

# Unlimited Rope Solutions





# LIROS Unlimited Rope Solutions

LIROS is now recognised as a world leader in the manufacture of high tech yachting ropes, kitesurf cords, paragliding lines and a wide range of industrial cordage. Latest production facilities enable LIROS to develop products for every customer requirement.

Special coatings developed by LIROS minimize the abrasion of high-quality fibre ropes and protect from UV-radiation. Thermal processes optimize the rope in terms of elongation and tensile strength. Our quality management systems ensure the highest level of quality for all LIROS customers.

For this reason LIROS produces innovative, sustainable and customer-optimised rope products – founded 170 years ago.

Sven Rosenberger

Karl Friedrich Rosenberger

Our company is certified and approved according to DIN EN ISO 9001 and DIN EN ISO 14001. Production 100% Made in Germany.



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Latest technology Essential for producing premium products



Laboratory Technical development of unique rope solutions



Quality control guarantees continuous quality



Logistics EDP-based warehousing for fast order processing

# **LIROS HSS**

ıııı I I I Heat Stretch System

LIROS HSS pre-stretch system uses exact heat treatment to guarantee the highest accuracy in any application.

# LIROS LCS

**■■■■■** LIROS Coating System

LIROS LCS is the best Protection against wear-and-tear and UV effects for technical ropes. LIROS LCS increases UV- and wearresistance by up to 50%.



100% recyclable products. Natural fibres and single-origin synthetic fibres.

LIROS - YOUR EXCELLENT PARTNER

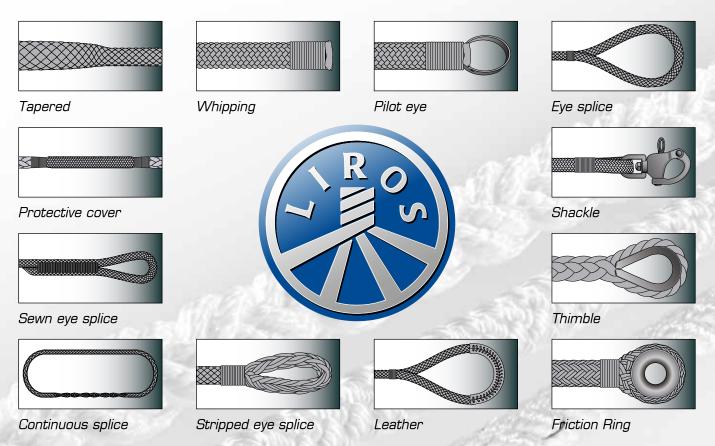
# Unlimited Rope Solutions!

### **Quality Made in Germany**

Our LIROS customer service team has solutions for even the most demanding customers / retail, wholesale, or direct-to-industry. We'll provide all the dimensional sizing, working and breaking load information you need to choose the right LIROS product for the job.



### Individual terminations



In addition to common splicing and whipping, our experienced ropemakers specialise in fashioning and finishing of high-tech sheets, mooring lines and halyards. We can create the perfect individual rope for your specifications.

### **LIROS CUSTOMER SERVICE TEAM**

Available monday to thursday 7:30am to 4:30pm and friday 7:30am to 1:00pm +49 (0) 92 93 / 8002-0 or info@liros.com

For registered dealers the B2B dealer portal on our website www.liros.com is available 24/7. Check warehouse availability and have instant access to the documents archive.





### LIROS Green Wave®

Sustainable action and fair, environmental conscious management is one of the biggest challenges of our time. At LIROS it is our corporate philosophy – the LIROS Green Wave. It is at the same time a seal of approval, concept and bindingmission statement for corporate action. The harmonisation of ecology and economy that takes responsibility in its entirety both for the environment and the population.

Production and consumption of energy has major ecological and social impacts. As a company we use energy as sparingly as possible whilst also using alternative sustainable and environmentally friendly techniques. LIROS aims to achieve climate neutrality in all areas of its business.

LIROS is certified according to **DIN EN ISO 14001:2015**. This demonstrates an effective environmental protection management system in all relevant divisions.



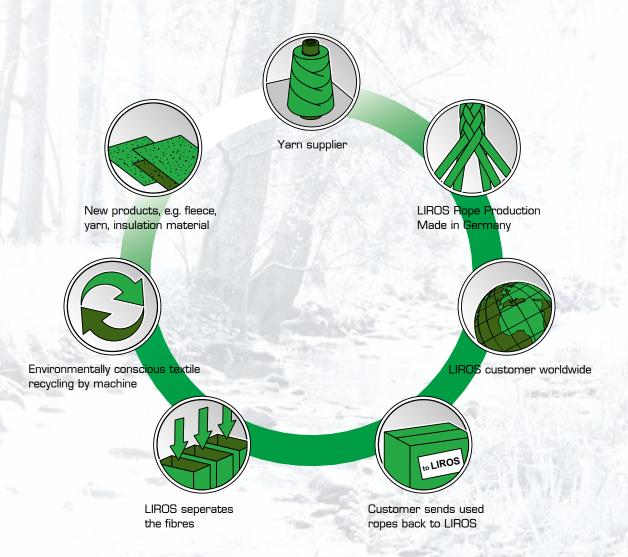
LIROS produces as an outdoor supplier for low environmental impact sports, for example, sailing, paragliding and kiting. As well as a supplier of extremely lightweight high strength componentry for the industry, LIROS has taken an active part in helping to reduce its  $CO_p$  emissions.

### **LIROS Recycled Products**

LIROS' recycled products allow for sustainable concepts, thereby reducing  $\mathrm{CO}_2$  and energy emissions and increasing resource conservation efficiency. In addition, new fields of application in environmental technology are constantly being developed. Our yarn suppliers guarantee the environmentally friendly recycling of old goods. We use raw materials in the form of R-PET for rope production in our newly developed products. For example, LIROS Green Wave Porto, or LIROS PES Cordage Green Wave.

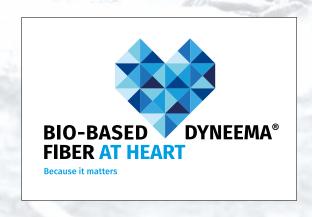


LIROS uses GRS-certified R-PET yarn (high strength yarn made from 100% PET bottles). Every ton of recycled PET produces 1.5-2.0 tons less of  $CO_a$  emissions than conventional polyester, a saving of around 70%.



### **Reducing the Ecological Footprint**

LIROS consistently pursues the goal of ensuring sustainable production for its partners and suppliers. As an example, the high strength fibers of Bio-based Dyneema.





### LIROS Photovoltaics & Biogas

The entire company in Berg, Upper Franconia with its state of the art machinery is heated by the waste heat from a biogas reactor. An in-house photovoltaic system guarantees a completely  $\mathrm{CO}_2$ -free power supply of the rope production with self-generated solar energy.

On sunny days the whole rope production is running with 100% photovoltaic energy from our roof top.





### LIROS Electro mobility

Regional transport at Liros is carried out with an electric vehicle. By using the companies photovoltaic system the vehicle is completely climate neutral.





### **LIROS Green Wave Porto**

### 00134

A very easy to handle mooring and anchor line manufactured in a core cover construction. Made from 100% recycle polyester, tear and abrasion resistant and will not harden. High stretch achieved through a special twisting construction.

- stretch >15%
- very easy to splice
- easy handling and UV stable
- tear and abrasion resistant



Ø mm	Breaking strength kg	Length of spool m
8	1450	200
10	2000	200
12	2600	200
14	3300	150
16	4400	100
18	4700	100
20	5600	100
22	8000	100

### Colour



271 White-Black-Green

Cover

R-PET high twisted

Construction

Ø 8-10mm Ø 12mm and up 16-plaited 20-plaited

Core

high-strength R-PET braid



### LIROS PES 3-strand Green Wave 01114

A classic rope for mooring and anchoring, very easy to splice, tear and abrasion resistant. 3-strand twist, made from 100% recycled Polyester.

- working stretch > 15%
- very easy to splice
- very strong and abrasion resistant
- heat-set
- good UV stability
- perfect for a lot of industrial applications

Ø mm	Breaking strength kg	Length of spool m
12	2300	200
14	3200	150
16	4500	100

### Material

High Strength R-PET

### Construction

3-strand, heat-set

### Colour



271 White-Black-Green





### LIROS XTReme Technology

The LIROS XTR range delivers high quality watersports lines with optimised braiding constructions and best core-cover interaction for optimised grip, high abrasion resistance, minimal stretch as well as extreme breaking load.

### 1. Grip factor

The LIROS grip factor constitutes one of the most important decision factors for the professional sailor and helps the rigger to select the perfect line with ideal properties. The most diverse requirements in case of grip on winches and in stoppers is paramount in the LIROS XTR-Range.

Grip factor is expected to improve during use.

### 3. Weight

The entire XTR range offers exceptional abrasion resistance and breaking loads at lowest weight. LIROS achieves this with LCS and with LIROS HSS as well as specially twined and coated covers.

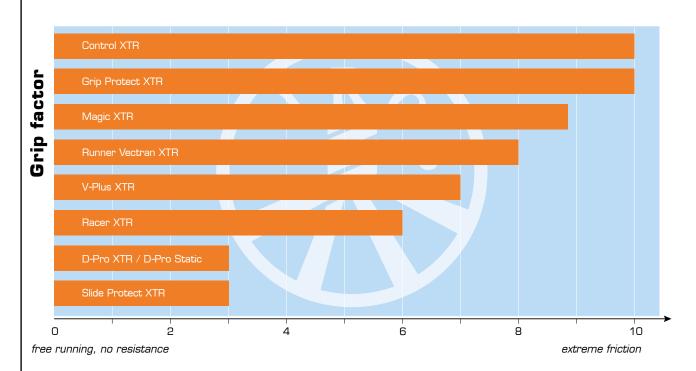
The LIROS Coating System (LCS) furthermore reduces water absorption up to  $33\,\%$ .

### 2. Abrasion resistance

LIROS XTR ropes captivate due to excellent abrasion resistance and deliver best results even under toughest conditions.

### 4. Stretch

The construction and core material essentially specify the stretch of a rope. LIROS XTR is optimised for lowest stretch and elasticity and transforms the wind power very efficiently into propulsion.





### LIROS Control-XTR

### 02224

LIROS Control-XTR is a constantly developed line optimised for grip, combined with high abrasion and temperature resistance. For hard use.

