteristics < 6%
- high quality matt yarn giving easy handling
- very good sheet for cruising yachts up to 45 feet

Ø mm	Breaking strength kg	J
5	300	250
6	520	200
8	1000	200
10	1900	200
12	2400	200
14	2900	150
16	3500	100

#### Colour



Cover Polyester matt yarn
Core Polyester plaited

Ø 6 up to 10 mm 16-plaited from Ø 12 mm 24-plaited

## LIROS Seastar Color

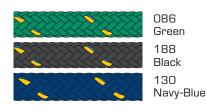
#### 00172

Very easy to handle line in 6 different colours, for genoa and spinnaker sheets, downhauls and control lines — heat set.

- Stretch characteristics < 6%
- high quality matt yarn giving easy handling
- seawater resilient colour, resistant to abrasion
- good identification with 6 different colours
- available in traditional hemp colour (see page 31)

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Ø mm	Breaking strength kg	9
5	300	250
6	520	200
8	1000	200
10	1900	200
12	2400	200
14	2900	150
16	3500	100
18	4500	100

**Cover** Polyester matt yarn coloured

**Core** Polyester plaited

Construction Ø 5 8-plaited

 $\emptyset$  6 up to 10 mm 16-plaited from  $\emptyset$  12 mm 24-plaited



# **LIROS Standard**

#### 01082

Low priced and soft sheet made of easy to grip staple Polyester, heat set.

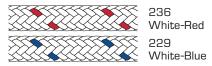
- Stretch characteristics < 8%
- soft and easy to grip
- allround sheet

mm	strength kg	spool m
6	500	200
8	1000	200
10	1600	200
12	2500	200
14	3000	150

Drooking

Longth of

#### **Colours**



**Cover** Polyester staple yarn

Core High tenacity Polypropylene multifilament plaited

 Construction
 Ø 6 – 12 mm
 16-plaited

 from Ø 14 mm
 20-plaited

Ø 1.5 mm to 5 mm without flecks

# **LIROS Nautic**

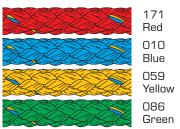
01072

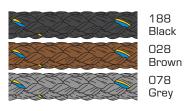
Spinnaker sheet for dinghies or small keelboats, soft, very light and easy to handle, can also be used as light weather sheet – and water-ski rope, floats. Made of UV-stabilized Polypropylene multifilament.

 $\mbox{\it 0}$  1.5 mm to 5 mm without guarantee yarn,  $\mbox{\it 0}$  6 mm to 14 mm with guarantee yarn in blue/gold.

- Stretch characteristics < 12%
- very light
- easy to handle
- floats
- UV-stabilized

#### Colours





Ø mm	Breaking strength kg	Length of spool m
1.5	38	500 (X-Spool)
2.0	70	500 (X-Spool)
3.0	140	500 (X-Spool)
4.0	280	500 (X-Spool)
5.0	390	250
6.0	550	200
8.0	900	200
10.0	1230	200
12.0	1700	200
14.0	2000	150
16.0	3700	100

Material Polypropylene multifilament

Construction 8-plaited

# LIROS Max Load System (MLS)

LIROS Halyards and Sheets ready for use in best LIROS quality. For all popular boat sizes.







LIROS MLS-System comes in attractive MLS netbags, pre-spliced with halyard shackle.

- premium manufacture
- product information on page 8/9

#### **LIROS MLS Performance**

LIROS Dynamic Plus with 100% Dyneema in the core 02004

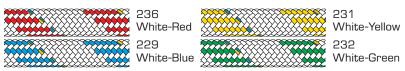
#### Halyard (Main, Genoa, Spinnaker)

	Ø	Length m	Terminal	Size of boat (feet)
02004-0830	8	30	Pilot eye/ sewed halyard shackle	22–29
02004-1035	10	35	Pilot eye / sewed halyard shackle	30–36
02004-1240	12	40	Pilot eye / sewed halyard shackle	37–42

#### Sheet (Spi, Genua)

	Ø mm	Length m	Terminal	Size of boat (feet)
02004-0825	8	25	Takling / spliced Snap shackle	22–36
02004-1025	10	25	Takling / spliced Snap shackle	37–40
02004-1230	12	30	Takling / spliced Snap shackle	40-42

#### **Colours**



LIROS MLS guarantees up to 80% of the linear breaking strength. The eyes will be spliced in our professional splicing department. Usage of the high end material Dyneema® guarantees minimum stretch and best adjustment.





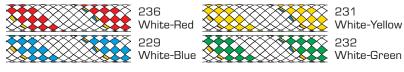
# **LIROS MLS Cruising**

LIROS Herkules made of 100% High Tenacity Polyester 00154

#### Halyard (Main, Genoa, Spinnaker)

	Ø mm	Length m	Terminal	Size of boat (feet)
00154-0830	8	30	Pilot eye / sewed halyard shackle	22–29
00154-1035	10	35	Pilot eye / sewed halyard shackle	29–36
00154-1240	12	40	Pilot eye / sewed halyard shackle	37–42

#### Colours





# LIROS DynaSoft

#### 02055

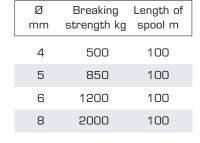
LIROS DynaSoft combines excellent grip, low weight, and minimal stretch characteristics. The hybrid braiding combines high-tenacity Grip fibre with Dyneema®. Ideal for sheet or forerunner halyard on competitive boats.

- non-slip grip
- · extremely flexible
- LIROS-Heat-Stretch-System for low stretch
- · round construction, great handling

1	EW	

#### Colours





#### Material

High tenacity Grip fibre and Dyneema® Construction

8-plaited with core







# LIROS Magic Pro

#### 01507

A halyard or a sheet designed exclusively for dinghies, catamarans and sports boats. The low stretch characteristics are delivered by the LIROS Dyneema Pro core. Designed to be used with the cover stripped. The cover needs only to be used where the rope is being handled.

#### • Compact construction

The compact construction ensures Magic Pro offers exceptional handling and good grip in cleats and stoppers.

Flexibility

The special grip between core and cover ensures perfect flexibility and maximum speed in all maneuvers.

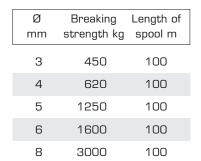
The precise non slip grip gives better control.

•	Grip
	The

The LIROS Heat Stretch System used on the Dyneema core gives minimum stretch.

#### Colours





Cover Polyester Grip Fibre and Polyester spin-dyed

Core Dyneema® SK78 with LIROS XTR Grip-Coating coloured

Construction 3-8 mm 16-plaited







#### 02016

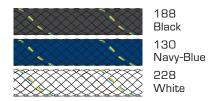
Sheet and halyard rope with high strength and very low stretch. Compact construction gives great performance in blocks and on winches.

- Stretch characteristics < 1.5%
- LIROS-Heat-Stretch-System
- Extreme high strength

#### Colours

Cover

171 Red
010 Blue
086 Green



Polyester high twist 1:1-plaited

Core Dyneema® SK78

Construction 2–3 mm 16-plaited 4–10 mm 1:1-plaited

Ø mm	Breaking strength kg	Length of spool m	
2	270	100	
2.5	390	100	
3	550	100	
4	800	100	
5	1100	100	
6	2500	100	
8	3800	100	ΕW
10	5000	100	





# **LIROS D-Pro**

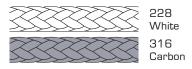
#### 01505

D-Pro provides cutting edge performance on modern performance dinghies and sports boats. Especially developed for transmitting the highest loads to deliver maximum speed. An all purpose rope whith the lowest weight and minimum stretch incorporating the LIROS HSS. High abrasion resistance and zero water absorption due to LIROS impregnation system.

- Stretch characteristics < 1%
- higher breaking strength than wire diameter for diameter
- · very low stretch
- zero water absorption
- very easy to splice
- LIROS-Heat-Stretch-System

#### Colours





Ø mm	Breaking strength kg	O
1	195	100
1.5	230	100
2	410	100
2.5	580	100
3	950	100
4	1300	100
5	2600	100

Material Dyneema® SK78
Construction 12-plaited,
heat set,
impregnated







# LIROS Magic Gold

#### 01500

A high performance Polyester cover with Dyneema® core makes this an ideal rope for performance dinghies, catamarans and sports boats. The low stretch and good grip characteristics make this ideal for control lines and halyards.

- Stretch characteristics < 1.5%
- Excellent abrasion resistance
- Very low stretch characteristics due to Dyneema®
- LIROS-Heat-Stretch-System
- 1.5 mm diameter without fleck: yellow, pink, purple and black

Ø	Breaking	Length of
mm	strength kg	spool m
1.5	125	100
2	240	100
3	420	100
4	580	100
5	1050	100
6	1800	100

#### **Colours**



Red-Neon Yellow-Blue

414 Neon Yellow-Pink-Blue 500

500 White-Pink-Blue 506 Blue-Neon Yellow-Red 408 Black-Neon Yellow-Blue



LIROS HSS

**Cover** Polyester

Core Dyneema® SK78

Construction 1.5-5 mm 16-plaited

6 mm 1:1-plaited



# LIROS Magic Sheet

#### 01506

LIROS Magic Sheet has been specially developed for use as main- and jib sheets on dinghies, sports boats and catamarans.

- <u>Maximum flexibility</u>: The cohesion between the core and the cover gives excellent flexibility and speed through the blocks.
- <u>Handling</u>: The precise nonslip grip give better control.
- <u>Compact construction</u>: With its round shape and compact braiding it asures excellent handling with good grip in cleats.

Ø	Breaking	Length of
mm	strength kg	spool m
7	970	100
9	1500	100

Cover Polyester Grip Fibre and Polyester spin-dyed, 16-plaited

Core High Tenacity Polypropylene

**Colours** 



405 White-Navy-Blue 404 White-Silver



406 White-Orange 407 White-Sand



# **LIROS Magic Speed**

#### 01501

A performance Polyester rope ideal for a use on dinghies and sports boats for halyards and control lines. Very abrasion resistant cover. Good in cleats, low stretch - Polyester core.

- Stretch characteristics < 5%
- Excellent abrasion resistance
- Low stretch

Ø mm	Breaking strength kg	
2	95	100
3	185	100
4	320	100
5	680	100
6	940	100

#### **Colours**



412 Red-Pink-Blue 479

Blue-Pink-Red 500

White-Pink-Blue



414 Neon Yellow-Pink-Blue 408 Black-Neon Yellow-Blue

CoverPolyesterCorePolyester

**Construction** 2-5 mm 16-plaited

6 mm 1:1-plaited

# LIROS Optisail

#### 02056

The perfect new lacing line for Optis. Very low stretch, lightweight, with the ultimate in knot holding. Abrasion-resistant cover construction, with specially developed core of Dyneema® SK78.

- Stretch characteristics < 1.5%
- Optimized knot tenacity
- LIROS-Heat-Stretch-System
- Available on 100m reels or in Point-of-Sale carton with 20m reels

**Cover** Polyester

Core Dyneema® SK78
Construction 16-plaited

Ø	Breaking	Length of
mm	strength kg	spool m

02056-0120	1.2	120	100
02056-2020	1.2	120	20x20/Ktn.

#### Colour



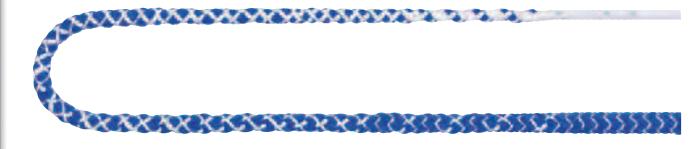
199 Black-Red











# LIROS Dyneema®-Spisheet-Special 02049

Very light, high quality, individually produced tapered spi sheet with extremely low stretch and high strength thanks to a new construction using a high proportion of Dyneema® in the core. Minimum water absorption.

- · high performance
- · high quality for excellent durability
- low stretch and water absorption due to the high proportion of Dyneema® in the core
- excellent handling charcteristics
- diameters available from 3 to 12 mm
- custom manufacture for special requirements
- · light weight cover

**Cover** The thicker part – staple spun matt Polyester mixed with Dyneema® SK78.

Thinner part - 100% Dyneema®

Core Dyneema® SK78





Required order specifications 02049 + 02043:		Available dian	neters 02049 + 02043		
1. Ø thick end	mm mm	3 to 5 mm	4 to 10 mm	6 to 8 mm	
2. Length of thick end	Ø mm Ø mm	3 to 6 mm	5 to 8 mm	6 to 9 mm	
3. Ø thin end		4 to 6 mm	5 to 9 mm	6 to 10 mm	
4. Length of thin end	mm	4 to 8 mm	5 to 10 mm	6 to 12 mm	
5. Colour code	Ø mm	4 to 9 mm	5 to 12 mm	8 to 12 mm	

# LIROS Tapered Sheet

02043

Individually-tailored tapered sheet. Good grip with seamless tapering from thick to thin. Specify your diameters when ordering.