- grip factor 10 (page 10)
- maximum grip under extreme winch and stopper conditions
- excellent abrasion resistance
- superior cover-core power transference
- low stretch

24

### Technora®





### Cover

Technora® / high-ten. Polyester

### Construction

8 mm 24-plaited 10 mm and up 32-plaited

### Core

Dyneema® SK99 12-plaited pre-stretched with LIROS HSS and LIROS LCS

Ø mm	Weight g/m	Weight cover g/m	Weight core g/m	Stretch %	Breaking strength kg	Length m
8	44	20	24	< 1,0	6250	200
10	60	27	33	< 1,0	8000	200
12	95	48	47	< 1,0	11200	200
14	131	60	71	< 1,0	14100	150
16	167	72	95	< 1,0	17500	100
18	211	109	102	< 1,0	20400	100
20	234	111	123	< 1,0	23500	100
22	270	135	135	< 1,0	27600	100

160

< 1,0

31500

### Colours









239 White-Black

### LIROS Runner Vectran®-XTR

160

### 04008

100

LIROS Runner Vectran $^{\otimes}$ -XTR is the rope with ultimate cover for minimal abrasion and high temperature conditions.

• grip factor 8 (page 10)

320

- XTReme abrasion resistance at high temperatures up to 200°C
- melt resistant cover
- superior cover-core power transference
- lowest stretch, top reliability
- extreme grip applications

Ø mm	Weight g/m	Weight cover g/m	Weight core g/m	Stretch %	Breaking strength kg	Length m
6	31	16	15	< 1,0	2800	200
8	53	29	24	< 1,0	6250	200
10	62	29	33	< 1,0	8000	200
12	89	42	47	< 1,0	11200	200
14	144	71	73	< 1,0	14100	150
16	199	102	97	< 1,0	17500	100

### Cove

100% Vectran®

### Construction

32-plaited

### Core

Dyneema® SK99 12-plaited pre-stretched with LIROS HSS and LIROS LCS

### Colour



705 Beige NF

### **Vectran**<sup>™</sup>







### LIROS Racer-XTR

### 02008

LIROS Racer-XTR offers an exceptional combination of heat-resistant hybrid fibres and high-tenacity Polyester. The extremely low-stretch, colour-treated Dyneema® SK78 core guarantees the best in breaking load and is perfect for cover stripping.

- working stretch < 1%
- lightweight
- perfect for extreme performance with stripped cover
- excellent abrasion resistance, even at high temperatures
- hybrid fibre prevents cover melting
- ideal interconnected cover-core
- multipurpose sheet and halyard rope
- very low stretch
- LIROS Heat Stretch System

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
8	4700	53	200
10	6900	65	200
12	9900	93	200
14	13000	121	150
16	15200	156	100
18	18500	180	100
20	21700	222	100
22	24600	270	100
24	28000	320	100

50% Vectran®/50% Polyester Cover

32-plaited

Construction 8<sub>mm</sub> 24-plaited

32-plaited 10mm and up

Core Dyneema® SK78 with XTR-Grip-Coating Silver









Beige-Black

### Colours



Beige-Orange Beige-Silver Beige-Yellow Beige-Burgundy

### LIROS D-Pro-XTR

01514

D-Pro-XTR is a 12-plaited braided Dyneema® line with highly durable XTR Grip Coating. Well-suited as a replacement for steel ropes and hard shackles. D-Pro-XTR is the ultimate line for applications that require the least stretch.

- XTReme high breaking load
- grip factor 3 (page 10)
- extremely low stretch
- very light weight
- easy to splice
- no water absorption
- easy to cover with Protect-XTR (see page 14)

	Ø mm	Weight g/m	Stretch %	Breaking strength kg
NE	<b>N</b> 2,5	3,5	< 1,0	700
	3	5	< 1,0	1150
	4	7	< 1,0	1500
	5	13	< 1,0	3200
	6	23	< 1,0	5600
	8	35	< 1,0	7000
	10	60	< 1,0	11000
	12	72	< 1,0	15000
	14	95	< 1,0	18000
	16	131	< 1,0	22400
	18	166	< 1,0	28000







205

Silver

Material Construction

Dyneema® SK99 12-plaited



### LIROS D-Pro Static

### 01504

LIROS D-Pro Static is the only Dyneema® product with no creep. Ideal for any application where dimensional stability is critical (outhaul, backstay, dinghy shrouds). Also suited for static lines in industrial or other water sports applications.

- no creep Dyneema® DM20
- high breaking load with smallest diameter and lowest weight
- exceptionally easy to splice
- highly UV-stable, excellent abrasion resistance
- LIROS Coating System LCS

Ø mm	Weight g/m	Stretch %	Breaking strength kg
3	5	< 1,0	900
4	7	< 1,0	1230
5	13	< 1,0	2450
6	23	< 1,0	4050
8	35	< 1,0	5000
10	60	< 1,0	8500
12	72	< 1,0	11300





### Colour



205 Silver

### **Material**

Dyneema® DM20

Construction

12-plaited



### LIROS V-Plus-XTR

### 04007

V-Plus-XTR is made of 100% Vectran® with high tech XTR Coating. Perfect as a wire replacement or alternative to hard shackles. An ideal line for applications that require constant length, lowest stretch without creep also under load. Vectran® delivers extreme precision. Perfect as bolt rope for high performance sails.

- grip factor 7
- working stretch < 1%
- no creep
- XTReme low initial elongation
- high-tech XTR coating
- easy to splice
- heat resistant up to 200°C
- easy to cover with Protect-XTR

Ø mm	Weight g/m	Stretch %	Breaking strength kg
2	3	< 1,0	400
3	7	< 1,0	1100
4	10	< 1,0	1500
5	22	< 1,0	3000
6	32	< 1,0	5000
8	48	< 1,0	6800

### Colours



188 Black 220 Transparent



### LIROS Slide Protect XTR

### 10148

LIROS Slide Protect-XTR provides a supplemental cover and protects against abrasion in turning blocks and fairleads. Slide Protect-XTR is not suited for protection in stoppers or on winches, the low cover grip factor delivers lowest friction.

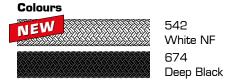




- grip factor 3 (page 10)
- very easy to splice
- best abrasion resistance and cut resistance

### Material

Dyneema® SK78 with XTR-Coating



Reference	Measurements mm	Cover mm	for rope Ø mm	Construction	Breaking strength kg	Length of spool m
10148-0506	5 x 1,6	0,8	3-6	24-plaited	800	25
10148-0810	9 x 1,7	0,9	5-10	48-plaited	1600	25
10148-1214	12 x 2,7	1,4	8-12	48-plaited	2500	25
10148-1624	19 x 3,7	1,9	14-22	48-plaited	5500	25

### LIROS Grip Protect XTR

### 04500

LIROS Grip Protect-XTR covers lines, provides optimal abrasion protection and protects the rope on sharp edges. The high-grip surface of this cover delivers the best in power transference inside a halyard stopper.



- grip factor 10 (page 10)
- very easy to splice
- high cut resistance
- very high heat resistance up to 400°C

### Material

Technora® dope dyed Black

### Colour



188	
Black	

Reference	Measurements mm	Cover mm	for rope Ø mm	Construction	Breaking strength kg	Length of spool m
04500-0506	5,5 x 1,2	0,6	3-6	24-plaited	600	25
04500-0810	10 x 1,7	0,9	5-10	48-plaited	900	25
04500-1214	15 x 2,7	1,4	8-12	48-plaited	1800	25
04500-1624	23 x 3,2	1,6	14-22	48-plaited	3200	25





### LIROS Racer-Hybrid

### 02026

LIROS Racer-Hybrid offers an exceptional combination of heat- and cut-resistant hybrid fibres and high-tenacity Polyester. The cover can be stripped with ease for weight reduction. LIROS Racer-Hybrid has a perfectly balanced cover-core ratio for maximum reliability and best breaking strength.

•	working	stretch	<	1,5	%
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- excellent abrasion resistance, even at high temperatures
- perfect for extreme performance with stripped cover
- lightweight
- ideal interconnected cover-core
- multipurpose sheet and halyard rope
- LIROS Heat Stretch System

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
6	2900	25	200
8	4200	48	200
10	5500	65	200
12	8000	93	200
14	10500	121	150

50% Vectran®/50% Polyester Cover

Construction 6<sub>mm</sub> 16-plaited

8<sub>mm</sub> 24-plaited 10mm and up 32-plaited

Core Dyneema® XTR-Grip-Coating Silver

# **D**vneema

### **Colours**



419 Beige-Orange 421 Beige-Yellow

Beige-Steelblue

263



422 Beige-Burgundy 262 Beige-Silver 549 Beige-Black







### **LIROS Racer Vision**

### 02027

New High-Tech rope in a modern style. Simple stripping and easy to splice. Excellent retention forces on winches and rope stoppers. Perfect design with special abrasion resistant LIROS steelblue Polyester. Special XTR-Grip-Coating.

•	working	stretch	<	1	5%
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- maximum breakload and low weight
- ideal for halyards, sheets and winch uses
- easy to splice
- LIROS Heat-Stretch-System

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
8	4200	53	200
10	5500	75	200
12	8000	96	200
14	10500	127	150

### **Colours**



212 Steelblue-Blue

353

Steelblue-Green

704

Steelblue-Orange

707

Steelblue-Neon Yellow

774 Steelblue-Silver Cover Polyester high twisted

Construction 8<sub>mm</sub>

24-plaited 10mm and up 32-plaited

Core Dyneema® with

XTR-Grip-Coating Silver







### **LIROS Racer**

### 02001

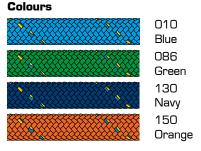
Proven, durable Dyneema® rope with high breaking load and low stretch featuring a specially-engineered 32-plaited cover and coated Dyneema® SK78 fibre core. For halyards and sheets. Very suitable for winches.

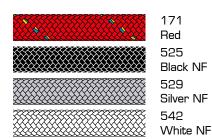
- working stretch < 1,5%
- high breaking load, easy handling and non-kinking
- for halyards and sheets
- very good winch suitability
- LIROS Heat-Stretch-System



LIROS LCS

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
6	2500	27	200
8	3800	51	200
10	5000	71	200
12	7200	85	200
14	9500	115	150
16	12600	144	100
18	15300	179	100





### Cover

Polyester high twisted

### Construction

6-8mm 24-plaited 10mm and up 32-plaited

### Core

Coated Dyneema® SK78 with additional cover plait

### **LIROS V-Force**

### 04000

LIROS V-Force with high strength Vectran® fibre. Super low stretch, comparable to wire, extremely durable and abrasion resistant. Excellent holding strength in stoppers and cleats with specialised 32-plait cover, ideal for halyards and backstays.

- working stretch < 1 %
- very low initial stretch
- ideal interconnected cover-core
- best stopper durability
- no creep

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
5	950	17	250
6	1400	24	200
8	2800	56	200
10	3700	80	200
12	5300	105	200

### Colours



423 Silver-Red 424 Silver-Green 445 Silver-Black 593 Silver-Blue Cover

Polyester high-twisted

Construction

3-5 mm 16-plaited 6-8 mm 24-plaited 10 mm and up 32-plaited

Core

Vectran®, 8 mm and up with additional cover plait

**Vectran**<sup>™</sup>

LIROS LCS



### LIROS Regatta 2000

### 02000

Very low-stretch line for halyards, spinnaker and genoa sheets. An extremely light and durable high-performance rope with abrasion resistant braided cover and inner cover. Specialised core of coated Dyneema® SK78.

- working stretch < 1,5%
- extreme break resistant, light and durable
- 30% more abrasion resistant than conventional Polyester
- LIROS Heat-Stretch-System

Cover Special Polyester high-twisted

Construction 2-3mm 16-plaited

4mm and up 1:1 plaited

Core Coated Dyneema® SK78,

8mm and up with additional cover plait





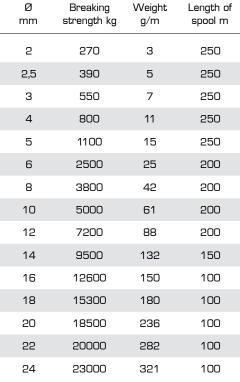
### **Colours**

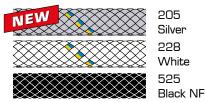


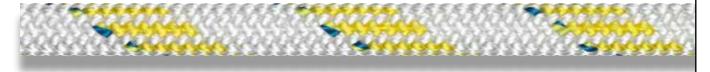
354 Steelblue-Red 212 Steelblue-Blue 352 Steel-



353 Steelblue-Green 213 Steelblue-White 952 Steelblue-Neon Orange







### LIROS Dynamic Plus

### 02004

Easy-handling, abrasion resistant line with low stretch, premium Polyester cover and Dyneema® SK78 core. Suitable for use as a highend sheet, or low-stretch halyard by advanced cruising sailors.

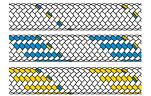
- working stretch < 2%
- kink-free, low-stretch sheets for cruiser-racers
- easy to splice
- LIROS Heat-Stretch-System

# Dvneema®



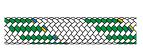
Ø mm	Breaking strength kg	Weight g/m	Length of spool m
3	3 500		250
4	4 710		250
5	870	17	250
6	1200	21	200
8	2300	38	200
10	3100	69	200
12	4800	89	200
14	6500	119	150

### Colours



228 White 229 White-Blue

White-Yellow



White-Green



236 White-Red

### Cover Polyester high twisted

### Construction

3-5mm	16-plaited
6-8mm	24-plaited
10mm and up	32-plaited

### Core

Dyneema® coated, 6 mm and up with additional cover plait



### **LIROS Dynamic Color**

### 02028

Dvneema<sup>s</sup>

LIROS HSS

Easy-handling, abrasion resistant line with low stretch, premium Polyester cover and Dyneema® SK78 core. Suitable for use as a highend sheet, or low-stretch halyard by advanced cruising sailors.

- working stretch < 2%
- kink-free, low-stretch sheets for cruiser-racers
- easy to splice
- LIROS Heat-Stretch-System

mm	strength kg	g/m	spool m
3	500	7	250
4	710	11	250
5	870	17	250
6	1200	21	200
8	2300	38	200
10	3100	69	200
12	4800	89	200
14	6500	119	150

Weight

Length of

Breaking

### Colours



021
Blue-White
067
Yellow-White
092
Green-White
179
Red-White
775

Dark Grey-White

hite LIROS LCS

### Cover

Polyester high twisted

### Construction

3-5mm	16-plaited
6-8mm	24-plaited
10mm and up	32-plaited

### Core

halyard shackle

Dyneema® coated,

6mm and up with additional cover plait

### LIROS Max Load System (MLS)

LIROS MLS crafted halyards and sheets for all popular boat sizes. Regatta ready, manufactured to exact LIROS standards. LIROS MLS with integrated shackle comes in a handy MLS mesh stow bag.

- Premium workmanship
- Product information see above







### Colours

### Halyard (Main, Genoa, Spi)



021 Blue-White



179 Red-White

Reference	Ø mm	Length m	Attachment / halyard shackle	Breaking strength kg	Boat Size ft
02028-0830	8	30	pilot eye/spliced Wichard 81433	1800	22-29
02028-1035	10	35	pilot eye/spliced Wichard 81434	2400	30-36
02028-1240	12	40	pilot eye/spliced Wichard 81434	3800	37-42

### Sheet (Spi, Genoa)

	Reference	Ø mm	Length m	Attachment / soft shackle	Breaking strength kg	Boat Size ft
	02028-0825	8	25	whipping / soft shackle	1800	22-36
W	02028-1025	10	25	whipping / soft shackle	2400	37-40
	02028-1230	12	30	whinning / soft shackle	3800	40-42

NE

# Roy

### LIROS D-Pro

### 01505

Ø

mm

1

1,5

2

2.5

3

4

5

6

8

9

10

12

14

Breaking

strength kg

195

230

410

580

950

1300

2600

4300

5300

7500

9000

11900

14500

19200

Weight

g/m

0,9

1,3

1.8

3.5

4,6

7

13

23

35

49

60

72

95

131

Length of

spool m

100

100

100

100

100

100

100

100

100

100

100

100

100

100

LIROS Heat-Stretch-System guarantees optimal breaking loads and stretch characteristics of this line. Excellent chafing resistance, light weight, and easy spliceability make this line irreplaceable in all sorts of applications on racing boats of any size. Perfect as a replacement for steel cabling in technical applications.

- working stretch < 1%
- very high breaking load with small diameter and very low weight
- first choice for any application under extreme loads
- very spliceable
- highly UV stable and chafe resistant
- LIROS Heat-Stretch-System

SK78
:

Construction 12-plaited, heat-set and coated







Not certified for lifting loads and personal security!

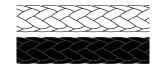


**Colours** 









228 White 674

Deep Black (2 and up)

### LIROS D-Pro Vision

### 01508

The new LIROS D-Pro Vision made of 100% Dyneema® SK78 with extremely high breaking loads at lowest weight! Best differentiation in all applications — whether as high-strength winch rope in industrial use or as universally useable watersports line. High UV-stability combined with best abrasion resistance and highest breaking loads at lowest weight guarantee best safety in practical use. First choice for replacing steel ropes in sports and industrial use.

- working stretch < 1 %
- very high breaking load with small diameter and very low weight
- first choice for any application under extreme loads
- very spliceable
- highly UV stable and chafe resistant
- LIROS-Heat-Stretch-System

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
3	950	4,6	100
4	1300	7	100
5	2600	13	100
6	4300	23	100
8	5300	35	100
10	9000	60	100





### Material

Coated Dyneema® SK78

### Construction

12-plaited, heat-set and coated

### Colours



019 Blue-Black







178 Red-Black



### **LIROS** Herkules

### 00154

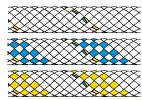
Very resistant, extremely versatile premium quality rope. Specially designed for sheets and control lines on yachts of every size. Very durable and low stretch, easily spliced to wire — heat set. Excellent grip on winch drums, exceptionally abrasion resistant cover. First choice for Cruising yachts with extremely high standards.

- working stretch < 5%
- very high quality line for the demanding Cruising yacht
- easy to splice and absolutely non-kinking
- extremely durable, even under hard winching conditions

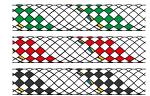


Ø mm	Breaking strength kg	Length of spool m
4	400	250
5	650	250
6	800	200
8	1600	200
10	2500	200
12	3500	200
14	4500	150
16	5000	100
18	6300	100
20	7000	100
22	8000	100
24	9000	100

### **Colours**



228 White 229 White-Blue 231 White-Yellow



232 White-Green 236 White-Red 239 White-Black

Cover

high-strength Polyester

Construction 1:1 plaited

Core

high-strength Polyester plaited



### LIROS Herkules Vision

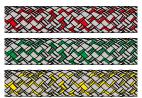
### 01552

Fresh colours combined with our premium silver grey Polyester. Very resistant, extremely versatile, top quality line. Specially designed for sheets and control lines on yachts of every size. Very durable and low stretch — heat set. Excellent grip on winch drums, exceptionally abrasion resistant cover. First choice for Cruising yachts with extremely high standards.

- working stretch < 5%
- very high quality line for the demanding Cruising yacht
- very broad range of uses: sheet, halyard or control line
- · easy to splice and absolutely non-kinking
- extremely durable, even under hard winching conditions

Ø mm	Breaking strength kg	Length of spool m
6	800	200
8	1600	200
10	2500	200
12	3500	200
14	4500	150
16	5000	100

### Colours



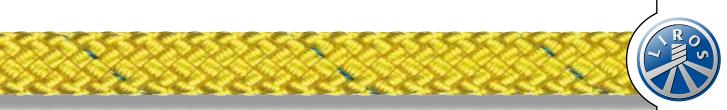
423 Silver-Red 424 Silver-Green 432

Silver-Yellow



445 Silver-Black 458 Silver-Orange 593 Silver-Blue





### **LIROS Herkules Color**

### 01550

Very resistant, extremely versatile premium quality rope. Specially designed for sheets and control lines on yachts of every size. Very durable and low stretch, easily spliced to wire - heat set. Excellent grip on winch drums, exceptionally abrasion resistant cover. First choice for Cruising yachts with extremely high standards.

- working stretch < 5%
- the full-colour alternative to LIROS Herkules with high quality spun-dyed Polyester cover

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



### **Colours**





086 Green 188 Black 130 Navy 529 Silver NF

Cover high-strength Polyester dope dyed

Construction 1:1 plaited

Core high-strength Polyester plaited



### **LIROS Top Grip**

### 01540

The new generation of high quality Cruising sheets. LIROS Top Grip 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.

- working stretch < 5%
- perfect handling
- smooth, comfortable surface
- maximum grip
- best abrasion resistance
- very durable construction

Ø mm	Breaking strength kg	Length of spool m
6	750	200
8	1350	200
10	2200	200
12	3000	200
14	4000	150

### **Colours**



229 White-Blue 232 White-Green



236 White-Red 239 White-Black



Construction 1:1 plaited

Core high-strength Polyester plaited



### LIROS Top-Cruising

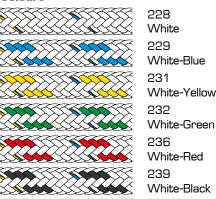
### 00152

Very durable, kink-free, long-lasting sheet made of 100% high-tenacity Polyester. For use as mainsail, jib, and spinnaker sheets. Ideal for blue water sailing and long distances. Easy to splice - heat set.