- low water absorption
- good grip
- flexible diameter (3-12 mm available)
- Customizable diameter and length
- Lightweight Opti version (6 mm-9 mm-6 mm) in lengths 1.5 m / 2.5 m / 3 m (Ref. 02042-0100 )

#### Colours



**Cover** 9 mm - matt Polyester 6 mm - high tenacity Polyester

Core high tenacity Polyester





# **LIROS Taper Pro**

#### 02010

LIROS Taper Pro has been developed specially for the latest generation of headsail furlers. The core is constructed of Dyneema® and covered in a heavy duty polyester which tapers progressively over the length of the rope — the thin end is the part that rolls on the drum and the thick end is the part that is used for handling and winching.

- Stretch characteristics < 1.5%
- · very good grip on winch drums
- · simplifies reefing

#### 02010-0900

Tapering from 9 mm (20 m) to 6 mm (10 m) = 30 m

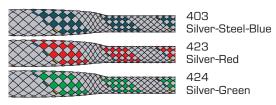
#### 02010-1100

Tapering from 11 mm (20 m) to 8 mm (15 m) = 35 m

Ø mm	Breaking strength k	, ,
9–6	2300	20m ø 9mm + 10m ø 6mm

9-6 2300 20 m ø 9 mm + 10 m ø 6 mm 11-8 3600 20 m ø 11 mm + 15 m ø 8 mm

#### **Colours**



**Cover** Polyester high tenacity 1:1-plaited **Core** Dyneema® SK78 with additional cover plait







The LIROS Soft Shackle is a perfect replacement for heavy traditional metal snap shackles and screw shackles. Easy to use, requires no tools. Made of 100% Dyneema® SK78.

**New:** fast, simple quick-release mechanism with easy-to-read loading capacity printed on the integrated LIROS tape.

Superior to steel shackles:

- No deck damage
- 10x lighter than same-strength metal shackle
- stays locked even when not under load
- easy to undo without tools even after high loads
- multiple applications for yachting and industry.

# LIROS Soft Shackle

Ref.	Breaking strength t	Colour	Safe working load t**	approx Ø mm	. Rope Ø
00146-0066	1	228 White*	0.5	6	4
00146-0090	1.5	316 Carbon	0.75	8	5
00146-0069	2	171 Red*	1	12	6
00146-0070	4	010 Blue*	2	16	8
00146-0071	6	059 Yellow*	3	18	10
00146-0072	8	086 Green*	4	20	12
00146-0073	10	316 Carbon	5	24	14

<sup>\*</sup> All sizes available in carbon colour

#### Colours





NEW

Material Dyneema® SK78

<sup>\*\*</sup> t = tons



# LIROS SuperSheet

#### 01570

LIROS sheet with extremely good winch handling properties. The perfect solution for classic and cruising yachts, with low stretch and very good abrasion resistance. Designed for the optimum tradeoff between breaking strength, and ease of handling/suitability on winches.

- extremely flexible, but compact
- best winch suitability
- · very good abrasion resistance
- durable construction

Cover Polyester 24-plaited

Core Dyneema®/Polypropylene Braiding



Ø mm	Breaking strength kg	Length of spool m
12	3500	200
14	4500	150
16	5000	100
18	6300	100
20	7000	100
22	8000	100

#### Colour





# LIROS Super Yacht Mooring

LIROS Super Yacht DB is a new range of mooring and anchoring warps for Super Yachts from 70' to 200' feet in length. The cover is specially treated against the effects of abrasion using the unique LIROS impregnation system NCS. These ropes are very flexible combining high stretch and shock absorbing qualities with great handling characteristics. Available ready spliced and with leather protection around the spliced eye (1 m inner length) if required.

• stretch characteristics > 15%

- stretcn cnaracteristics
- non-kinking
- easy to handle
- special anti-abrasion treatment LIROS LCS

#### **Colours**

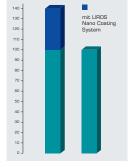
130 Navy-Blue
188 Black
228 White
312 Aquasilver

Ref.	Ø mm	for Yachts*	Breaking strength kg	Weight kg/ 100 m
01300-2400	24	70 to 90 feet	11500	40
01300-2800	28	to 120 feet	15900	58
01300-3200	32	to 150 feet	19800	74
01300-3600	36	to 180 feet	26000	95
01300-4000	40	to 200 feet	32800	115
01300-4400	44	to 220 feet	38500	142
01300-4800	48	to 250 feet	46000	170
01300-5200	52	to 280 feet	53500	198

<sup>\*</sup> For very heavy displacement or high windage yachts choose the next diameter up.

Cover Polyester high twisted 24-plaited, coatedCore Polyester plaited

1401









# LIROS Handy-Elastic

#### 00136/00137

New type of highly elastic rope in a cover-core construction for mooring, anchoring and towing. Its special construction and the use of highly elastic fibres allow this line to be used in extreme situations, even without shock absorbers. Abrasion resistant 1:1-plait made of 100% Polyamide, highly elastic.

- Stretch characteristics > 20%
- · very easy to splice
- · highly elastic
- very stretch- and abrasion-resistant
- very easy to handle
- by request available up to 40 mm Ø
- available ready spliced see page 28.

Ø mm	Breaking strength kg	Length of spool m
8	1600	200
10	2500	200
12	3900	200
14	4800	150
16	6000	100
18	8500	100
20	9900	100
22	10600	100
24	12000	100

#### Polyamide high tenacity, Cover

1:1-plaited

high elastic Polyamide Core

#### Colours 00136



Navy-Blue-Yellow

Black

#### **Colour 00137**



289 White-Black-Red



#### **LIROS Porto**

#### 00133

Very easy to handle mooring and anchor line in a cover-core construction made of 100% Polyester. Extremely tensile and resistant to abrasion, will not stiffen up. Special twine construction assures high elasticity.

- Stretch characteristics > 15 %
- · very easy to splice
- very easy to handle
- high strength and excellent abrasion resisatance
- the construction gives excellent flexibility and high stretch charcteristics
- available customized see page 28/29.

#### Colours

Core



239 White-Black 188 Black



130 Navy-Blue 205 Silver

Ø mm	Breaking strength kg	Length of spool m
8	1650	200
10	2300	200
12	2900	200
14	3700	150
16	4900	100
18	5300	100
20	6300	100
22	8900	100
24	9600	100

Cover Polyester high twisted

16-plaited 8-10 mm from 12 mm 20-plaited

High tenacity Polyester



# **LIROS Squareline-PES**

#### 01047/01049

Mooring and anchoring rope, easy to handle - non kinking 8-plait, easy to splice and easily joined to chain. High tenacity Polyester with excellent abrasion characteristics.

- Stretch characteristics > 20 %
- soft and handy
- · comfortable handling
- nonkinking and abrasion resistant
- easy to splice.

#### **Colour 01047**

Material

Construction



229 White-Blue

Polyester high tenacity

8-strand octoplait



188 Black 130 Navy-Blue

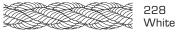
# LIROS Squareline-PP

#### 01078/01079/01080

A light and handy rope for use as mooring line or for towing. Floating 8-strand construction made of 100% Polypropylene multifilament, high tenacity, UV-stabilized.

- Stretch characteristics > 15%
- easy handling and light weight
- floats

# Colour 01078



#### **Colour 01079**



010 Blue

#### **Colour 01080**



Ø mm	Breaking strength kg	Length of spool m
12	2100	200
14	2700	150
16	3400	100
18	4000	100
20	5000	100

#### **M**aterial

Polypropylene multifilament high tenacity

#### Construction

8-strand octoplait





## **LIROS Moorex 12**

#### 00132

A new generation of mooring warp. Extremely flexible, combining great handling and ease of use. Very stretchy, removing the need for a mooring shock absorber. Special construction — hollow braid for easy splicing, together with high stretch for mooring shock absorption.

- Stretch characteristics >20%
- very easy to handle
- quick splice construction
- high stretch removes need for mooring rubber
- available customized see page 28.

10	2400	200
12	3000	200
14	4000	150
16	4600	100
18	5300	100
20	7200	100

8600

Breaking

strength kg spool m

Length of

100

Ø

mm

22

#### **Colours**



Material Polyester high tenacity

Construction 12-plaited



# LIROS Polyester Rope

# 00111/01110

Classical rope for mooring and anchoring, made of 100% Polyester, very easy to splice, high strength and abrasion resistance. Retains flexibility throughout its life. 3-strand made of 100% Polyester according to DIN 83331/EN697, heat set.

- Stretch characteristics > 15%
- very easy to splice
- extremely stretch- and abrasion-resistant
- does not stiffen up
- heat set
- available customized see page 28/29.

#### **Colour 00111**



#### Colours 01110



188 Black 130 Navy-Blue

MaterialPolyester high tenacityConstruction3-strand, heat set

Ø mm	Breaking strength kg	Length of spool m
3	280	250
4	400	250
5	600	250
6	800	200
8	1400	200
10	2000	200
12	2600	200
14	3600	150
16	5000	100
18	6000	100
20	7000	100
22	9000	100
24	10500	100
30	14800	100



# **LIROS Nordic**

#### 01173

Traditional mooring warp which has been very popular in Scandinavia. Combining light weight and good grip with ease of handling — semi matt finish.

- Stretch characteristics > 17%
- handy construction
- easy to splice
- available customized see page 28.

#### Colour



Material Mixed construction made of Polyester

matt yarn and shiny Polyester

Construction 3-strand, heat set

Ø mm	Breaking strength kg	Length of spool m
6	700	200
8	1200	200
10	1600	200
12	2300	200
14	2900	150
16	3760	100
18	4550	100
20	5130	100



# **LIROS Nylon Rope**

00110

Classic rope for mooring, with high stretch and 3-strand twist make it easy to splice. High strength and excellent resistance to abrasion. 100% Nylon manufactured according to DIN 83330/EN696, heat set, white with green or marine blue marker yarn.

- Stretch characteristics > 20%
- · very easy to splice
- high strength and excellent resistance to abrasion
- UV-stabilised
- many industrial applications

#### **Colours**



Material Polyamide high tenacity

Construction 3-strand

Ø mm	Breaking strength kg	0
4	380	250
5	600	250
6	900	200
8	1440	200
10	2400	200
12	3300	200
14	4400	150
16	5600	100
18	7000	100
20	8140	100
22	9800	100
24	11800	100
30	17400	100



#### **LIROS** Lirolen

#### 01120/01123/01126

An allround rope that floats. 3-strand, easy to splice, retains soft flexibility even after long use, manufactured according to DIN 83334/EN 699.

01120: Polypropylene multifilament, heat set, white 01123: spin-dyed Polypropylene multifilament, heat set 01126: spin-dyed Polypropylene multifilament, heat set, ideal for classic yacht applications

- Stretch characteristics > 15%
- easy to splice
- low-priced allround line
- no water absorption
- floats

Cal	lour	<b>011</b>	20

228 White

Colour 01126



037 Hemp

#### Colours 01123



010 Blue 188 Black 130

Navy-Blue

**Material** Polypropylene multifilament

Construction 3-strand, heat set

Ø	Breaking	Length of
mm	strength kg	spool m
4	280	250
5	400	250
6	590	200
8	1040	200
10	1600	200
12	2200	200
14	3000	150
16	3700	100
18	4700	100
20	5700	100



# LIROS Bumperline

01079

Fender-line, square braid made of a pliable material which fits snugly against the hull, spliced-in lines on both ends, very light and easy to handle, floats, does not absorb water.

100% high tenacity and UV-resistant Polypropylene multifilament. Length and diameter of the spliced-in lines: 2.5 m; Ø 12 mm.

- · pliable
- fits snugly against hull
- very light and easy to handle
- floats

Col	oui	'S
S		<b>&gt;</b>



228 White 188 Black 130 Navy-Blue C

/laterial	Polypropylene multifilament
Construction	8-strand









# **Customized Mooring**

<b>Handy Elastic</b>	<b>LIROS Porto</b>	LIROS Moorex 12	<b>Ø</b>	<b>Length</b>	<b>Eye</b>
00136	00133	00132	mm	m	cm
00136-1006-XXX	00133-1006-XXX	00132-1006-XXX	10	6	40
00136-1010-XXX	00133-1010-XXX	00132-1010-XXX	10	10	40
00136-1015-XXX	00133-1015-XXX	00132-1015-XXX	10	15	40
00136-1206-XXX	00133-1206-XXX	00132-1206-XXX	12	6	40
00136-1210-XXX	00133-1210-XXX	00132-1210-XXX	12	10	40
00136-1215-XXX	00133-1215-XXX	00132-1215-XXX	12	15	40
00136-1406-XXX	00133-1406-XXX	00132-1406-XXX	14	6	40
00136-1410-XXX	00133-1410-XXX	00132-1410-XXX	14	10	40
00136-1415-XXX	00133-1415-XXX	00132-1415-XXX	14	15	40
00136-1606-XXX	00133-1606-XXX	00132-1606-XXX	16	6	40
00136-1610-XXX	00133-1610-XXX	00132-1610-XXX	16	10	40
00136-1615-XXX	00133-1615-XXX	00132-1615-XXX	16	15	40
00136-1806-XXX	00133-1806-XXX	00132-1806-XXX	18	6	40
00136-1810-XXX	00133-1810-XXX	00132-1810-XXX	18	10	40
00136-1815-XXX	00133-1815-XXX	00132-1815-XXX	18	15	40

Polyester Rope	LIROS Nordic	Ø	Length	Eye
00111	01173	mm	m	cm
00111-1006-XXX	01173-1001-XXX	10	6	40
00111-1010-XXX 00111-1015-XXX	01173-1002-XXX 01173-1015-XXX	10 10	10 15	40 40
00111 1010 700	31178 1318 7070			70
00111-1206-XXX	01173-1201-XXX	12	6	40
00111-1210-XXX	01173-1202-XXX	12	10 45	40
00111-1215-XXX	01173-1215-XXX	12	15	40
00111-1406-XXX	01173-1401-XXX	14	6	40
00111-1410-XXX	01173-1402-XXX	14	10	40
00111-1415-XXX	01173-1415-XXX	14	15	40
00111-1606-XXX	01173-1601-XXX	16	6	40
00111-1610-XXX	01173-1602-XXX	16	10	40
00111-1615-XXX	01173-1615-XXX	16	15	40
00111-1806-XXX	01173-1801-XXX	18	6	40
00111-1810-XXX	01173-1802-XXX	18	10	40
00111-1815-XXX	01173-1815-XXX	18	15	40

Attention: LIROS guarantees 80% of the linear breaking load for spliced material

Technical datas see

00136 Page 23

00133 Page 23

00132 Page 25

00111 Page 25

01173 Page 26

Please note that when placing your order for LIROS rope 3 digits denoting the colour required must be added to the article number. The detail pages showing the 3 digit number that equates to each colour.





All customized anchor warps are supplied in an attractive net storage bag.

# **Customized Anchor Warps**

LIROS Porto	Polyester Rope	Ø	Length	Eye
00133	00111	mm	m	cm
00133-1030-XXX	00111-1030-XXX	10	30	S/S thimble
00133-1230-XXX	00111-1230-XXX	12	30	S/S thimble
00133-1430-XXX	00111-1430-XXX	14	30	S/S thimble
00133-1630-XXX	00111-1630-XXX	16	30	S/S thimble

Attention: LIROS guarantees 80% of the linear breaking load for spliced material

Technical datas see 00133 Page 23 00111 Page 25



# **Customized LIROS Customized Fender Ropes**

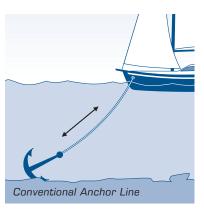
LIROS Customized Fender Ropes	Ø	Length	Eye
01580	mm	m	cm
01580-0801-188	8	1.5	15

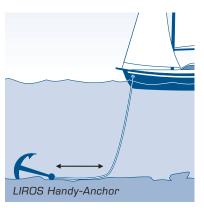
A practical solution to smart looking fender ropes that are professionally pre spliced. Available in black 32-plaited Polyester.











# LIROS Handy-Anchor 01320/01322

Anchor line with lead weight built into the last 10 meters, can be used without chain, especially easy to handle, very easy to stow, stainless steel thimble spliced and whipped into every 30 or 40 m length.

100% Polyester, chafe and UV-resistant, white with blue colour coding and LIROS blue/gold mark yarn. Available in a nice blue LIROS kitbag.

- usable without chain
- especially easy to handle
- very easy to stow
- available in an attractive kitbag

#### **Colour 01320**



229 White-Blue

**Colour 01322** 



228 White Cover
Polyester
Core
Polyester, lead

Construction 20-plaited

	Ø mm	Breaking strength kg	Length m	Weight kg
01320	10	1500	20	3.4
	10	1500	30	4.15
	10	1500	40	4.9
	12	2200	20	4.1
	12	2200	30	5.0
	12	2200	40	6.3
	14	3100	40	8.5
	16	4000	40	10.8

All lengths with 10 m lead core.

12	1500	30	7.9
12	1500	40	10.5
12	1500	50	13.1
14	2200	40	11.0
14	2200	50	14.2
16	3100	40	12.9
16	3100	50	16.1
	12 12 14 14 16	12 1500 12 1500 14 2200 14 2200 16 3100	12     1500     40       12     1500     50       14     2200     40       14     2200     50       16     3100     40

All lengths completely with lead core.

12 mm  $\pm$  14 mm fitted with 8 mm Stainless Steel thimble 16 mm fitted with 10 mm Stainless Steel thimble



# LIROS Seastar Classic

#### 00173

High quality rope in natural colour for tradional yachts. Available in 16-plait double braid.

- very easy to handle and easy to grip
- ideal for use in many applications for classic yachts
- with Dyneema® core for Regatta usage on demand (ref. 02520)

#### Colour



008 Beige

Cover Polyester matt yarn
Core Polyester plaited

**Construction** from 6 mm-10 mm 16-plaited

from 12 mm 24-plaited

Ø mm	Breaking strength kg	Length of spool m
6	520	200
8	1000	200
10	1900	200
12	2400	200
14	2900	150
16	3500	100
18	4500	100
20	5200	100



01172

## LIROS Classic 3-strand

High quality rope in natural colour for traditional yachts. 3-strand Polyester with good abrasion characteristics.

- very easy to handle and easy to grip
- ideal for all classic applications
- premium visual appearance

#### Colours



008 Beige 228 White

Material Polyester matt yarn

Construction 3-strand

Breaking strength kg	Length of spool m
350	200
730	200
1100	200
1300	200
1700	150
2200	100
3500	100
4900	100
	350 730 1100 1300 1700 2200 3500



# LIROS ClassTech

#### 01127

LIROS ClassTech is available in large diameters for super yacht classic sailors. It's light weight makes it suitable even for larger classic yachts. LIROS ClassTech is available in a lot of different sizes for all ambitious sailors on classic boats.

- Stretch characteristics >8%
- long lasting and UV-resistant
- resistant to acids and alkalis
- high abrasion resistance
- very easy to splice
- floats
- available in 220m coils only

#### Colour



037 Hemp

Material Highly resilient PP-Synthetic fibre

Construction 3-strand

Ø mm	Breaking strength kg	Length of coil m
10	1450	220
12	2100	220
14	2800	220
16	3580	220
18	4630	220
20	5560	220
22	6750	220
24	7560	220
26	9000	220
28	10200	220
32	11100	220

# LIROS Historic 3 Strand

01140

Appearance like hemp, however it is softer and has better weather resistance, carries heavier loads while quality stays the same, UV-resistant.

- easy to splice
- soft and easy to grip
- classical appearance
- very weather resistant
- Historic Rope plaited see page 65
- floats

#### Colour



037 Hemp

Material

Spun Polypropylene

Construction

3-strand

Ø	Breaking	U
mm	strength kg	spool m
3	60	500
4	120	500
5	190	250
6	320	200
8	500	200
10	800	200
12	1100	200
14	1500	150
16	2000	100
18	2400	100
20	3000	100
22	3650	100
24	4800	100
26	5400	100
28	6000	100
30	6400	50 (Coil)



Ø mm	Breaking strength kg	J
2	270	250
2.5	390	250
3	550	250
4	800	250
5	1100	250

#### Colour



Cover Special polyester

high twisted

2–3 mm 16-plaited from 4 mm 1:1-plaited

Core Covered Dyneema® SK78

# LIROS Magic Race

Very low stretch rope with good grip in clutches. Solid construction and excellent abrasion resistance.

- Stretch characteristics < 1.5%
- very UV resistant
- extreme low stretch







# LIROS AntiTorsion 01442

The LIROS anti torque rope for replacing certain high load luff ropes.

- Stretch characteristics < 1%
- Extremely stiff, non kinking construction with monofilament inner cover
- Extremely low stretch and high break load caused by Aramide core
- Anti torque and extremely stiff, not spliceable.

Ø mm	Breaking strength kg	Length of spool m
6	1300	100
8	3000	100
10.5	4000	100
13	5000	100
16.5	8000	100

#### Cover

Polyester 16-plaited

#### Core

Aramide with monofilament cover

#### Colour



Ø mm	Breaking strength kg	Length of spool m
2	350	100
3	1100	100
4	1400	100
5	2800	100
6	4200	100
8	7200	100

#### Colour



# LIROS V-Plus 04007

A new 100% Vectran single core rope for high load applications were minimum stretch and zero creep are essential. An innovative UV coating protects this rope from UV degradation and enhances the abrasion resistance.

- Stretch characteristics < 1%
- easy to splice
- compact construction ensures shape retention under extreme loads

**Material** 100% Vectran® 12-plaited with LIROS Impregnation





## LIROS Leach Line 01046

Compact braided, shape retaining leach line for sailmakers.

- round (therefore easy to process)
- compact
- low-shrinking

#### Colour



228 White

#### Cover

Polyester low-shrinking 16-plaited

#### Core

Polyester low-shrinking

Ø mm	Length of spool m
2	250
2.5	250
3	250
3.5	250
4	250
4.5	250
5	250
5.5	250
6	200
7	200
8	200

# LIROS Lazy Jack 01531

A new development with a hollow construction designed for quick and easy splicing. Developed for use as a Lazy Jack Rope available in 2 diameters: 4–5 mm and 6–7 mm.

- Compact and lightweight
- easy to splice
- extremely UV resistant
- easy handling

Ø	Breaking	Length of
mm	strength kg	spool m

4–5	500	200
6–7	1100	200

#### Colour



205 Silver

#### **M**aterial

Polyester spin-dyed

#### Construction

12-plaited



# LIROS Dyneema® Webbing 00186

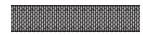
High tech webbing with very high strength. Multi purpose – for use on boats as well as sails and other high tenacity applications.

- lowest stretch
- high drag force
- very abrasion resistant
- no water absorption

Ø	Breaking	Length of
mm	strength kg	spool m

25 1800 50

#### Colour



228 White

Material Dyneema® woven







Ideal for sailmakers. Round construction is compact and delivers minimum shrinkage.

• minimum shrinkage

Ø

mm

5

6

7

8

9

10

11

12

Length of

spool m

250

200

200

200

200

200

200

200

• good dimensional stability

Ø mm	Breaking strength kg	U
2	95	100
3	185	100
4	320	100
5	680	100
6	940	100

#### Material

Polyester

## Core

Polyester

#### Construction

2–5 mm 16-plaited 6 mm 1:1-plaited

#### Colour



236 White-Red

Section 1	
	1
	775
AD - 100	

# LIROS Bolt Rope 00124

High quality bolt rope. High twist 3-strand Polyester with low shrink properties in white with black fleck.

- round
- compact
- low-shrinking

#### Colour



Material Polyester low-shrinking

Construction 3-strand

# LIROS Optisail

#### 02056

The perfect new lacing line for Optis. Very low stretch, lightweight, with the ultimate in knot holding. Abrasion-resistant cover construction, with specially developed core of Dyneema® SK78.

- Stretch characteristics < 1.5%
- Optimized knot tenacity
- LIROS-Heat-Stretch-System
- Available on 100m reels or in Point-of-Sale carton with 20m reels

Cover Polyester

**Core** Dyneema® SK78 **Construction** 16-plaited

	Ø mm	Breaking strength kg	Length of spool m
02056-0120	1.2	120	100
02056-2020	1 9	120	20v20/Ktn

#### Colour



199 Black-Red









# LIROS Magic Speed in Sales Package 01501

Very abrasion-resistant cover with excellent holding abilities in cleats, Polyester core provides low stretch. For use as dinghy halyards, and con-

· very resistant, low stretching

Ref.	Ø	Number of
	mm	spools
01501-0002	2	10 x 30 m
01501-0003	3	10 x 15 m

Cover Polyester Core Polyester

Construction 16-plaited with core

# Colours



412 Red-Pink-Blue 413 Blue-Pink 414 Neon Yellow-Pink-Blue 415 White Pink-Blue 408 Black Neon Yellow-Blue



# LIROS D-Pro in point of sale carton 01505

High Tech cords available in 2-4 mm. Essential accessory for all yachtsmen - multipurpose use. Very high breaking strength 2 mm - 410 daN, 3 mm - 950 daN and 4 mm - 1.300 daN.