- working stretch < 5%
- the classic sheet for sailing yachts of any size
- non-kinking, easy-handling line with abrasion resistant cover and high breaking load
- easy-to-splice multi-purpose line

# LIROS

### Colours





### Cover high-strength Polyester

Ø mm	Breaking strength kg	Length of spool m
4	450	250
5	780	250
6	1100	200
7	1300	200
8	1800	200
10	2700	200
12	3200	200
14	3800	150
16	6100	100
18	6900	100
20	9700	100

### Construction

Ø4-8mm 16-plaited Ø 10mm and up 20-plaited

high-tenacity braided Polyester

### LIROS Top-Cruising-Color

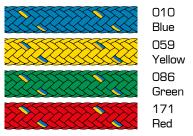
### 01528

Very durable, kink-free, long-lasting sheet made of 100% high-tenacity Polyester. For use as mainsail, headsail and spinnaker sheets. Ideal for blue water sailing, long distances. Easy to splice - heat set.

- working stretch < 5%
- the full-colour alternative to LIROS Top-Cruising with high quality spun-dyed Polyester cover

Ø mm	Breaking strength kg	Length of spool m
4	450	250
5	780	250
6	1100	200
8	1800	200
10	2700	200
12	3200	200
14	3800	150







188 Black 523 Navy NF 529 Silver NF 705 Beige NF



### Cover spun-dyed Polyester

### Construction

Ø4-8mm 16-plaited Ø 10mm and up 20-plaited

### Core

high-tenacity braided Polyester



### **LIROS Allround**

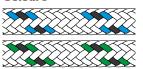
### 00151

Economical double-braid for universal use in industry and watersports. Low water absorption, easy to handle, abrasion resistant — heat set.

- working stretch < 8%
- handy, economical, winch-ready sheet
- cover construction with good abrasion resistance
- minimal water absorption, well-suited for yachts up to 40 feet

Ø mm	Breaking strength kg	Length of spool m
6	800	200
8	1400	200
10	2200	200
12	2600	200
14	3300	150

### **Colours**



229 White-Blue 232

White-Green



236 White-Red

**Cover** Polyester Construction

 $\emptyset$  6-8mm  $\emptyset$  10mm and up

16-plaited 20-plaited

### Core

high-tenacity braided Polypropylene multifilament



### **LIROS Seastar**

### 00162/00172/00173

High quality, grippy Polyester sheet with exceptionally soft, easy to grip cover – heat set. Classic design, available in eight different colours with LIROS blue and gold flecks.

- working stretch < 6%
- soft, easy-to-handle, braided line
- salt water- and abrasion-resistant colours
- easily distinguishable colours help differentiate lines on deck

Ø mm	Breaking strength kg	Length of spool m
5	300	250
6	520	200
8	1000	200
10	1900	200
12	2400	200
14	2900	150
16	3400	100
18	4300	100

### **Colour 00162**



228 White

### **Colour 00173**



546 Hemp NF



### Colours 00172



	171

# 171 **(** Red h

188

Black

### Cover

Polyester yarn matt

### Construction

8-plaited
16-plaited
20-plaited
24-plaited

### Core

high-tenacity braided Polyester



### **LIROS Standard**

### 01082

Economical and soft sheet with easy to grip spun Polyester cover - heat set.

- working stretch < 8%
- soft and easy to grip
- all-purpose sheet

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

### Colours



229 White-Blue



236 White-Red

Cover

matt Polyester yarn

Construction

Ø 6–12mm Ø 14mm and up 16-plaited 20-plaited

### Core

high-tenacity braided Polypropylene

### LIROS Nautic

### 01072

Soft, very light, and easy-to-handle spisheet for dinghies or small keelboats. Can also be used as water-ski rope or towline. Spun-dyed, multi-purpose floating line. Round-woven, UV-stabilised, durable Polypropylene multifilamentament. **1 – 5 mm without flecks**. 6–16 mm with flecks in blue/gold.

- working stretch < 12%
- very lightweight
- easy to handle
- floatable
- UV-stabilised



Co	lours	Ø	1-5	mm	(NF)



### Colours Ø 6-16 mm

010
Blue
059
Yellow
086
Green
150
Orange
171
Red
188
Black
541
Grey OKF
543
Brown Ol

Ø mm	Breaking strength kg	Length of spool m
1	30	500
1,5	38	500
2	70	500
3	140	500
4	280	500
5	390	250
6	550	200
8	900	200
10	1230	200
12	1700	200
14	2000	150
16	3700	100

### Material

Polypropylene multifilament

### Construction

8-plaited



### **LIROS Reflecta**

### 02100

High-quality safety line for recovering individuals, for use with rescue systems or rigid danbuoys. Floating line with reflective fleck, making the rope easily visible under torch or spotlight illumination.

Ø mm	Breaking strength kg	Length of spool m
6	550	200
8	900	200

- working stretch < 12%
- reflective flag
- round
- floats

### Colour



059 Yellow

### Material

Polypropylen multifilament with reflective fleck

### Construction

8-plaited



### LIROS Prestretch

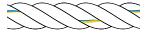
### 00121/00122

Pre-stretched for low elongation. Use for wire halyard leaders, control lines on dinghies and small boats — heat set. Perfect for many industrial applications.

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

Reference	Ø mm	Breaking strength kg	Length of spool m
00121	4	420	250
	5	600	250
	6	820	200
	8	1400	200
00122	4	420	250
	5	580	250
	6	800	200

### **Colour 00121**



228 White

### Colours 00122



188 Black



228 White



Polyester heat-set

Construction 00121 tw

twisted 3-strand

00122

8-plaited

**GREEN WAVE** 



### LIROS Super Yacht Mooring 01300

LIROS Super Yacht Mooring is a mooring line developed for superyachts up to 200 feet. Flexible core provides the best in safety, while the specialised LIROS cover delivers premium comfort. Our high end LIROS version with eye splice and protective leather chafing guard available upon request in individual lengths.

- working stretch > 15%
- ultimate in safety
- extremely easy to handle
- highly abrasion resistant LIROS Leather Guard eye splice in brown or black

dope dyed

Construction 24-plaited,

coated

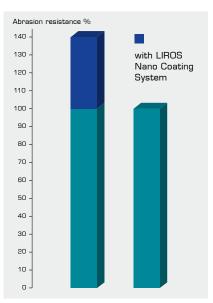
Core high-tenacity braided Polyester





### Colours

130
Navy
188
Black
308
Dark Grey



Abrasion testing in LIROS labs

Reference	Ø mm	Boat size * ft	Breaking strength kg	Weight g/m
01300-2400	24	70 to 90	11500	400
01300-2800	28	up to 120	15900	580
01300-3200	32	up to 150	19800	740
01300-3600	36	up to 180	26000	950
01300-4000	40	up to 200	32800	1150
01300-4400	44	up to 220	38500	1420
01300-4800	48	up to 250	46000	1700
01300-5200	52	up to 280	53500	1980

<sup>\*</sup> for yachts heavier than average, choose the next larger diameter



Leather chafing guard



100% hand-sewn, Made in Germany



Premium whipping



### LIROS Handy-Elastic

### 00136/00137

The top performer in LIROS tests. High-stretch, extremely abrasion resistant mooring line, towline or anchor line. Specially designed with high elastic fibres. Can be used for shock absorption in extreme settings.

- working stretch > 20%
- very easy to splice
- highly elastic and highly UV-stable
- extremely abrasion resistant
- very easy to handle
- very low-noise (when pulsating) under varying loads
- up to 40mm diameter available upon request

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

### Colours 00136



142 Navy-Yellow 188 Black 942

Dark Grey-Black-Red

### Cover

high-strength Polyamide

### Construction

1:1 plaited

### Core

high-elastic braided Polyamide



### **Colour 00137**



289 White-Black-Red



### LIROS Handy-Elastic pre spliced

Reference 00136/00137	Ø mm	Length m	Eye splice cm
-1006	10	6	40
-1010	10	10	40
-1015	10	15	40
-1206	12	6	40
-1210	12	10	40
-1215	12	15	40
-1406	14	6	40
-1410	14	10	40
-1415	14	15	40

Reference 00136/00137	Ø mm	Length m	Eye splice cm
-1606	16	6	40
-1610	16	10	40
-1615	16	15	40
-1806	18	6	40
-1810	18	10	40
-1815	18	15	40



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



### **LIROS Porto**

Very easy to handle 100% Polyester mooring or anchor line. Extremely strong and abrasion resistant, will not stiffen up. Special twist construction for high stretch.

- working stretch > 15%
- very easy to splice
- highly UV-stable
- high strength and excellent abrasion resistance

### Cover

Polyester high twisted

### Construction

Ø 8–10mm 16-plaited Ø 12mm and up 20-plaited

### Core

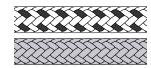
high-strength Polyester braid

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

### Colours



130 Navy 188 Black



239 White-Black 529 Silver

00133





### LIROS Porto pre spliced

Reference	Ø	Length m	Eye splice cm
00133-1006	10	6	40
00133-1010	10	10	40
00133-1015	10	15	40
00133-1206	12	6	40
00133-1210	12	10	40
00133-1215	12	15	40
00133-1406	14	6	40
00133-1410	14	10	40
00133-1415	14	15	40
00133-1606	16	6	40
00133-1610	16	10	40
00133-1615	16	15	40
00133-1806	18	6	40
00133-1810	18	10	40
00133-1815	18	15	40

Reference	Ø mm	Length m	Eye splice
00133-1030	10	30	S/S thimble
00133-1230	12	30	S/S thimble
00133-1430	14	30	S/S thimble
00133-1630	16	30	S/S thimble



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

130 Navy 188 Black 239 White-Black

529

Silver

### **Colours**





### **LIROS Holiday**

### 01083

A textured, grippy but soft mooring line for travelling. Light as a feather for low water absorption. Good abrasion resistance for sailing trips. Kink free for easy mooring.

- working stretch < 15%
- easy splicing
- light and floatable
- very good price-performance ratio



381 Black-Silver

Ø mm	Breaking strength kg	Length of spool m
10	1500	200
12	2100	200
14	2800	150
16	3200	100

### Material

spun dyed Polypropylene multifilament



### Construction

16-plaited



### **LIROS Bumperline**

### 01079

Premium square-braided fender line. Smooth material lays flat against topsides. Soft and easy to handle. Spliced attachments on both ends. 100% UV stabilised Polypropylene multifilament. Length between splices: 2,5 m, diameter: 12 mm.