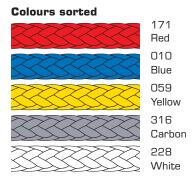
- Excellent UV and abrasion resistance
- easy to splice, assorted colours

Ref.	Ø mm	Number of spools
01505-0002	2	10 x 30 m
01505-0003	3	10 x 15 m
01505-0004	4	5 x 10 m

Material Dyneema SK78,

Pre stretched and coated

Construction 12-plaited







#### LIROS Polyester-**Braided Line in Sales Package** 01040

Made of Polyester, highly resilient

- · does not stiffen up
- · very UV-resistant
- flexible

Ref.	Ø	Number of	
	mm	spools	
01040-0002	2	10 x 30 m	
01040-0003	3	10 x 15 m	
01040-0004	1	5 v 10 m	

**Material** Polyester Construction 8-plaited

#### Colours sorted



Red 010 Blue 059 Yellow 086 Green 188 Black

228 White



## Uninsited Rope Solutions

#### Whipping Twine/Sewing thread Spools

	Ø mm	Number of spools	Con- struction	Finish	Colour
00001	1.0	5 x 30 m	plaited	unwaxed	228 White
	1.5	5 x 20 m	plaited	unwaxed	228 White
	1.5	5 x 20 m	plaited	intensively waxed	228 White
	1.2	5 x 30 m	twisted	waxed	228 White
00006	0.5	20 x 100 m	twisted	waxed	228 White
00007	1.2	20 x 30 m	twisted	waxed	228 White
80000	1.5	20 x 20 m	plaited	intensively waxed	228 White
00011	1.0	20 x 30 m	plaited	intensively waxed	228 White
00012	1.5	20 x 20 m	plaited	unwaxed	054 Multicoloured*
00013	1.5	20 x 20 m	plaited	intensively waxed	054 Multicoloured*
LIROS Sewing 00099-0400			Polyester		228 White
LIROS Dyneema® waxed whipping twine					

LIROS Dyneema® waxed whipping twine 00099-0830 1.2 20x30 m plaited

All whipping twines available in 500m bulk spools.

NEW

316 Carbon



#### Colour



037 Hemp

Material Polypropylene cording twine

Construction 3-strand



Hemp performance, but softer, more weather resistant, high load performance. Spun Polypropylene.

- · easy to grip
- soft
- very weather resistant

Ø	Number of
mm	spools

3 5 x 15 m



waxed

## LIROS Trim Line in Sales Package

01522

Braided Polyester cords with core, assorted neon colours in LIROS sales carton.

- all-purpose
- popular self-service article
- round construction

Coloursmixed coloursCoverPolyester

Construction 16-plaited with core

Ref.	Ø	Number of
	mm	spools

**01522-0163** 3 10 x 20 m

<sup>\*</sup> Coulored sorted: Black, Blue, Green, Red, Yellow





Highly elastic rubber with excellent stretch characteristics, braided cover made of abrasion resistant and highly resilient Polyester. White with guarantee yarn in blue/gold or fullcoloured black.

- Individual adaptation concerning colours
- · round, abrasion resistant construction
- for industrial applications available in bulk quantities.

**Cover** Polyester

**Core** high quality latex rubber white **Construction** 3–8 mm 16-plaited

10–14 mm 24-plaited

228 White	
188 Black	
171 Red	NEW
086 Green	NEW
010 Blue	NEW
059 Yellow	NEW
	White 188 Black 171 Red 086 Green 010 Blue

Ø	Length of
mm	spool m
3	100
4	100
5	100
6	100
7	100
8	100
10	100
12	100
14	100



#### LIROS Guard Rail Netting 02040-0001-228

Top-quality guard-rail netting, knotted with 2mm polyester braided lines, white with reinforced edging.

- mesh width approx. 45 mm
- width of net 60 cm
- rolls of 50 m lengths
- · Colour: 228 White

## LIROS Sail Ties

Mainsail webbing ties with a strong sewn eye. Very easy to use and self construction prevents chafe on the sail.

- Available as 5 pieces in a net storage bag
- Length: 2 metres each





#### LIROS Quick-Clip 01905/01907

Universal adjuster for shock cord. Available singly or 5 pieces per PE kitbag.

	Ø mm	Length cm
01905-4050	4	50
01905-5070	5	70
01907-8100	8	100
01907-8140	8	140

#### LIROS Nylon-Hook 01294-0400-228

For use on elastic lines, 4 mm Ø 10 pieces per PE kitbag.



#### LIROS Snap hooks for shock cord 01194/01196/01198

For use on elastic lines,  $4-8~\text{mm}~\varnothing$  5 pieces per PE kitbag.

	Ø in mm
01194-0400-228	4
01196-0600-228	6
01198-0800-228	8



# O1901 with hook

## O1902 with cone

#### LIROS Elastic Strops 01901/01902

High quality Rubber shock cord strops with Polyester cover braid and high tenacity hook for a multitude of applications. Available in packs of 5 pieces. Ideal to climb promotion or textile banners.

	Ø	Length
	mm	cm
01901-0415-228	4	15
01902-0430-228	4	30
01901-0435-228	4	35
01902-0440-228	4	40
01901-0455-228	4	55
01902-0450-228	4	50
01901-0475-228	4	75
01902-0460-228	4	60



#### **LIROS Trim Line Neon LIROS Trim Line**

01522 01051

Low stretch quality, good grip, very good grip in cleats. Compact, round and abrasion resistant plait.

- Stretch characteristics < 5%
- very UV-resistant
- low stretch quality and good grip
- line for windsurfing tried for a long time

Polyester

#### Colours 01522

Material

Construction



416 Violett-Neon Yellow 417 Neon Yellow-Pink

16-plaited with twisted core

#### Colours 01051

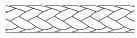
229 White-Blue
188 Black
195 Black-

#### **LIROS Multi Purpose** Line 10070/10072

For camping, houshold and outdoor. Pre packed in LIROS poly bag.

- attractive self-service article
- UV-resistant
- useful in many outdoor-fields

#### **Colour 10070**



228 White

#### Colours 10072



Ref.	Ø mm	Length of winder m
10070-0230	3	20
10070-0330	3	30
10070-0530	3	50
10070-0240	4	20
10070-0340	4	30
10070-0250	5	20
10070-0350	5	30

**Material** Polypropylene multifilament Construction 8-plaited



Ø mm	Breaking strength kg	U
4	320	100
5	610	100
6	800	100

#### 01051

Ø mm	Breaking strength kg	J
3	200	100
4	320	100
4.5	500	100
5	610	100
6	800	100



#### **LIROS DC**

High-end kiteline, made of 100% Dyneema®. LIROS DC is perfect for flying line or bridle. Highest load capacity and extremely reduced diameter delivers best kite performance. Very good stretch characteristics, even after heavy loads, for precise control of the kite. LIROS DC — Kiting without compromise!

· easy to splice

Colours

- · outstanding, precise control of kite
- controlled manoeuvres
- · low stretch even after high loading
- LIROS-Heat-Stretch-System

Ref.	app. Ø mm	Breaking strength kç	Length* of g spool m
DC 000-0040	0.50	40	1000
DC 000-0060	0.60	60	1000
DC 000-0100	0.80	100	1000
DC 000-0120	0.85	120	1000
DC 000-0160	1.10	160	1000
DC 000-0200	1.60	200	1000
DC 000-0300	1.80	300	1000
DC 000-0500	2.05	500	1000

 $<sup>^{*}</sup>$  LIROS Flightport lines may come with up to 7 pieces on a reel, but each length will exceed 25 m.

#### 171 Red 010 Blue

059

Yellow

086 Green 228 White 316 Carbongrey

Material Dyneema® SK78, pre-stretched, coated



Length of

#### LIROS Magic-High-Trimm

#### 02080

Pre-stretched, very low stretch high-load adjust line, its special 8-plait cover out of highly resilient Polyester assures a good handling and excellent grip in cleats.

- $\bullet \ Stretch \ characteristics < 1.5\%$
- high load line
- extremely low stretch quality
- round, hard and very abrasion resistent plait
- LIROS-Heat-Stretch-System

	-	
-0	lynoom	MI)



	Di caking	Longon or	
mm	strength kg	spool m	
4	800	250	
5	1100	250	
6	2200	200	

Breaking

#### Cover

 $\alpha$ 

Polyester 8-plaited

#### Core

Dyneema® SK78

#### Colours







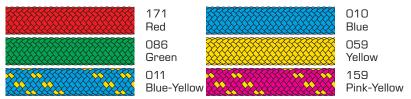
#### **LIROS DSL**

High-tech Dyneema® core fibre, combined with high-quality Polyester cover braid, guarantees long-lasting, high-altitude lines. Compact and smooth Polyester cover offers optimal line handling before launch. Polyester cover also protects the core from dust.

- Optimized reset capabilities
- Low stretch characteristics
- Easy line identification
- · Long life span
- LIROS-Heat-Stretch-System

	Ref.	app. Ø mm	Breaking L strength kg	-
NEW	DSL 00-0025	0.90	25	1000
	DSL 00-0035	0.95	35	1000
	DSL 00-0070	0.95	70	1000
	DSL 00-0140	1.25	140	1000
	DSL 00-0350	2.00	350	1000
	DSL 00-0600	2.40	600	500

#### Colours





Special colours on demand

Cover Polyester

Core Dyneema® SK78 heat set

#### LIROS LTC

LIROS LTC – The competition line with top aerodynamic characteristics and two-way coating for long lasting performance.

Our unique LTC coating of each single fibre delivers load capacity after bending, UV stability and excellent handling properties.



LIROS nanocoating system for high-tech matt look to the surface!

LIROS LTC is the perfect line for competitive and advanced-intermediate gliders.

- Minimum stretch
- Minimum creep characteristics
- Double Nanocoating
- High Performance
- LIROS-Heat-Stretch-System

Material 100% Technora®, 12-plaited

	Ref.	app. Breaking Length* o Ø mm strength kg spool m		٠
	LTC 00-0045	0.55	45	1000
	LTC 00-0065	0.65	65	1000
	LTC 00-0080	0.70	80	1000
	LTC 00-0120	1.10	120	1000
	LTC 00-0160	1.20	160	1000
	LTC 00-0200	1.30	200	1000
NEW	LTC 00-0350	1.75	350	500
MEA	LTC 00-0400	1.90	400	500







#### **LIROS PPSL**

LIROS PPSL is lightweight, with minimum creep and unique load capacities, even after tough longterm use. PPSL is the reliable nocompromise solution.

- Optimized reset capabilities
- Low stretch characteristics
- Top performance, long life-span
- No loss of load capacity after bending
- LIROS-Heat-Stretch-System

Ref.	app. Ø mm	Breaking strength kg	0
PPSL 0-0120	1.15	120	1000
PPSL 0-0160	1.40	160	1000
PPSL 0-0200	1.42	200	1000
PPSL 0-0275	1.90	275	1000
PPSL 0-0350	2.25	350	500

Cover Polyester
Core Dyneema® SK78
heat set

Colours

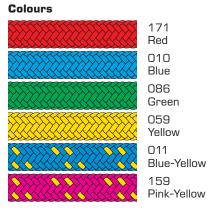
171 Red

010 Blue

059 Yellow

011 Blue-Yellow





Special colours on demand

#### LIROS HSS

The second second	And the Real Property lies		

Ref.	app.	Breaking	Length* of
	Ø mm	strength kg	g spool m
NTSL 00-0120	1.25	120	1000
NTSL 00-0160	1.40	160	1000
NTSL 00-0200	1.90	200	1000
NTSL 00-0250	2.15	250	1000
NTSL 00-0350	2.25	350	1000

#### LIROS HSS

#### Paragliding

Paragliding line with excellent restistance to bending fatigue. Also available as TSL series for best performance.

- · Lowest stretch and best reset results
- Optimized diameter at constant breaking strength
- Best bending fatigue

**LIROS NTSL** 

• LIROS Heat-Stretch-System

**Cover** Polyester **Core** Technora®

#### Special colours on demand

#### **LIROS TSL**

The TSL series is the covered paragliding line with the best diameter to load capacity ratio. Very good aerodynamics, due to optimized construction. Minimum stretch and creep characteristics, due to high tenacity Technora fibers and LIROS Heat-Stretch-System. The braided water-repellent cover guarantees easy handling before launch.

- Optimized diameter at equal breaking strength
- Lowest creep and stretch
- Good resistance after bending
- LIROS Heat-Stretch-System

Colours
171 Red
010 Blue
059 Yellow
O11 Blue-Yellow

Ref.	app. Ø mm	Breaking strength kg	Length* of g spool m
TSL 00-0115	1.25	115	1000
TSL 00-0140	1.30	140	1000
TSL 00-0190	1.55	190	1000
TSL 00-0220	1.65	220	1000
TSL 00-0280	1.80	280	1000
TSL 00-0380	2.20	380	1000
TSL 00-0500	2.37	500	500

Cover Polyester
Core Technora®

LIROS HSS

Special colours on demand



#### **LIROS DFL**

LIROS DFL is a very flexible and low stretching frame line. Very good knot holding and UV resistance. Developed especially for steering and brake lines. LIROS DFL has very good behavior in high dynamic load ranges, especially through deflection by turning blocks.

- Good knot tenacity
- Extremely abrasion resistant
- · Light weight
- · Very flexible

Cover Polyester

Core Dyneema® SK78

Ref.	app. Ø mm s	Breaking trength ko	Length* of g spool m
DFL 00-0115	1.40	115	1000
DFLP 0-0232	1.90	200	500
DFLS 0-0200	2.70	200	500
DFL 00-0350	2.70	350	500

#### Colours

171 Red
150 Orange
059 Yellow



#### **LIROS SL**

Very long lasting and lightweight towing line for paragliding and winch towing. LIROS SL delivers a high level of safety. The SL500 is especially suitable for Tandem towing. The extremely thin diameter increases the capacity on the winch drum.

- Easy to splice
- Enormous weight reduction
- · Low diameter increases winch capacity
- No water absorption
- Good resistance to UV

Col	0	u	r
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Ref.	app. Ø mm	Breaking strength kg	Length* of g spool m
SL 000-0375	2.5	375	1000
SL 000-0500	3.2	500	1000

Material	Dyneema® SK78	
Construction	SL375 12-plaited	
	SI 500 8-plaited	



#### **LIROS Safety Line**

LIROS Safety Line was specially engineered for safety equipment applications, and is optimized to compensate for stretch and shock loading. Developed to deliver the ultimate in safety.

- Stretch under load < 25%
- Excellent damping characteristics
- Easy to splice

Ref.	app. Ø mm	Breaking Length* of strength kg spool m

10150-0400	4	110	250/1000
10150-0450	4.5	150	250/1000

Material high tenacity Polyamide

#### Colour







#### **LIROS Max Load Black**

#### 02025

The full spectrum black cover is completely invisible in dark environments. High-quality, very low-stretch rope. LIROS Max Load Black is very durable and abrasion resistant. Very technical cover braid with a special core of coated Dyneema® SK78.

- Stretch characteristics < 1.5%
- · High loading capacity, lightweight and durable
- Extremely abrasion resistant due to special Polyester cover
- LIROS-Heat-Stretch-System

#### Colour



188 Black



**Cover** Special polyester high twisted

**Core** Dyneema® SK78 with additional cover plait

**Construction** 2–3 mm 16-plaited

from 4 mm 1:1-plaited





Ø	Breaking strength kg	Weight kg/100 m	Length of spool m
111111	Su engur kg	kg/ 100111	3p001111
2	270	0.3	250
2.5	390	0.5	250
3	550	0.7	250
4	800	1.1	250
5	1100	1.5	250
6	2500	2.5	200
8	3800	4.2	200
10	5000	6.1	200
12	7200	8.8	200
14	9500	13.2	150
16	12800	15.0	100
18	15300	18.0	100
20	18500	23.6	100
22	20000	28.2	100
24	23000	32.1	100

#### LIROS Soft Black

00174

High-quality, easy to handle, non-slip matt Polyester rope with a flexible cover. The matt black cover is completely invisible in dark environments.

- Stretch characteristics < 6%
- Good knot tenacity
- Soft grip, very easy to handle

#### Colour



188 Black



 12
 2400

 14
 2900

 16
 3500

Breaking

300

520

1000

1900

strength kg spool m

Length of

250

200

200

200

200

150

100

Ø

mm

5

6

8

10

**Cover** Polyester matt yarn coloured

**Core** Polyester plaited

Construction Ø 5 mm 8-plaited

Ø 6 bis 10 mm 16-plaited over Ø 12 mm 24-plaited



#### **LIROS Poly Black**

#### 01076

Affordable, extremely lightweight rope for theatrical and cable applications. Very easy-to-handle design of deep black polypropylene multifilament. Antistatic.

- Stretch characteristics < 12%
- · Very lightweight
- Easy to handle
- Floats
- UV-stabilized
- Affordable

#### Colour



188 Black



Material Polypropylene Multifilament

Construction 8-plaited

Ø mm	Breaking strength kg	Length of spool m
1.5	38	500 (X-Spool)
2.0	70	500 (X-Spool)
3.0	140	500 (X-Spool)
4.0	280	500 (X-Spool)
5.0	390	250
6.0	550	200
8.0	900	200
10.0	1230	200
12.0	1700	200
14.0	2000	150
16.0	3700	100

#### LIROS D-Pro Black

#### 01508

Optimized breaking strength and stretch characteristics, guaranteed. LIROS Heat Stretch System optimizes stretch and abrasion resistance. Lowest weight, easy-to-splice construction, making LIROS D-Pro Black ideal for various applications in show rigging. Ideal as replacement of steel wire. Antistatic.

- Stretch characteristics < 1%
- Matt black surface
- Non reflective
- · Very high load capacity at minimum diameter and weight
- · First choice on applications with extreme loads
- Easy to splice
- Best UV resistance
- LIROS Heat-Stretch-System

#### Colour



188 Black







Ø mm	Breaking strength kg	Weight kg/100 m	Length of spool m
1	195	0.09	100
1.5	230	0.13	100
2	410	0.18	100
2.5	580	0.35	100
3	950	0.46	100
4	1300	0.70	100
5	2600	1.30	100
6	4300	2.30	100
8	5300	3.50	100
9	7500	4.90	100
10	9000	6.00	100
12	11900	7.20	100
14	14500	9.50	100
16	19000	13.10	100

Material Construction Dyneema® SK78 coated

12-plaited,

pre-stretched and coated



#### LIROS Multi Black

#### 01037

Black, high-tenacity Polyester braiding. High grip surface. Multiple application rope.

• Stretch characteristics < 10%

Flexible

Won't stiffen

· High UV resistance

Abrasion resistant

**Material** high tenacity Polyester 16-plaited with core Construction



188 Black



Flame-resistant version also available, meets DIN 4102 fire protection class B1 standards. (Load capacities differ from ref. 01037).



-	1	-	

Ø

mm

1.0

2.0

3.0

4.0

5.0

6.0

8.0

10.0

12.0

14.0

16.0

Breaking

strength kg

35

90

150

280

450

640

1100

1700

2200

3000

3900

Length of

spool m

500 (X-Spool)

500 (X-Spool)

500 (X-Spool)

500 (X-Spool)

250

200

200

200

200

150

100

Colour

#### **LIROS V-Plus** 04007

Extremely low initial stretch, no creep. For use at high continuous loads. Rigorous UV coating optimized for compactness and abrasion resistance.

Heat resistance up to 200°C.

- Stretch characteristics < 1%
  - Easy to splice
  - Dimensionally stable and heat resistant

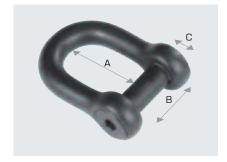
#### Colour



188 Black

Material 100% Vectran® 12-plaited with LIROS LCS Coating

Ø mm	Breaking strength kg	Length of spool m	
2	350	100	
3	1100	100	
4	1400	100	
5	2800	100	
6	4200	100	
8	7200	100	



Standard shackle, Art. 1304B



Carabiner Hook, Art. 2325B



Snap shackle, Art. 2471B

#### **LIROS Shackle Black**

Matt coated black shackles. 3 different styles, completely non-reflective.



	Standard shackle Art. 1304B	Carabiner Hook Art. 2325B	Snap shackle Art. 2471B
Weight	53 g	73 g	42 g
Working load	960 kg	960 kg	960 kg
Breaking load	2700 kg	1500 kg	2000 kg
Measurements A/B	26 mm/16 mm	15 mm/11 mm	16 mm/10 mm
Diameter C	8 mm	8 mm	_
Colour	Black	Black	Black



#### **LIROS Sky** 01002

Compact, easy-running, ultra-light weight single rope. Offers excellent strength for experienced climbers. Manufactured according to EN 892. CE approved.

- Impact Force (with 80kg) 7.3 kN
- Unique LIROS DryRope System for lower weight in wet conditions
- Number of falls: 10 Weight (g/m): 62
- Extremely resistant against sharp edges
- · Black middle marking

Ref.	Ø mm	Length m
01002-0970	9.7	200
01002-0971	9.7	60
01002-0972	9.7	70

Material high tenacity Polyamide

LIROS DRS



#### Colours



Single rope: suitable for single-line climbing, providing optimal 'rope drag' control. For all difficult straight-line climbs, or easy routes with no belaying/rappelling points, requiring a single-line approach. A favorite among sport climbers.

#### **LIROS Sky Duo**

010

LIROS dynamic 'half' rope for double rope applications. Lowest weight for a vanced/extreme climbers. Manufactured according to EN 892. CE approved.

- Impact Force (with 55kg on one rope) 5.1 kN
- Comes with unique LIROS DryRope System
- Number of falls: 18 Weight (g/m): 48
- · Extremely resistant against sharp edges
- · Black middle marking

001	Ref.	Ø
ad-		mm
uu		

01001-0860

01001-0861	8.6	50
01001-0862	8.6	60

8.6

Length

m

200

Material high tenacity Polyamide

LIROS DRS



#### Colours



Double rope: For double line systems, with two climbers tied to one end of both strands (or at the mid-point, for the leader on a bicolour dual rope system). On solid anchor points (bolts, embedded anchors, etc.) avoid drag by using extenders. On uncertain anchors (ice screws, pitons, cams, etc.) clip alternate strands to lower the impact force. Great for mountain touring or for long climbing routes, where you want to rappel. Also recommended for securing unsafe points (e.g., while ice climbing).

#### LIROS Rock

New from LIROS. Versatile, affordable single rope for classic climbers. Manufactured according to EN 892. CE approved.

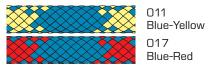
- Impact Force (with 80 kg) 8 kN
- Number of falls: 8 Weight (g/m): 65
- Extremely resistant against sharp edges
- Black middle marking

Ref.	Ø	Length
	mm	m
01003-1020	10.2	200
01003-1021	10.2	60
01003-1022	10.2	70

Material high tenacity Polyamide



#### Colours



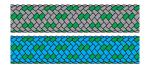
**Single rope:** suitable for single-line climbing, providing optimal 'rope drag' control. For all difficult straight-line climbs, or easy routes with no belaying/rappelling points, requiring a single-line approach. A favorite among sport climbers.

#### LIROS Wall 01004

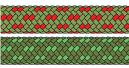
Versatile LIROS single rope, specially developed for Indoor climbing. The compact Polyamide cover ensures superior abrasion characteristics and unparalleled protection against sharp edges. LIROS Wall offers superior lifespan, compared to conventional climbing ropes. Perfect core-cover connection to avoid "sock effect". Manufactured according to EN 892. CE approved.

- Impact Force (with 80kg) 8.4 kN
- Number of falls: 8, minimal cover-core slippage
- Weight (g/m): 71, highly resistant against sharp edges
- · Retains flexibility throughout its lifetime

#### Colours



081 Grey-Green 015 Blue-Green



328 Green-Red 503 Olive-Hellgrün

01003



Ref.

01004-1050 10.5

Ø

mm

Material high tenacity Polyamide

Length

m

200



#### **LIROS Accessory Cord**

#### 01024

LIROS Accessory cord provides high abrasion resistance to secure your equipment. Multifunction line, suited for nearly all outdoor and climbing purposes. Exceptionally long-lasting construction, with good knot hold.

· Very flexible, high abrasion resistance

#### **Colours**



Ø mm	Breaking strength kg	Length of spool m
3	225	100
4	370	100
5	550	100
6	730	100
8	1600	100

Material high tenacity Polyamide Construction 16-plaited



#### LIROS Semi-static rope

#### 00099-1116

The LIROS semi-static rope is a strong and durable rope for life safety/rescue applications, spelunking, or rope access/scaffolding. The unique abrasion-resistant cover protects the core from external weather conditions and dirt. The exclusive LIROS cover-core construction design, with two specially-braided centre cords, virtually eliminates the "sock effect." Manufactured according to EN 1891.

- Durable construction, high abrasion resistance
- Easy and comfortable to handle
- Very low cover-core slippage
- Also available in individual lengths with stitched eye.

Ø	Breaking	Length
mm	strength kg	m
10.5	3.300	On demand

**Material** high tenacity Polyamide **Construction** 1:1-plaited

LIROS HSS



#### Colour







#### LIROS Safe White

#### 01011

"Standards-ready" semi-static rope for Professional Protective Equipment (PPE). Developed by LIROS for all industrial applications. Minimum covercore slippage due to double braid construction and LIROS Heat-Stretch-System.

#### Colour



230 White-Blue-Yellow



Ø mm	Breaking strength kg	Weight kg/100 m	Length of spool m
10	2700	6.2	200
11	3500	7.9	200
12	4000	8.2	200
14	4800	10.2	200

Coverhigh tenacity PolyamideCorehigh tenacity Polyamide

Construction 32-plaited

LIROS HSS



#### **LIROS Safe Blue**

#### 01012

"Standards-ready" semi-static rope for Professional Protective Equipment (PPE) and for specialized industrial applications such as rappelling in high abrasion environments. Minimal cover-core slippage due to double braid construction and LIROS Heat-Stretch-System.

#### Colour



O13 Blue-Yellow-Red

Ø	Breaking	Weight	Length of
mm	strength kg		
9	2400	4.6	200

Cover high tenacity Polyamide
Core high tenacity Polyamide

Construction 1:1-plaited







#### LIROS D-Pro XTR

#### 01481

LIROS D-Pro XTR guarantees optimized breaking strength and stretch values through our LIROS Heat Stretch System. Unbeatable abrasion resistance, low weight and easy splicing provide for shorter assembly times and offer new solutions for forestry and arborist applications. Ideal for replacement of steel wire in a wide variety of settings. Carrying heavy steel ropes now belongs to the past!