Reference	Mm	Length m
01079-5001	50	5
01079-5002	50	7,5

- pliable
- lays cleanly against topsides
- soft and easy to handle
- low water absorption
- floatable





spun dyed Polypropylene multifilament

### Construction

8-plaited square braiding

## Colour



130 Navy

### LIROS Flat-Elastic

### 00140

Newly designed mooring line without a core. Exceptional handling, durable, tear and abrasion resistant. Space saver, and very flexible.

- working stretch > 20 %
- highly elastic and UV-stable
- very easy to splice

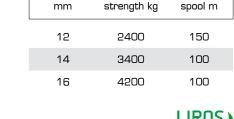
Cover high-strength Polyamide

Construction 1:1 plaited

### Colour

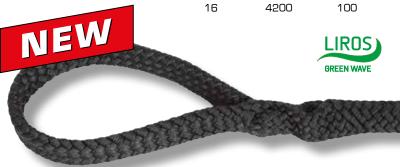


188 Black



Breaking

Length of



Ø



### **LIROS Squareline-PES**

### 01047/01049

Super pliable, easy handling square-braided mooring or anchor line of  $100\,\%$ high-tenacity Polyester. 100% kink-free, easy to splice and easily joined to chain.

- working stretch > 15%
- soft and easy to handle, extremely UV-stable
- smooth, comfortable feel
- non-kinking and extremely abrasion resistant
- easy to splice

### LIROS **GREEN WAVE**

188 Black

LIROS

GREEN WAVE

Blue

01580

### Material

high-strength Polyester

### **Construction**

8-plaited Octoplait



24	
26	
28	

Ø mm	Breaking strength kg	Length of spool m
10	2000	200
12	2400	200
14	3800	150
16	4700	100
18	5800	100
20	7600	100
22	8600	100
24	10700	100
26	13700	100
28	15000	100

### **Colour 01047**



229 White-Blue

### **Colours 01049**



130 Navy



### LIROS Squareline-PP 01078/01079/01080

Very light and easy-to-handle mooring line, land line, or towing line. High-strength, floating, UV-stabilised.

- working stretch > 15%
- floats
- low water absorption

### Material

high-strength Polypropylene multifilament

### **Colour 01078**



228 White

### **Construction** 8-plaited Octoplait

### Colours 01079



\*Available up to 28 mm.

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

### **Colour 01080**



### **LIROS Fender Line**

- pair of premium fender lines
- eye splice (15cm) on one end
- 1,5m customized or 100m reels without eyes

Reference	Ø mm	Length m	Breaking strength kg	Eye cm
01580-0802	8	1,5	900	15
01580-0800	8	100	1000	-
01580-1002	10	2	1500	15
01580-1000	10	100	1500	-

**Material** high-tenacity black Polyester







### **LIROS Moorex 12**

### 00132

Very pliable, easy to handle, high-stretch mooring line. Hollow braided, very easy to splice. 12-plaited high-tenacity Polyester.

- working stretch > 15%
- economical braided LIROS mooring line
- very smooth and easy to handle
- high stretch
- easy to splice

Breaking strength kg	Length of spool m
2400	200
3000	200
4000	150
4600	100
5300	100
7200	100
	2400 3000 4000 4600 5300

### **Colours**



130 Navy



188 Black



Material

high-strength Polyester

### Construction

12-plaited



### LIROS Moorex 12 pre spliced

Reference	Ø mm	Length m	Eye splice cm
00132-1006	10	6	40
00132-1010	10	10	40
00132-1015	10	15	40
00132-1206	12	6	40
00132-1210	12	10	40
00132-1215	12	15	40
00132-1406	14	6	40
00132-1410	14	10	40
00132-1415	14	15	40

Reference	Ø mm	Length m	Eye splice cm
00132-1606	16	6	40
00132-1610	16	10	40
00132-1615	16	15	40
00132-1806	18	6	40
00132-1810	18	10	40
00132-1815	18	15	40



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

### **Colours**





130

Navy





### **LIROS Polyester Rope**

### 00111/01110

Classic, very easy to splice, high strength, abrasion resistant rope for mooring and anchoring. 3-strand made of 100% Polyester. Heat-set. According to **DIN EN ISO 1141** standards (previously DIN EN 697, DIN 83331), heat set.

- working stretch > 15%
- very easy to splice
- extremely strong and abrasion resistant
- heat-set
- highest UV stability
- perfect for a lot of industrial applications



### **Colour 00111**



White

# Colours 01110

130 Navy 188 Black



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

### **Material**

high-strength Polyester

### Construction

3-strand, heat-set



### LIROS Polyester Rope pre spliced

Reference	Ø mm	Length m	Eye splice cm
00111-1006	10	6	40
00111-1010	10	10	40
00111-1015	10	15	40
00111-1206	12	6	40
00111-1210	12	10	40
00111-1215	12	15	40
00111-1406	14	6	40
00111-1410	14	10	40
00111-1415	14	15	40
00111-1606	16	6	40
00111-1610	16	10	40
00111-1615	16	15	40

Reference	Ø mm	Length m	Eye splice
00111-1030	10	30	S/S thimble
00111-1230	12	30	S/S thimble
00111-1430	14	30	S/S thimble
00111-1630	16	30	S/S thimble



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

### **Colour 00111**





### **LIROS Polyamide Rope**

### 00110

Classic mooring line with high elesticity. 3-strand twist for easy splicing. High strength and excellent abrasion resistance. 100% heat-set Nylon, according to **DIN EN ISO 1140** (previously DIN EN 696, DIN 83330), heat set.

- working stretch > 20%
- very easy to splice
- extremely durable and abrasion resistant
- UV stabilised
- perfectly suited for multiple industrial uses

Colour
--------





Material	high-strength Polyamide
Construction	3-strand, heat-set

Ø mm	Breaking strength kg	Length of spool m
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
32	19600	on request
36	24400	on request



### **LIROS Lirolen**

### 01120/01123/01126

All-purpose, floating 3-strand rope. Easy to splice, stays pliable even after extensive usage. According to **DIN EN ISO 1346** (previously DIN EN 699, DIN 83332)

**01120**: Polypropylene multifilament, heat-set, white **01123**: Polypropylene multifilament spun dyed, heat-set **01126**: Polypropylene multifilament spun dyed, heat-set

- working stretch > 15%
- easy to splice
- economical, allround line
- low water absorption
- floatable
- perfect for many industrial applications



4	280	250
5	425	250
6	600	200
8	1000	200
10	1500	200
12	2120	200
14	2800	150
16	3750	100
18	4500	100
20	5600	100

Breaking

strength kg

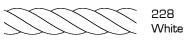
Length of

spool m

Ø

mm

### **Colour 01120**



### **Colour 01126**



705 Beige NF

### Colours 01123



### **Material**

high-strength Polypropylene multifilament

### Construction

3-strand, heat-set



### **LIROS Handy-Anchor**

### 01320

High quality anchor line with lead weight built into the last ten meters. Can be used without chain, especially easy to handle and stow. Available in 20, 30 and 40 m lengths, with spliced S/S-thimble and whipping. 100% Polyester abrasion and UVresistant. Comes in handy, blue LIROS kitbag.

- can be used without chain
- super easy to handle
- very simple to stow
- attractive LIROS kitbag

Ø mm	Breaking strength kg	Length of spool m	Weight kg
10	1500	20	3,4
10	1500	30	4,2
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
16	4000	50	13,5

### Colour



229 White-Blue

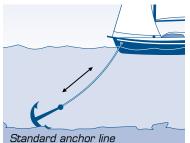
All lengths have 10 m of integrated lead weighting and steel thimble

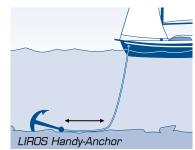


Polyester Cover 20-plaited Construction Core Polyester, lead

(10 m from S/S thimble)







### **LIROS Winch-Master**

### W1322

Similar to LIROS Handy-Anchor, but optimised to withstand windlass usage.

- completely with lead core
- attractive LIROS kitbag

Colour	



228 White



Ø mm	Breaking strength kg	Length of spool m	Weight kg
12	1500	30	4,5
12	1500	40	5,9
12	1500	50	7,4
14	2200	40	11,0
14	2200	50	14,2
16	3100	40	12,9
16	3100	50	16,1

Cover	Construction	
Polyester	12mm	16-plaited
_	14mm and up	20-plaited



### LIROS Magic XTR

### 01513

LIROS Magic XTR is ideal for use in dinghies and multihulls. Superior high grip, extremely durable cover. Perfect in cleats. The professional's choice.

- working stretch < 1%
- grip factor 9 (page 10)
- removable cover for top performance
- superior abrasion resistance combo-cover (twisted Technora®/Dyneema®)
- best cover-core attachment
- very low stretch, highest breaking load
- LIROS Heat-Stretch-System

Ø mm	Breaking strength kg	Length of spool m
4	620	100
5	1400	100
6	1800	100



### Colours



231 White-Yellow



239 White-Black

### Cover

Technora®/Dyneema® Mix

### Construction

4-5 mm 16-plaited 6 mm 24-plaited

### Core

Dyneema® SK78 with LIROS XTR Grip Coating

### LIROS Magic Control XTR

### 02024

Maximum grip for exact control of your dinghy. High tech materials provide highest reliability and enable precise manoeuvres, when it counts.

- working stretch < 1,0%
- coated core
- very resistant and handy
- miminum stretch
- LIROS Heat-Stretch-System

Ø mm	Breaking strength kg	Length of spool m
4	1100	100
5	1450	100
6	2800	100



### Colours



090 Green-Black 178 Red-Black



239 White-Black 652 Neon Yellow-Black

### Cover

Technora®/Polyester

### Construction

4-5 mm 16-plaited 6 mm 24-plaited

### Core

Dyneema® SK78 silver with LIROS XTR Grip Coating



### **LIROS Magic Pro**

### 01507

LIROS Magic Pro combines all of the best characteristics with extreme low stretch. Outstanding block performance, enabling ultra-fast manoeuvres. The core is coated and specially treated with LIROS Heat-Stretch-System. The cover is made of a special Polyester grip fibre / spun-dyed Polyester mix for optimal control and perfect handling in manoeuvres.

- working stretch < 1,5%
- grip factor 9 (page 10)
- precise cover construction for excellent hold in cleats and winches
- ideal for cover-stripping
- LIROS Heat-Stretch-System for lowest stretch

Ø mm	Breaking strength kg	Length of spool m
3	450	100
4	620	100
5	1250	100
6	1800	100
8	3000	100



### **Colours**



229 White-Blue 232 White-Green 236 White-Red 239 White-Black



404 White-Silver 428 White-Pink 501 White-Neon Yellow



### Cover

Polyester grip fibre / spun-dyed Polyester mix

### Construction

16-plaited

### Core

Dyneema® SK78 with coloured LIROS XTR Grip Coating

### LIROS Magic Edge

### 01502

Robust and handy low-stretch performance rope for all applications to regatta and advanced dinghy sailing boats. Best abrasion resistance due to high tech and tight cover braid.