- Stretch characteristics < 1%
- · Very high break load at minimum diameter and minimum weight
- 8x lighter than steel, first choice for applications with extreme loads
- Excellent splicing ability, can be protected with additional cover
- Very economical and ergonomical for professional foresters
- High UV and abrasion resistance
- Water-repellent coating
- LIROS Heat-Stretch-System



Ø mm	Breaking strength kg	Length of spool m
8	6800	100 / on demand
10	10500	100 / on demand
12	14500	100 / on demand
14	17500	100 / on demand
16	22000	100 / on demand
18	26000	100 / on demand
20	32000	100 / on demand
22	38000	100 / on demand
24	44000	100 / on demand

#### **Material** Construction

Dyneema® SK78 coated

12-plaited.

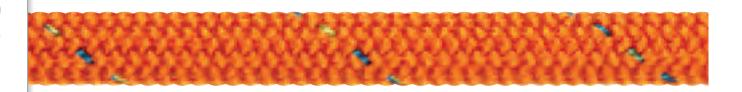
heat set and coated

#### Colour



316 Carbongrey





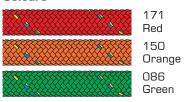
#### **LIROS Racer**

#### 02001

Proven durability of Dyneema® rope, with high breaking load and minimum stretch. With a specially designed 32-plait cover and a coated Dyneema® fiber in the core, perfect for all work where low stretch and high tensile strength are a must. Great on winches, perfect for pulling trees.

- Stretch characteristics < 1.5%
- · High breaking strength
- · Very good on winches
- LIROS Heat-Stretch-System

_	_	
Co	lou	re







Ø mm	Breaking strength kg	Weight kg/100 m	Length of spool m
6	2500	2.7	200
8	3800	5.1	200
10	5000	7.1	200
12	7200	8.5	200
14	9500	11.5	150
16	12600	14.4	100
18	15300	17.9	100
20	18500	23.7	100
22	20000	28.5	100

Cover Polyester high twisted Core Dyneema® SK78 with additional inner cover plait

Construction 6-8 mm 24-plaited

from 10 mm 32-plaited



#### **LIROS Lowering Rope**

Specifically designed for Tree Surgeons. Great handling rope in cover/core construction made of 100% Polyester. Excellent strength, will not harden. Special LIROS LCS Coating provides extreme abrasion resistance and improves handling/performance when working in wet conditions.

- Easy to splice
- · Very supple and UV resistant
- Durable
- Will not stiffen

#### **Colours**

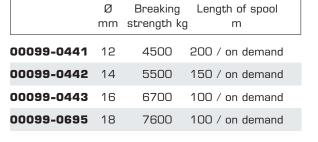


**12 mm** 010 Blue **16 mm** 171 Red



14 mm 059 Yellow 18 mm 188 Black

LIROS LCS
INNUMBELIROS Coating System



**Cover** high twisted Polyester, 20-plaited

Core Polyester high tenacity



#### **LIROS Prussik**

#### 00099-1389

Higher breaking load - LIROS Prussik Rope is specially manufactured for arboriculture where resistance against heat and friction is necessary. A mixture of heat-resistant hybrid fibers combined with high tenacity Polyester provides this rope with great durability, even under high friction and heat. Great usability working with knots.

- Excellent abrasion resistance at high temperature
- Hybrid fibers prevents cover melting
- Perfect cover-core connection
- · Very flexible in use
- Available customized with sewed eye at both ends.



Ø	Breaking	Length of
mm	strength kg	spool m
8	1600	200

#### Colour



061 Yellow-Blue

Cover 50% Hybrid fibers,

50% Polyester

32-plaited

**Core** high tenacity Polyester

#### LIROS Rope Fix

#### 00104

Extremely safe — extremely easy — extremely strong. This unique LIROS invention is the best alternative to common terminals for forest winch purposes. LIROS Rope Fix has been developed with a high tenacity steel alloy, and can be left at the hook for quick rope changes. Despite its low weight, LIROS Rope Fix ensures excellent stability between hook and rope. LIROS Rope Fix has been certified by KWF (Trustees for Forestry Work Technology).

Direct hook installation, without a connecting link, reduces the risk of winch accidents. The simple connection and easy access to the LIROS Rope Fix ensure high efficiency in practical applications. Installing Rope Fix is extremely easy, simply place a properly pre-formed rope loop (without thimble) around the LIROS Rope Fix. Can be done by any user directly on-site.









Rope Fix example (rope and hook not included)

ArtNr.	<b>5 t</b> 00104-0001	<b>10 t</b> 00104-0002
Rope diameter	10 mm	12 - 16 mm
Max. load	7.5 t	11.6 t
Ø pin	16.5 mm	21.5 mm
Distance between discs	50 mm	57 mm
Ø disc	36.5 mm	53.5 mm
Hook mouth	10.5 mm	13.5 mm



#### LIROS Offroad Winch Rope 01505

Specially-designed recovery rope for extreme winch applications. Perfect replacement for wire on every kind of winch. Tear-resistant and 8x lighter than steel wire. LIROS Offroad Winch Rope offers perfect performance and safety in all recovery outdoor applications. Designed for long-term outdoor use and completely ready for use. Working end: carabiner hook, plus 2 adjustable protective shells for friction points. Winch end: Special flat terminal for fixing to winch drum, protected by 3m heat resistant monofilament braid.

- Stretch characteristics < 1%
- Extremely high breaking strength at lower diameter and weight
- · Replaces steel wire
- Easy to splice
- High UV and abrasion resistance
- LIROS-Heat-Stretch-System

#### Colour



316 Carbon







Material Dyneema® SK78
Construction 12-plaited

Ref.	Ø	Length	Winch	Rope
			size	Breaking
	mm	m	t	strength kg
01505-0801	8	30	4.3	5500
01505-0802	8	40	4.3	5500
01505-1001	10	30	4.3	8500
01505-1001	10	40	4.3	8500

Hook breaking load	t
small	1.6
large	2.5



#### LIROS D-Pro XTR

01481

LIROS Heat Stretch System guarantees optimized breaking strength and stretch characteristics. Top abrasion resistance, low weight and easy splicing provide new solutions for offroad winching or towing in outdoor terrain. Ideal for replacement of steel wire in different applications.

- Stretch characteristics < 1%
- Very high break load at minimum diameter and weight
- First choice for applications with extreme loads
- Easy to splice
- Can be protected with additional cover
- High UV and abrasion resistance
- Water-repellent
- LIROS-Heat-Stretch-System

Ø mm	Breaking strength kg	Length of spool m
8	6800	100 / on demand
10	10500	100 / on demand
12	14500	100 / on demand
14	17500	100 / on demand

Material Dyneema® SK78 coated

Construction 12-plaited, heat set and coated





#### Colour



316 Carbon

## LIROS Offroad Towing Rope 01058-2401

This towline has been designed to withstand extremely high forces during dynamic Towing (e.g., in sand). The line will allow hopelessly stuck SUVs to be dragged out of the toughest situations. Tubular webbing made of abrasion resistant Polyester. Affords excellent eye protection in severe conditions.

- Protective webbing at one end
- Up to 30% stretch at shock loads
- Highly durable, suitable for long-term use
- Floats

#### Colour





Material Polyamide

Construction 8-strand octoplait

Ref.	Ø mm	Length m	Breaking strength kg
01058-2401	24	5	9500
01058-2402	24	8	9500
01058-2403	24	12	9500



#### LIROS Offroad Shackle 00146

LIROS Offroad Shackle combines exceptional flexibility and light weight with enormous breaking load. Extremely abrasion-resistant protective shell makes this shackle a must for offroad and 4x4 applications. Very durable and massive holding power.

- Convenient and lightweight
- High breaking strength
- Locking system even when not under load
- Minimized injury risks
- 10x lighter than equivalent metal shackle



#### Colour



316 Carbon



Dynnema\*



Material Dyneema® SK78 coated

Protective cover Polyester

Ref.	Breaking strength kg	Working strength daN
00146-0077	7000	4000
00146-0078	12000	7000
00146-0079	20000	12000



#### **LIROS D-Pro XTR**

#### 01481

Highest breaking load combined with lowest stretch/low weight make this rope perfect as a replacement for steel wire in different industrial applications.

- Stretch characteristics <1%
- 8x lighter than steel wire
- First choice for applications with extreme loads
- Easy to splice
- High UV and abrasion resistance
- LIROS-Heat-Stretch-System

#### Colour



316 Carbon

Material Dyneema® SK78 coated

Construction 12-plaited, heat set and coated

Ø mm	Breaking strength kg	Length of spool m
8	6800	100 / on demand
10	10500	100 / on demand
12	14500	100 / on demand
14	17500	100 / on demand
16	22000	100 / on demand
18	26500	100 / on demand
20	32000	100 / on demand
22	38000	100 / on demand
24	44000	100 / on demand





#### LIROS Braided Dyneema® Cord "fine lines" 00148

LIROS offers a comprehensive range of braided Dyneema lines which can be used in industry as well as the nautical and aviation environments.

- Stretch characteristics < 1%
- · high breaking strength
- lowest stretch characteristics
- available up 0.04 mm to 24 mm
- custom lengths, colours and constructions on demand
- standard reel size 500-m-X-Spool

#### Colour



Material Dyneema®

As an innovative company, LIROS pioneered the use of the high tenacity fibre Dyneema®. We offer a wide range of Dyneema® plaits, tailor-made according to your needs and suitable for a wide range of technical applications in industry and sports. LIROS aim to replace wire cables with textile alternatives.

Work with the world leader, call LIROS with your technical enquiries and we'll build a better rope for you.

Ref.	Ø mm	Breaking strength k	Construction	Length of spool
00148-0006	0.6	3.8	3-plaited	500 m
00148-0014	0.14	8.0	3-plaited	500 m
00148-0018	0.18	11.5	3-plaited	500 m
00148-0024	0.24	16	6-plaited	500 m
00148-0030	0.30	25	6-plaited	500 m
00148-0040	0.40	36	6-plaited	500 m
00148-0060	0.60	60	6-plaited	500 m
00148-0080	0.80	90	8-plaited	500 m
00148-0100	1.00	115	6-plaited	500 m
00148-0150	1.5	175	8-plaited	500 m
00148-0200	2.0	200	8-plaited	500 m
00148-0250	2.5	430	12-plaited	500 m

Data sheet shows only a selection of possible diameters and constructions.







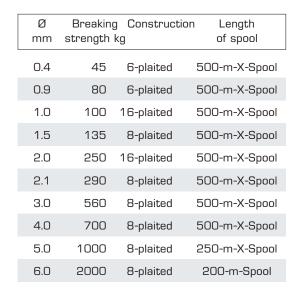
Very tensile and low stretch braided line for special use in industry and leisure activities.

- Stretch characteristics < 1.5%
- extremely heat-resistant
- · especially tensile
- low stretching, excellent for replacing steel wire
- individual adaptation concerning length
- other diameters available on request



059 Yellow

Material Aramide





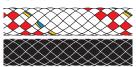
#### **LIROS Aramide**

00144

Very low stretch and high tensile Aramide line with intermediate cover and additional Polyester plait.

- Stretch characteristics < 1.5%
- · especially tensile
- extremely low stretch quality
- optimised UV-resistance through Polyester cover

#### Colours



236 White-Red 188 Black

**Cover** up to 2.5 mm from 3.5 mm

Polyester 16-plaited Polyester 1:1-plaited

Core Aramide

Ø mm	Breaking strength kg	Ü
2	170	500
2.5	260	500
3.5	500	500
5	800	250
6	1100	200
8	2000	200
10	2600	200
12	3600	200
14	5200	150



8-plaited 16-plaited

## LIROS Polyester-Braided Cords and Lines 01040/01038

Polyester, high tenacity.