- working stretch < 1,0%
- coated core
- resistant and handy construction
- low elongation
- 1,5-2mm single-coloured
- LIROS Heat-Stretch-System

Ø mm	Breaking strength kg	Length of spool m
1,5	125	100
2	250	100
3	420	100
4	580	100
5	1050	100
6	1800	100
7	2300	100

### Colours



Black-Blue
192
Black-Yellow
194
Black-Green
197

Black-Neon Orange

198 Black-Pink 199 Black-Red 381 Black-Silver



LIROS HSS

### Cover

Spun dyed Polyester

# **Construction** 1,5-5 mm 6 mm and up

16-plaited 1:1 plaited

### Cor

Dyneema® SK78 silver with LIROS XTR Grip Coating



### **LIROS Magic Race**

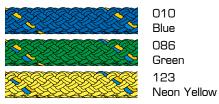
#### 02016

Extremely low stretch, compact, and abrasion resistant braid with high-strength Dyneema® core.

- working stretch < 1,5%
- highly UV resistant
- low stretch, high grip

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

#### **Colours**





171 Red 188 Black 228 White





#### Cover

special high-twisted Polyester

#### Construction

2-3 mm 16-plaited 4 mm and up 1:1 plaited

#### Core

Dyneema® SK78 coated

## LIROS DynaSoft

#### 02055

LIROS DynaSoft combines the best grip, the lightest weight, and the lowest stretch. Combination braid of high-strength Polyester grip fibres and Dyneema®. Almost kink free rope, which has been achieved through thermal treatment of the rope. Ideal for dinghy sheets and regatta halyard leads.

Ø mm	Breaking strength kg	Length of spool m
7	1200	100
9	2000	100

- working stretch < 2%
- heat-set
- high grip
- extremely flexible
- excellent handleability
- limited suitability on winches
- LIROS Heat-Stretch-System for lowest stretch





#### Colours



081 Grey-Green 386 Grey-Red



504 Grey-Turquoise

#### Material

Ideal hybrid of Dyneema® SK78 and Polyester grip fibres

**Construction** 8-plaited with core



### **LIROS Magic Sport**

#### 01517

Technical high-grade, universally useable line in striking Neon-Design for dinghies and small keel boats. Very abrasion resistant core in cleats, low stretch due to heat-set Polyester core.

- working stretch < 5%
- very abrasion resistant
- high visibility
- low stretch



Ø mm	Breaking strength kg	Length of spool m
2	95	100
3	185	100
4	550	100
5	850	100
6	1000	100

#### Colours



781 Neon Yellow-White Neon Yellow-Silver



417 Neon Yellow-Pink Neon Yellow-Blue

spun dyed Polyester

Construction 16-plaited

#### Core

high-strength Polyester

# LIROS Magic Sheet

#### 01506

LIROS Magic Sheet has been specially developed for use as main and jib sheets on dinghies, sports boats, and catamarans. Polyester grip fibres provide best cover-core attachment and perfect grip for optimal control in any situation.

- working stretch < 8%
- great in turning blocks, fastest manoeuvres
- very compact non splice construction

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

#### Cover

Polyester grip fibre / spun-dyed Polyester mix

#### Construction

16-plaited

#### Core

Polypropylene high-strength plaited

White-Orange



#### Colours



404 White-Silver 405 White-Marine



428 White-Pink

## LIROS Magic Surf

The LIROS Magic Surf is specially designed for wind surfing and enables exact setting of the sail tension. 03000-0380 is suitable for all kinds of clutches. 00148-0419 enables extreme grip on sensitive clutches and at higher stress on systems with ratchet.

- working stretch < 1%
- extremely low stretch

_				
	Reference	Ø mm	Breaking strength kg	Length of spool m
	03000-0380	3,8	1000	100
	00148-0419	4,2	800	100



Colour	
	228
	White

Material Dyneema® SK 78, pre-stretched

Konstruktion 3,8 mm 16-plaited

4,2 mm 8-plaited



# 

### LIROS Spi Pro

#### 02049-0000

Very light, high quality, individually produced tapered spinnaker sheet with Dyneema® SK78 core for extremely low stretch and high strength. Minimal water absorption.

- Individual customisation available for any boat
- tailor-made for long working life
- lowest stretch and water absorbency
- premium spun Polyester for optimal grip
- available in diameters from 3-12 mm
- length, diameter, and colour customised to your specifications
- lowest weight
- available with eye splice



#### Cover

thick end – high-grip matt Polyester with Dyneema® SK78 / tapered end – 100% Dyneema® SK78

#### Core

braided Dyneema® SK78



Reference: 02042-0100

#### Colours



021 Blue-White

... mm

067 Yellow-White



... mm

\$

Green-White

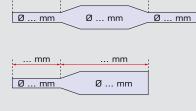
Red-White



204 Black-White 542 White NF

#### Required order specifications:

- 1. Ø thick end
- 2. length thick end3. Ø tapered end
- o. D tapel ed ella
- 4. length tapered end5. colour



... mm

5 – 3 / 480	10 – 4 / 780	8 – 6 / 2000
6 – 3 / 480	8 – 5 / 950	9 – 6 / 2000
6 – 4 / 780	9 – 5 / 950	10 – 6 / 2000
8 – 4 / 780	10 – 5 / 950	12 – 6 / 2000
9 – 4 / 780	12 – 5 / 950	12 – 8 / 3000

Available Ø 02049 [mm] / Breaking strength tapered end [kg]:

## LIROS Spi

#### 02049

Very light and high quality spinnaker sheet with Dyneema® SK78 core for optimal grip, low stretch and high strength. Minimal water absorption.

- working stretch < 3%
- premium spun Polyester for optimal grip
- lowest stretch
- light weight

BIO-BASED DYNEEMA®

Mm	Breaking strength kg	Length of spool m
5	650	100
6	800	100
8	1000	100
10	1900	100

#### **Colours**



092 Green-White 179 Red-White



542 White NF

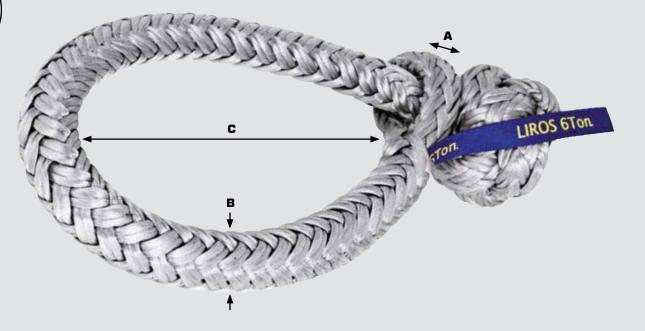
#### Cover

high-grip matt Polyester with Dyneema® SK78

#### Core

Dyneema® SK78 plaited





### LIROS Soft Shackle

Fastening sheets, shackle halyards, fix blocks – the LIROS XTR Soft Shackle is the solution! 100% made of high-strength fiber Dyneema® SK78, replaces heavy metal shackles on deck. Easy and fast opening, thanks to the blue "LIROS ribbon" with breaking strength information.

- No damages on deck or risk of injuries when operating by flapping metal parts
- suitable for many applications in sectors industry, offroad and outdoor
- 10x lighter than steel shackles at same breaking strength
- Easy and intuitive handling
- self-locking construction under load
- easy to open after use with high loads
- safety factor 2:1

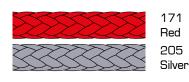


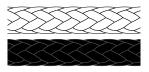
**Material** 



#### Colours







228 White 674 Deep Black

Dyneema® SK78

Reference	Breaking strength t	Colour	SWL** t	<b>A</b> Material Ø mm	<b>B</b> Final Ø app. mm	<b>C</b> Inner length mm
00146-0066	1	228 White*	0,5	4	6	65
00146-0090	1,5	674 Deep Black	0,75	5	9	90
00146-0069	2	171 Red*	1	6	12	120
00146-0070	4	010 Blue*	2	8	13	135
00146-0071	6	059 Yellow*	3	9	15	150
00146-0072	8	086 Green	4	10	19	150
00146-0073	10	674 Deep Black	5	12	20	190

<sup>\*</sup> All sizes also available in deep black or silver!



<sup>\*\*</sup> SWL = Safe Work Load



### **LIROS Taper Pro**

#### 02010

LIROS Taper Pro is the ideal line for latest generation of headsail furlers. This high-strength Dyneema® line offers a smooth transition from thick to thin for optimal handling. The thick cover provides excellent grip, while the thin end enables easy rolling, even under heavy load with small diameter furlers. Perfect as a low-stretch halyard for boats from 25-35 feet.

- working stretch < 1,5%
- optimum grip on winches
- easy reefing, safe manoeuvres
- perfect solution for tapered halyards

Ø

mm

11-8



**Cover** high-tenacity Polyester

Construction 1:1 plaited

Core Dyneema® SK78 with additional cover plaiting

	_
Length with tapering	
m	







### **LIROS D-Loop**

Reference

02010-1100

Textile slings made of high strength Dyneema® SK99 provides various options for transferring loads. Maximum weight savings. Replaces heavy steel fittings. Ideal combination with low-friction rings, blocks and shackles. LIROS D-loops can be used in three variants: single, double and looped.

Breaking

strength kg

3200

- working stretch < 2%
- maximum breakload at lowest weight
- LIROS Heat-Stretch-System
- round and safe

#### Colour

looped



205 Silver

**D**vneema

from 11 mm (20 m) to 8 mm (15 m) / 35 m

#### **Application examples**

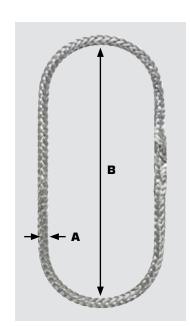




double







**Material** Dyneema® SK99

**Construction**16-plaited, coated

Reference	<b>A</b> Material Ø mm	<b>B</b> Stretched length mm	SWL* single t	SWL* double t	SWL* looped t
00146-0230	4	100	0,6	1,2	0,48
00146-0231	7	100	1,1	2,2	0,88
00146-0232	8	130	1,6	3,2	1,28
00146-0234	10	170	2,5	5	2
00146-0235	10	200	2.5	5	2



\*SWL = Safe Work Load



### LIROS AntiTorsion EVO

11442

Proven, ideal replacement for cable forestays.