- Stretch characteristics < 10%
- does not stiffen up
- very UV-resistant
- flexible
- abrasion resistant
- individual lengths possible

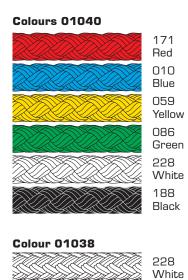
#### **Material**

Polyester high tenacity

Construction 01040 8-plaited

**Construction 01038** 

16-plaited



	Ø mm	Breaking strength kg	Length of spool m
01040/01038	1.0	35	500 (X-Spool)
	1.5	50	500 (X-Spool)
	2.0	90	500 (X-Spool)
	2.5	130	500 (X-Spool)
White & Coloured	3.0	150	500 (X-Spool)
	4.0	280	500 (X-Spool)
	5.0	450	250
	6.0	640	200
	8.0	1100	200
	10.0	1700	200
White & Black	12.0	2200	200
	14.0	3000	150
	16.0	3900	100



Ref. 01038 is also available in flame retardant version, meeting B1 fire protection standards (from 3 up to 8 mm, colour black)

8-plaited 16-plaited

## LIROS Polyamide-Braided Cords and Lines 01025/01030/01027

Polyamide, high tenacity

- Stretch characteristics < 15%
- high stretch quality and flexible
- very UV-resistant
- excellent abrasion resistance
- <u>individual lengths</u> <u>possible</u>

#### Material

Polyamide high tenacity

Construction 01025

8-plaited

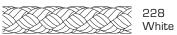
**Construction 01030** 

8-plaited

**Construction 01027** 

16-plaited

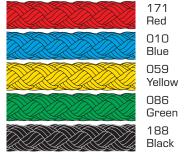
#### Colour 01025



#### Colour 01027



#### Colours 01030



	Ø mm	Breaking strength kg	Length of spool m
01025/01030	0.5	15	500 (X-Spool)
	1.0	35	500 (X-Spool)
	1.5	40	500 (X-Spool)
	2.0	100	500 (X-Spool)
White & Coloured	2.5	140	500 (X-Spool)
	3.0	180	500 (X-Spool)
	3.5	260	500 (X-Spool)
	4.0	340	500 (X-Spool)
	5.0	550	250
	6.0	850	200
	8.0	1500	200
	10.0	2400	200
White & Black	12.0	3200	200
	14.0	3600	150
	16.0	4300	100
01027	1.5	50	500 (X-Spool)
	2.0	100	500 (X-Spool)
	2.5	140	500 (X-Spool)
	3.0	180	500 (X-Spool)
White	4.0	340	500 (X-Spool)
	5.0	550	250
	6.0	850	200
	8.0	1170	200
	10.0	1720	200

Spiral plait Spiral plait

#### LIROS Polyamide-Braided Cords and **Lines, Spiral Plait** 01035/01036

Polyamide, high tenacity

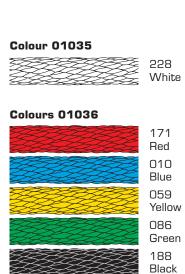
- Stretch characteristics < 20%
- high stretch quality and flexible
- round
- flexible
- very UV-resistant
- individual lengths possible

#### **Material**

Polyamide high tenacity

#### Construction

Spiral plait



	Ø mm	Breaking strength kg	Length of spool m
01035	2.0	90	500
	2.5	120	500
	3.0	160	500
	3.5	210	500
	4.0	290	500
	5.0	450	250
	6.0	600	200
	8.0	1000	200
	10.0	1800	200
	12.0	2200	200
	14.0	2800	150
	16.0	3600	100
01036	3	160	500
	4	290	500
	5	450	250

8-plaited Spiral plait

#### **Lirolen Braided Cords and Lines** 01070/E1070/01075

High tenacity Polypropylene multifilament, excellent UV-resistance, floats

- Stretch characteristics < 12%
- UV-stabilized
- floats
- individual lengths and format is possible

#### **Material**

Polypropylene multifilament high tenacity

#### **Construction 01070**

8-plaited

#### **Construction E1070**

#### 16-plaited

**Construction 01075** Spiral plait

\* The breaking loads referred to in the table are relevant to article

#### Colour 01070



#### Colour E1070



#### Colour 01075



Ø	Breaking strength kg 01070/E1070	Breaking strength kg 01075	Length of spool m
1	30	-	500 (X-Spool)
2	75	-	500 (X-Spool)
3	140	90	500 (X-Spool)
4	280	140	500 (X-Spool)
5	390	200	250
6	550	310	200
8	1000	500	200
10	1300	800	200
12	1600	1100	200
14	2000	1500	150
16	2600	1900	100

01070 Ø 1-16 mm E1070 Ø 2-16 mm 01075 Ø 3-16 mm



With LIROS fleck from 6 mm

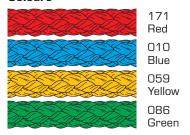
Without LIROS fleck to 5 mm

## Polypropylene-multifilament Coloured Braided Cord 01072

High tenacity Polypropylene multifilament, spin-dyed...

- Stretch characteristics < 12 %
- very wide range of use
- · low-priced
- UV-stabilized
- from 6 mm Ø with blue/gold guarantee yarn
- individual lengths possible

#### Colours





Ø mm	Breaking strength kg	Length of spool m
1.5	38	500 (X-Spool)
2.0	70	500 (X-Spool)
3.0	140	500 (X-Spool)
4.0	280	500 (X-Spool)
5.0	390	250
6.0	550	200
8.0	900	200
10.0	1230	200
12.0	1700	200
14.0	2000	150
16.0	3700	100

MaterialPolypropylene multifilamentConstruction8-plaited

Breaking

Length of spool m

200

200

#### LIROS Nautic Hollow Plait 01072

Floating all purpose rope out of spin-dyed Polypropylene multifilament, very easy to splice. 16-plaited, UV-stabilized and resistant Polypropylene multifilament.

	mm	strength kg
01072-0900	9	850
01072-1012	10-12	1300

- Stretch characteristics < 15 %
- floats, very easy to splice
- highly durable and UV-stabilized

#### Colours





MaterialPolypropylene multifilamentConstruction16-plaited



#### LIROS Starter Cord

#### 10145/10445

The use of special twist and its elaborate plaited construction assure exceptional resistance to abrasion. 100% Polyamide.

- · high stretch characteristics virtually eliminates jolting
- durable
- abrasion resistant
- additional impregnation on request (Ref. 10445)
- individual lengths and colour-impregnation possible

Ø	Length of
mm	spool m
3.0	500
3.5	500
4.0	500
4.5	500
5.0	250
6.0	200

Col	our	10	1	45

#### **Colour 10445**



228 White



418 White impregnated

Material

Polyamide high tenacity

Construction

16-plaited

#### LIROS Skittle Rope

#### 10845/10945

- glides very well
- highly abrasion resistant
- additional impregnation on request (Ref. 10945)

Ø	Length of
mm	spool m
3.5	500
4.0	500
4.5	500
5.0	250
6.0	200

Colour	1	0	8	4	5
--------	---	---	---	---	---



**Colour 10945** 

$\times\!\!\times\!\!\times$

418 White impregnated

Material Polyamide high tenacity

Construction 16-plaited



## **LIROS Venetian Blind Cord** 20140/20145 22140/22145

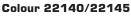
Polyester, cord from Ø 2.5 mm upwards contains core, tight braided.

- shape stable, round plait
- abrasion resistant
- UV-resistant
- individual lengths and colour-impregnation possible

Colour	201	140	<b>/201</b>	45
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228 White





188 Black

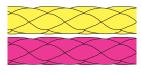
	Ø mm	Length of spool m
(20140/22140)	8.0	500 (X-Spool)
without core	1.0	500 (X-Spool)
	1.5	500 (X-Spool)
	1.7	500 (X-Spool)
	2.0	500 (X-Spool)
(20145/22145)	2.5	500 (X-Spool)
with core	3.0	500 (X-Spool)
	3.5	500 (X-Spool)

### MaterialPolyester high tenacityConstruction16-plaited

#### LIROS Bricklayers Line 01522

Highly durable and hard-wearing builders rope in LIROS quality. UV-resistant Polyester in bright colours for easy visibility and exceptional handling properties.

#### Colours



123 Neon Yellow 157 Pink

	Ø	Breaking strength kg	J
	1111111	Su engui kg	3p001111
01522-0200	2	90	100/500
01522-0300	3	200	100/500

Material Polyester high tenacity plaited

Packaging practical 100 m or 500 m plastic reels





#### LIROS Split Film Polypropylene 01060/01061

Low cost, floating all-purpose rope. UV-resistant Polypropylene fibre.

Material 01060 Polypropylene-monofilament Material 01061 Polypropylene-Split-fibre

Construction

8-plaited

#### **Colour 01060**



150 Orange

#### **Colour 01061**



229 White/Blue

Ø mm	Breaking strength kg	Length of spool m
6	400	200
8	700	200
10	1100	200
12	1500	200



#### **LIROS Polypropylene** Rope 00112

Low-priced, floating all-purpose line, available in many different diameters. UV-resistant Polypropylene Split-fibre.

**M**aterial

Polypropylene-Split-fibre

Construction

3-strand

Ø mm	Breaking strength kg	Length of spool m
6	590	200
8	1040	200
10	1530	200
12	2170	200
14	2990	150
16	3700	100

Black up to 36 mm available

Colour	6_14	mm Ø



150 Orange

Colour 6-16 mm Ø



010 Blue

Colour 6-16 mm Ø



228 White

Colour ab 16 mm Ø



188 Black



#### **LIROS Acrylic Ropes**

#### 01160/01161

Cable twist, especially designed for hand rails on stairways and for roping off areas. High quality for professional usage.

- Specify length(s)
- 28-30 mm Ø

#### Colours 01160



#### Colours 01161



Material 01160 Acrylic yarn Material 01161 Polyester

4-strand Cable twist Construction



#### **LIROS Poly-Hemp and Natural Hemp Ropes**

#### 1140D/0114D

Cable twist, especially designed for hand rails on stairways and for roping off areas. Grip like hemp, but softer and more weather resistant.

- UV-stabilised
- abrasion resistant
- easy to splice
- Specify length(s)
- 28-30 mm Ø
- 1140D ideal for outside usage

As alternative: 01141-3500

4-strand twisted made of Spun Polypropylene

#### Colour 1140D



037 Hemp

**Material** 

Spun Polypropylene Construction 4-strand Cable twist

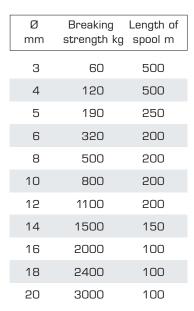
#### Colour 0114D



037 Hemp

**Material** 

Spun natural hemp Construction 4-strand Cable twist





#### **LIROS Historic Plaited**

03010

Appearance like hemp, but softer and stronger, with better weather resistance.

- · Spun Polypropylene cording twine
- UV-resistant
- easy to grip

#### Colour



037 Hemp Material Construction Polypropylene 8-plaited



Ø mm	Length of spool m
1.5	500
2.0	500
2.5	500
3.0	500
3.5	500
4.0	500
4.5	500
5.0	250
6.0	200
8.0	200
10.0	200
12.0	200
14.0	150
16.0	100

#### Braided Cord and Lines of Natural Hemp 00310

Made of 100% natural hemp in classical appearance.

#### Colour



MaterialSpun PolypropyleneConstruction8-plaited



#### Hemp Ropes

00114

100% natural hemp, DIN 83325

#### Colour



Natural

140

MaterialNatural hempConstruction 6 mm3-strand twistConstruction from 8 mm4-strand twist

Ø mm	Breaking strength kg	Length of spool m
6	260	200
8	410	200
10	640	200
12	980	200
14	1250	150
16	1660	100
18	2050	100
20	2530	100
22	2950	100
24	3620	100



Ø	Length of
mm	spool m
1.5	500
2	500
3	500
4	500
5	250
6	200
8	200
10	200
12	200
14	150
16	100

#### **Braided Cord and Lines** of Cotton 00510/00512

Made of 100% non-coloured cotton.

#### 8-plaited 140 Natural 16-plaited 140 Natural

#### Material

Cotton

**Construction 00510** 

8-plaited

**Construction 00512** 

16-plaited available from Ø 2 to 12 mm



#### **Sisal Ropes**

00113

100% sisal, natural, shorn

• Stretch characteristics: < 15%

#### Colour



140 Natural

Material	Sisal
Construction	4-strand

Ø mm	Breaking strength kg	0
8	425	200
10	560	200
12	840	200
14	1100	150
16	1490	100



#### Sisal-Yarns and Cords 00119

Natural, no oil residues, shorn, out of sisal production and East African fibres, X-spool without cover.

• Packaging unit: bags of 25 kg each

	X-Spool	Length of spool m	1	approx. m/kg
00119-2204	6 kg	220	4-plaited	50
00119-4501	3 kg	450	1-plaited	440
00119-4502	3 kg	450	2-plaited	220
00119-4503	3 kg	450	3-plaited	140
00119-6001	3 kg	600	1-plaited	570
00119-6002	3 kg	600	2-plaited	285
00119-8001	3 kg	800	1-plaited	770
00119-1000	3 kg	1000	1-plaited	960

In our sisal factory extremely fine yarns are available in a variety of colours. (minimum quantity 1000 kg).





A high spec splicing kit with all the tools and accessories necessary to complete braided and 3 strand splices.

#### To consist of:

- 1 x LIROS Whipping needle
- 1 x Swedish fid
- 3 x Splicing needles (5.5-7.5-10 mm)
- 1 x LIROS brochure
- 1 x LIROS Splicing CD
- LIROS-Tape
- LIROS Dyneema® whipping twine
- 1 x pen
- 1 x LIROS lighter
- 1 x LIROS Wet Notes Block





#### LIROS Protect Set 00099-0277

A black tubular webbing designed to protect mooring warps up to 30 mm diameter. Supplied complete with termination clips.

#### LIROS Wet Notes 00146-0103

A high quality waterproof plastic note book for use in all conditions.

Measurement 11 x 15 cm.







### LIROS Swedish Fid 11090/11091

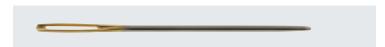
Reliable splicing tool for 3-strand and octoplaited ropes.