- working stretch < 1%
- stiff, reinforced with braided monofilament inner cover
- high-strength Aramid core for extremely low-stretch and high breaking load
- non-splicing
- available in custom lengths

#### Colour



188 Black



LIROS LCS

Cover Polyester Construction

16-plaited

Core

Ø

mm

6

8

10.5

11

13

16,5

Aramid with braided monofilament

Ø

mm

4

4,5

5

5,5

6

8

real Ø

mm

7,0-7,3

9,6

10.5

11,3

13,15

16,0

Breaking

strength kg

1300

3300

4000

4100

5000

8500

Length of spool m

250

250

250

250

200

200

200

#### **LIROS** Leachline

01046

Compact, braided, shape-retaining leach line for sailmakers.

- round
- compact
- minimal shrinkage



#### Colour



Cover low-shrink Polyester Construction

16-plaited

Core

Polyester

### LIROS Lazy Jack

01532

New compact construction made of special high twisted Polyester. The very smooth and abrasion resistant surface protects the sail when dropping. The wide hollow braid is very easy to splice. Specially designed for use as Lazy Jack line.

Ø mm	Breaking strength kg	Length of spool m
4	500	250
6	1100	200
8	2200	200

- round and lightweight
- extremely UV-resistant and abrasion resistant

#### Colour



529 Silver NF

#### Material

special high twisted Polyester spun dyed

#### Construction

12-plaited without core





Specially designed Furler Line with cover-core construction for use in all common furling systems. Abrasion resistant and UV-stable due to high quality Polyester cover. To manufacture endless spliced furling lines please use LIROS 00154 Herkules or LIROS 00152 Top-Cruising.

- Stretch < 5%
- High resistance to bending
- Abrasion resistant and UV-stable

Reference	Ø mm	Length m	Breaking strength kg
01546-0801	8	20	1700
01546-0802	8	25	1700
01546-1001	10	25	2700
01546-1002	10	28	2700
01546-1201	12	40	3200



#### Colour



**Cover**Polyester

Construction

8mm 10-12mm 20-plaited 24-plaited

00186

Core

Polyester

# LIROS Webbing Dyneema®

Premium webbing, low-stretch and high breaking strength.

- lowest stretch
- very abrasion resistant
- no water absorption
- extremely UV resistant





#### Colour



**Material** Dyneema® SK78



### **LIROS Magic Sail**

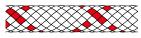
#### 01512

LIROS Magic Sail is ideal for sailmakers. Extremely shrink-resistant, round and compact for easy processing.

- minimal shrinkage
- good dimensional stability

Ø mm	Breaking strength kg	Length of spool m
3	185	500
4	320	500
5	680	250

#### Colour



236 White-Red



**Cover**Polyester

#### Construction

2-5 mm 16-plaited 6 mm 1:1 plaited Core

low-shrinkage Polyester



### **LIROS Bolt Rope**

00124

- round
- compact
- minimal shrinkage

mm	spool m
6	200
7	200
8	200
9	200
10	200

Length of

#### Colour



228 White

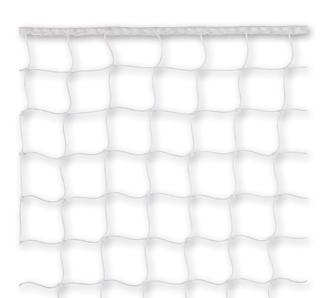


### Material

low-shrinkage Polyester

Construction

3-strand



# LIROS Safety Netting 02040-0001-228

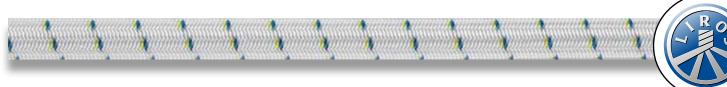
Premium knotted safety netting of 2mm white, braided Polyester with reinforced edging.

- mesh openings approx. 45 mm
- netting width 60cm
- 50m lengths





Detail view



### LIROS Shock Cord

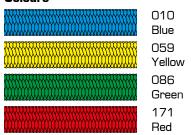
#### 00190

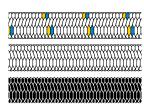
Our high-elasticity shock cord with the best in stretch characteristics. Braided out of abrasion resistant Polyester in solid colour or white with blue-gold mark yarn.

- round, abrasion-resistant construction
- also available in industrial bulk quantities
- Made in Germany

Ø mm	Breaking strength cover kg	Length of spool m
3	40	100
4	100	100
5	100	100
6	180	100
7	300	100
8	350	100
10	350	100
12	410	100
14	480	100

#### Colours





228 White 542 White NF 188 Black

**Cover** Polyester

#### Construction

3-8mm 10-14mm 16-plaited 24-plaited

#### Core

premium Latex



### LIROS Stretch XTR

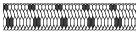
#### 00199

High quality Shock Cord with extremely abrasion resistant  $100\,\%$  Dyneema® jacket. Intelligent cover construction design with maximum breakload.

- highest abrasion resistance
- very lightweight
- low water absorption
- UV-resistant

Ø mm	strength cover daN	Length of spool m
3	150	100
4	290	100
5	300	100
6	320	100

### Colour



239 White-Black



**Cover** Dyneema® **Construction** 16-plaited

**Core** high quality Latex rubber





### LIROS Quick Clip + Shock Cord

Universal, all-purpose attachment for shock cord. 5 pieces in PE bag.

Reference	Ø mm	Length cm	Reference	Ø mm	Length cm
01905-4050	4	50	01907-8100	7	100
01905-5070	5	70	01907-8140	7	140



### **LIROS Quick Clip**

Useful tightener for shock cords 5 pieces in PE bag or individually available.

01905-0000 single	01905-0001 Five pieces in PE bag
01907-0000 single	01907-0001 Five pieces in PE bag



### LIROS Elastic Strops

Our premium braided Polyester shock cord with nylon hook. 5 pieces in PE bag or available individually. High quality stretch latex core for long-lasting elasticity. Perfect for hanging advertising flags or banners. Abrasion and UV-resistant. Made in Germany.

Reference	Ø mm	Length cm	Reference	Ø mm	Length cm
01901-0415	4	15	01901-0455	4	55
01901-0435	4	35	01901-0475	4	75



## **LIROS Nylon Hook**

For 4 mm diameter shock cord. 10 pieces in PE bag.

Reference	Ø mm
01294-0400-228	4



### LIROS Nylon-Carabine Hook

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

For LIROS Shock Cord  $\emptyset$  4–8 mm 5 pieces in PE bag.



### LIROS Sail Ties 00187-2525-229

Practical sail ties keep your sails safe.
Premium end loop stitching for easy tying.

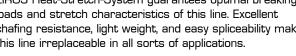
- 5 pieces in LIROS Netbag
- length: 2m



### **LIROS D-Pro**

01505

LIROS Heat-Stretch-System guarantees optimal breaking loads and stretch characteristics of this line. Excellent chafing resistance, light weight, and easy spliceability make this line irreplaceable in all sorts of applications.



- very strong and abrasion resistant
- UV resistant and spliceable

Reference	Ø mm	Breaking strength kg	Number of spools / length
01505-0002	2	410	10 x 30m
01505-0003	3	950	10 x 15 m
01505-0004	4	1300	5 x 10m

#### Material

pre-stretched, coated Dyneema® SK78

#### Construction 12-plaited





#### Colours

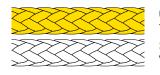


054 Selection 171 Red 674

Deep Black



010 Blue 205 Silver



059 Yellow 228 White



## **LIROS Magic Speed**

01501

Braided Polyester cord point-of-sale box with assorted colours.

- all-purpose line
- round braiding
- very robust

Reference	Ø mm	Breaking strength kg	Number of spools / length
01501-0002	2	95	10 x 30 m
01501-0003	3	185	10 x 15 m

**Material** Polyester

Construction

16-plaited with core

Core Polyester

#### Colours



054 Selection 414 Neon Yellow-Pink-Blue



Blue-Pink-Red 408

Black-Neon Yellow-Blue



412 Red-Pink-Blue





### LIROS Magic Sport

01517

Technical high-grade, universally useable line in striking Neon-Design for dinghies and small keel boats. Very abrasion resistant core in cleats, low stretch due to heat-set Polyester core.

- working stretch < 5%
- high visibility colours
- very resistant
- low stretch

Reference	Ø mm	Breaking strength kg	Number of spools / length
01517-0002	2	85	10 x 30m
01517-0003	3	195	10 x 15m

#### **Colours**



054
Selection
417
Neon Yellow-Pink
771

Neon Yellow-Silver



773 Neon Yellow-Blue 781 Neon Yellow-White

**Cover** spun dyed Polyester

# **Construction**16-plaited with core

**Core** Polyester





# LIROS Braided Polyester Line

Braided high-strength Polyester.

- will not stiffen up
- flexible
- very UV resistant

Reference	Ø mm	Breaking strength kg	Number of spools / length
01040-0002	2	100	10 x 30 m
01040-0003	3	200	10 x 15 m
01040-0004	4	330	5 x 10m

Material

high-strength Polyester

Construction

8-plaited

010

Blue

059

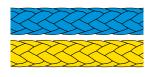
Yellow

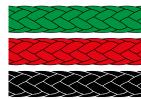


### Colours



054 Selection 228 White





086 Green 171 Red 188 Black



### **LIROS Trim Line neon**

Popular braided Polyester cord point-of-sale box with assorted colours.

- all-purpose line
- great self-service item
- round braiding



01522

Reference	Ø mm	Breaking strength kg	Number of spools / length
01522-0163-054	3	200	10 x 20 m

Materialcoloured PolyesterConstruction16-plaited with core

### **LIROS Classic**

01172

Design like traditional hemp rope, but softer, stronger and more weather resistant at constant quality.

- high-grip
- pliable
- weather resistant



Ø mm	Number of spools / length
a	10 v 10 m

Material

spun polyester yarn

Construction
3-strand

#### Colour



546 Hemp NF



# LIROS Optisail

02056

Low-stretch Opti lanyards for longlasting use and great knot holding.

- working stretch < 1,5%
- best knot holding
- extremely, strong and pliable

m	•	lumber of ools / length
1,	2 2	20 x 20m



#### Colour



199 Black-Red

CoverConstructionPolyester16-plaited with core

Core

Dyneema® SK78





### LIROS Whipping Twine / Sewing Thread

Reference	Ø mm	Number of spools / length	Construction	Treatment	Colour
00001	1,0	5 x 30m	plaited	unwaxed	292 White assorted
	1,5	5 x 20m	plaited	unwaxed	292 White assorted
	1,5	5 x 20m	plaited	heavy waxed	292 White assorted
	1,2	5 x 30m	twisted	waxed	292 White assorted
00006	0,5	20 x 80 m	twisted	waxed	072 White
00007	1,2	20 x 30 m	twisted	waxed	072 White
00008	1,5	20 x 20m	plaited	heavy waxed	072 White
00011	1,0	20 x 30 m	plaited	heavy waxed	072 White
00012	1,5	20 x 20m	plaited	unwaxed	054 assorted colours*
00013	1,5	20 x 20 m	plaited	heavy waxed	293 assorted colours*
Sewing Thread 00099-0400	0,3	10 x 140 m	Polyester		228 White

All whipping twine also available in bulk 500 m spools.