**11090** – up to 12 mm **11091** – from 14 mm



## LIROS Whipping Needle

The essential needle for splicing and whipping, suitable for cords up to 4mm. Usable without sailmaker gloves. Saves time and energy while whipping ropes.



## LIROS Stitching-/Splicing Needle 00143-4001

Ideal for splicing hollow braided Kite and paragliding lines from 0.6 mm up to 1.1 mm.
6 pieces per package



#### LIROS Splicer 00143

A professional range of splicing fids – ideal for handle for all core-cover splices.

	Size	Splice mm	Längd cm
00143-1000	1 small	6–8	15
00143-2000	2 medium	10-12	30
00143-3000	3 large	12-18	34



#### LIROS Splicing Tool Assortment 00143-5000

4 high-quality splicing tools made of high-grade steel, suitable for splicing lines with diameters between 3 and 14mm. Appropriate for both plaited and twisted ropes. Comes in practical plastic tube.



#### **LIROS XTR-Finish**

00146-0057

Provides additional cover or internal wear protection on all kinds of ropes (Polyester, Dyneema®, Vectran®, Zylon®). LIROS XTR-Finish comes pre-mixed with colour pigment in 250ml bottles.

- Ready for use
- Long-lasting protection
- UV-protection (especially with black PU-colour)
- Easy-to-clean, water-based solution
- Reduces friction
- Each package: 1x250ml bottle, 1 sponge.



## LIROS Splicing Bench 00146-0106

Professional splicing bench designed by LIROS to provide perfect working conditions for professional splicing and rigging. Features an Antal-W48ST aluminium winch for pre-loading ropes prior to installation. Incorporates a strong anchor point for making braided eye splices.

• Length 2.00 m x Width 0.80 m x Height 1.20 m



#### **LIROS Rope Measuring Gauge**

00138

High quality, robust construction, chrome, can be calibrated for plaited cords, plaited lines and ropes with diameters between 3 mm and 20 mm.





#### **LIROS Rope Rack**

00135

Flexible rope product rack, which can be fixed to the wall for an effective presentation of LIROS ropes. Fix two back-to-back for a double rack that can be assembled and positioned anywhere in the shop.

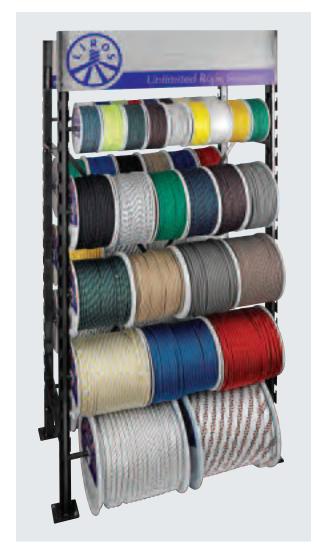
Ref.		Required	Required
		pieces for	pieces for
		a wall	a free
		rack	standing rack
00135-3001	Side element 175 cm heigh	2 nt	4
00135-3002	Elongation by 80 cm	(2)	4
00135-3003	Top for Headline 25 cm	2	4
00135-3004	Bars 92 cm width	6 (8)	12
00135-3005	Crossing for reinforcement	_ ;	1
00135-3006	Advertising si	gn 1	2

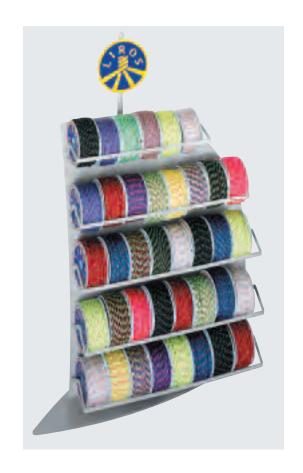


#### LIROS Counter-top Display 00146-0016

High-quality silver powder-coated metal display for optimal presentation at point of sale.

Can be fitted with 4 sales packages (e.g., Magic Speed, Trimline or whipping twine). See page 36-37





#### LIROS Heat Cutter 00146

For burning and sealing off synthetic cord and lines, width of cutting edge 21 cm. Professional Cutting of synthetic ropes in all diameters. 60 W.

**00146-0000** Heat Cutter **00146-0001** Replacement Blade



## LIROS Heat Cutter Pro

- High temperature cutting blade
- Rapid heat readiness
- Extended cutting blade
- Power 120 W

**11381** Heat Cutter Pro **00146-0018** Replacement Blade Pro





#### LIROS Ceramic Pro

11700

A top-quality riggers knife designed to clean cut the new high tech materials — Dyneema®, Vectran®, Aramide or PBO.

- Blade length: 11.5cm
- Swiss-quality precision
- Razor sharp
- Stainless
- Non-magnetic
- Very lightweight

CAUTION: Do not drop!





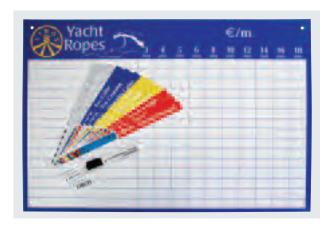
#### LIROS Scissors Pro 10439

A top-quality scissors designed to clean cut the new high-tech materials — Dyneema®, Vectran®, Aramide or PBO. Micro-serrated.

- total length 16 cm
- cutting length 3 cm







#### LIROS Price Board 00146-0044

Attractive price board for displaying your individual LIROS rope assortment at the point of sale. Comes with instructions and removable pens, as well as coloured product stickers.



LIROS Coffee Cup



#### LIROS Carpet 00146-0040

High quality LIROS carpet. Easy to clean.

Ref.	Measurements	
00146-0075	60 x 40 cm	
00146-0040	85 x 120 cm	



#### **LIROS Flags**

Ref.	Measurements
00146-0099	80 x 80 cm
00146-0032	160 x160 cm
00146-0028	150 x 300 cm
00146-0204	150 x 400 cm

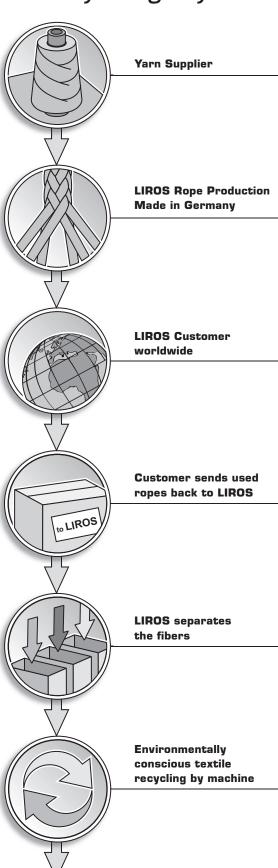


#### **LIROS Stickers**

	Ref.	Measurements
1	00146-0047	ø 50 cm
2	00146-0052	ø 25 cm
3	00146-0110	30 x 7 cm
4	00146-0046	80 x 12 cm

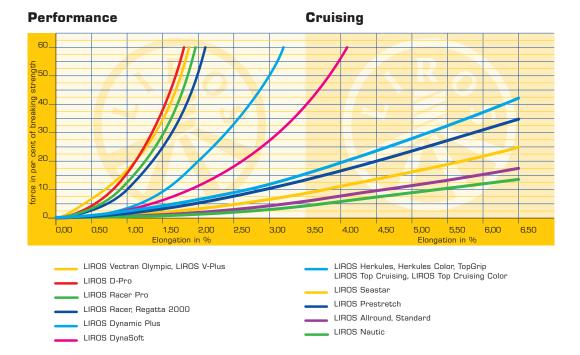


## LIROS Recycling System

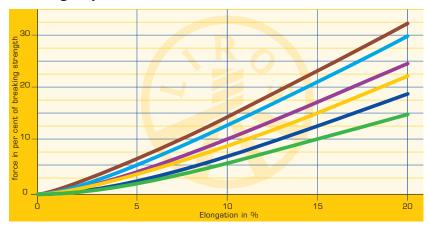


New products, e.g. nonwoven fabric, yarn, insulation material





#### **Mooring Ropes**



LIROS Squareline PP, LIROS Polyester Rope, LIROS Nautic

LIROS Porto, LIROS Super Yacht DB

LIROS Moorex 12

LIROS-Squareline Polyester

\_\_\_\_\_ LIROS Handy-Elastic



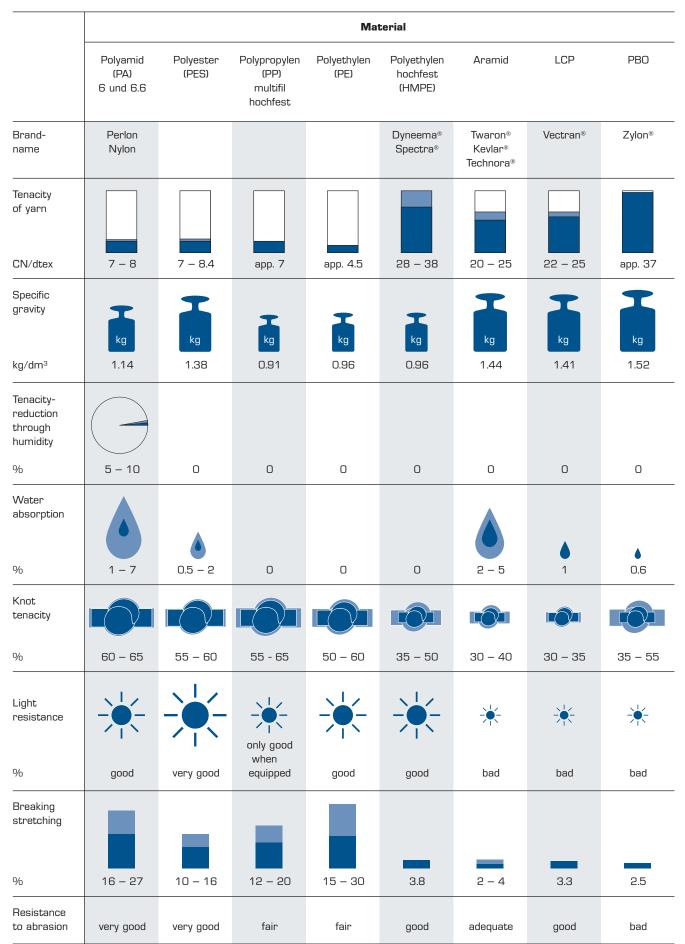
LIROS D-Pro

LIROS Magic Pro, LIROS Magic Race
LIROS Magic High Trim, LIROS Magic Gold

LIROS Magic Speed
LIROS Magic Sheet

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#### Comparing summary of synthetic fibres





### Reaction of synthetic ropes under different conditions

	Material							
	Polyamid (PA) 6 / 6.6	Polyester (PES)	Polypropylen (PP)	Polyethylen (PE), (HMPE)	Aramid	LCP	PBO	
Brand	Perlon Nylon			Dyneema® Spectra®	Twaron® Technora® Kevlar®	Vectran®	Zylon®	
Washing temp.	50 – 60	50 – 60	30	30	80 – 90	60	50	
Acids (50% :: concentr.), 25°C/100°C Rest %	17 / 5 – 10	80 / 0	no reaction	no reaction	partially 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	formic acid & acetic acid at high temp.	phenols, cresols zinc chloride	minimal reaction	minimal reaction	minimal reaction	minimal reaction	minimal reaction	
Alkali (Leaches)	resistant against weak solutions	resistant against solutions at 20°C; dissolves in solutions at 100°C	resistant against weak solutions	resistant	partially good resistant	very good resistant	very good resistant	
Insulating Properties	very good; poor conductor	very good	excellent	excellent	excellent	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	

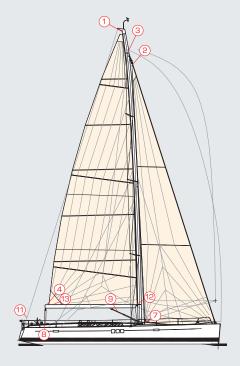
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CRUISING	
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LIROS Taper Pro	21
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LIROS Handy Anchor

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#### Yacht Rope Recommendations



Cruising

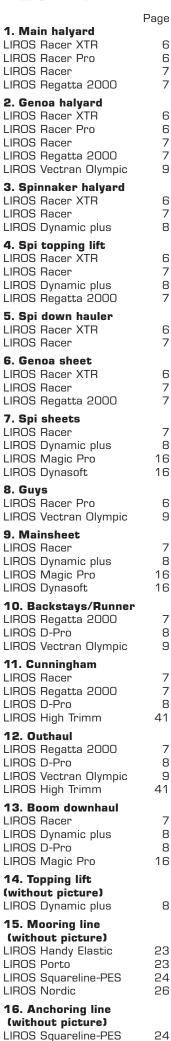


Regatta

Our recommendations for LIROS articles reflect many years of experience in the field of cruising and racing.

Source: Hanse Yachts / Judel Vrolijk

#### REGATTA









#### LIROS GmbH

Sieggrubenstraße 7  $\cdot$  D-95180 Berg Tel. +49 (0) 9293-8002-0  $\cdot$  Fax: +49 (0) 9293-8002-024 www.liros.com  $\cdot$  info@liros.com