\*assorted colours: Black, Blue, Green, Red, Yellow

LIROS Dyneema® Waxed Whipping Twine					
00016	0,5	20x60m	braided	waxed	529 Silver
00017	1,2	20x30m	braided	waxed	529 Silver



### LIROS Whipping twine set

01042-0122

LIROS waxed whipping twine in 1,2mm and a LIROS 00143-4001 micro splicing needle.

- waxed whipping twine white
- micro splicing needle

Ø mm	Length of spool m
1,2	100

### Material

Polyester

Construction twisted

#### **LIROS DC Pro**

High-performance, 100% Dyneema® SK99 kiteline. Unmatched ratio between diameter and breaking strength. LIROS DC is perfect for use as flying or bridle line. Extremely low drag values and maximum performance for the kiter. Excellent dimensional stability even after highest stress. Delivers best in kite performance and durable precise control of the sporting equipment.

- easy to splice
- unmatched precision in kite control
- excellent dimensional stability
- LIROS Heat-Stretch-System

Reference	app. Ø mm	Breaking strength kg	Length of spool* m
DC 000-0161	0,83	170	1000
DC 000-0201	1,10	230	1000
DC 000-0301	1,30	325	1000
DC 000-0401	1,55	490	1000
DC 000-0701	2,00	730	1000

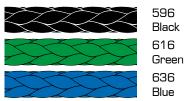


LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

Not all colours available in all diameters.

#### **Colours**









Length of

spool\* m

Breaking strength kg

**Material** pre-stretched, coated Dyneema® SK 99

Construction

Reference

12-plaited

Please find Polyester cover to strengthen splices on page 52.

#### LIROS DC

High-end, 100% Dyneema® SK75 kiteline. LIROS DC is perfect for use as flying or bridle line. Highest load capacity with minimal line diameter delivers the best in kite performance. Extreme stretch resistance, even after heavy loads, for precise control of the kite.

LIROS DC — Kiting without compromise!

- easy to splice
- unmatched precision in kite control
- excellent dimensional stability
- LIROS Heat-Stretch-System

0.000	ALC: CH	10/0/0	A STATE OF THE STA

app. Ø

L				
	DC 000-0035**	0,38	35	1000
	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



LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

Not all colours available in all diameters.

\*\* DC 000-0035 only available in 228 White and 659 Orange.

#### Colours







#### **Material**

pre-stretched, coated Dyneema® SK75

#### Construction

12- and 16-plaited

Please find Polyester cover to strengthen splices on page 52.



### **LIROS PC**

Very long-lived and abrasion resistant cover for LIROS flying lines. A flexible braid made of high quality polyester protects the flying line and guarantees best connection properties.

- long-lived
- UV-resistant
- cover material without core

Reference	suitable for	Length of spool* m
PC000-0060	DC60, DC100	100
PC000-0120	DC120, DC160, DC161, DC201	100
PC000-0200	DC200, DC301	100
PC000-0300	DC300, DC401, DC701	100



LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

#### Colours





188 Black

**Material** 

hollow-braided Polyester

#### **LIROS Bridle Line**

LIROS Bridle Line is the reliable and durable bridle line with minimal stretch characteristics. The very abrasion-resistant and compact braided Polyester cover makes this rope glide perfectly through pulleys and has direct influence on kite control.

- low elongation
- high abrasion resistance
- compact
- safe

Reference	app. Ø mm	Breaking strength kg	Length of spool* m
22138-0200	2,0	300	1000
22138-0330	3,3	500	500



\* LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

#### Colour



188 Black



LIROS HSS
LIROS LCS

Cover high-strength Polyester

Construction 12-plaited

Core

Dyneema® plaited

### **LIROS DePower Lines**

Specially designed Depower line made of 100% Dyneema®. For long-life cycle in modern kitebar constructions. Technically versed coatings deliver up to 30% more resistance against abrasion, than in common depower lines.

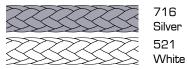
- highest safety and perfect abrasion resistance for the kiter
- spliceable
- very good abrasion resistance
- high breaking load
- low elongation
- LIROS Heat Stretch System

Reference	app. Ø mm	Breaking strength kg	Length of spool m
DPLP0-1300	4,0	1300	100/500
DPLP0-1750	4,5	1750	100/500
DPLP0-2600	5,0	2600	100/500
DPL00-1550	4,4	1550	500
DPL00-1700	5,2	1700	500
DPL00-1800	5,6	1800	500





#### Colours





735 Deep Black

Material Dyneema®

Construction

plaited, heat set and coated

#### **LIROS PPSLS**

Thin + Safe + Longlasting. Unique breakload at thinnest diameter guarantees highest performance for the paraglider. Minimum elongation for ideal glider setup. The paragliding line for high demands.

- extremely light and thin
- highest breakloads
- best paragliding performance
- perfect aging properties
- LIROS Heat-Stretch-System

Reference	app. Ø mm	Breaking strength kg	Length of spool* m
PPSLS-0065	0,76	65	1000
PPSLS-0125	1,05	130	1000
PPSLS-0160	1,15	160	1000
PPSLS-0180	1,25	180	1000
PPSLS-0200	1,3	200	1000
PPSLS-0260	1,58	260	1000



\* LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

Not all colours available in all diameters.

#### Colours





150 Orange 171 Red



LIROS HSS

Cover Polyester

Core

pre-stretched Dyneema®



### **LIROS PPSL**

LIROS PPSL is lightweight, with minimal creep, as well as unmatched durability, even after extreme bending. The kite line for the most demanding applications. Shrinkage  $<0.5\,\%.$ 

- very low creep
- lowest stretch
- top paragliding performance
- optimal dimensional stability
- extremely durable
- LIROS Heat-Stretch-System

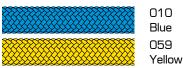
Reference	app. Ø mm	Breaking strength kg	Length of spool* m
PPSL0-0120	1,15	120	1000
PPSLO-0160	1,40	160	1000
PPSLO-0191	1,20	190	1000
PPSL0-0200	1,42	200	1000
PPSL0-0275	1,90	275	1000
PPSLO-0350	2,25	350	500



LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

Not all colours available in all diameters.

#### Colours





086 Green 150 Orange



171 Red

Cover Polyester 16-plaited

Core pre-stretched Dyneema®



LIROS HSS

### **LIROS DSL**

High-tech Dyneema® core, combined with our superior Polyester braided cover, guarantees a long-lasting, high-altitude line. Perfectly balanced Polyester cover offers the best in line accessibility and protects the core from dirt and UV exposure.

- very low creep
- lowest stretch
- good line differentation
- optimum durability
- LIROS Heat-Stretch-System

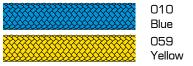
Reference	app. Ø mm	Breaking strength kg	Length of spool* m
DSL00-0025 Black	0,80	25	1000
DSL00-0035 White	0,90	35	1000
DSL00-0070	0,95	70	1000
DSL00-0140	1,25	140	1000
DSL00-0350	2,00	350	1000
DSL00-0600	2,40	600	500



\* LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

Not all colours available in all diameters.

#### Colours





086 Green 150 Orange



157 Pink 171 Red

Cover Core Polyester 32-plaited pre-stretched Dyneema®





#### **LIROS TSL**

LIROS TSL is the covered Technora® paragliding line with the best diameter to load capacity ratio. Optimised cross-section for excellent aerodynamics. High-strength Technora® fibres and LIROS Heat-Stretch-System to minimise stretch and creep. Finely braided, water-repellent Polyester cover provides easy line differentation.

- optimal diameter to load capacity ratio
- lowest creep, lowest stretch
- optimum bendability
- LIROS Heat-Stretch-System

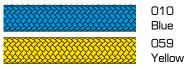
Reference	app. Ø mm	Breaking strength kg	Length of spool* m
TSL00-0115	1,25	115	1000
TSL00-0140	1,30	140	1000
TSL00-0190	1,55	190	1000
TSL00-0220	1,65	220	1000
TSL00-0280	1,80	280	1000
TSL00-0380	2,20	380	1000
TSL00-0500	2,37	500	500



\* LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

Not all colours available in all diameters.

#### Colours







Cover

Polyester

Core Technora®



### **LIROS LTC**

LIROS LTC - performance at its best! The high tech line with double coating for the best in aerodynamics. The unique LIROS LTC process coats Technora® fibres before braiding for the best in static hold, UV stability, lateral strength, and line handling. LIROS LTC is the perfect line for competitive and advanced-intermediate use.

- lowest stretch
- very low creep
- double nanocoating
- optimum surface finish
- peak performance
- LIROS Heat-Stretch-System

Reference	app. Ø mm	Breaking strength kg	Length of spool* m
LTC00-0045	0,55	45	1000
LTC00-0065	0,65	65	1000
LTC00-0080	0,70	80	1000
LTC00-0120	1,10	120	1000
LTC00-0160	1,20	160	1000
LTC00-0200	1,30	200	1000
LTC00-0350	1,75	350	500
LTC00-0400	1,90	400	500



\* LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.





### Colour



Material 100% Technora® Construction 12-plaited



### **LIROS DFL**

LIROS DFL offers a high degree of flexibility. Very good knot holding and UV resistance, excellent for brake lines. LIROS DFL handles high dynamic load ranges easily, especially in deflection through turning blocks.

- good knot hold
- extremely abrasion resistant
- lightweight
- highly flexible

Reference	app. Ø mm	Breaking strength kg	Length of spool* m
DFL00-0115	1,40	115	1000
DFLS0-0200	1,90	200	500
DFLP0-0232	2,70	200	500
DFL00-0350	2,70	350	500



\* LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

DFLSO only available in O59 Yellow and 150 Orange.

#### **Colours**



059 Yellow



150 Orange



Cover

Polyester 16-plaited, DFLPO-0232 32-plaited

Core Dyneema®



### **LIROS Safety Line**

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

#### RLP

- working stretch < 25%
- excellent damping capabilities
- good spliceability
- Material: Polyamide

#### **RLD**

- working stretch < 7%
- good spliceability
- high weight reduction
- Material: Dyneema®

Reference	app. Ø mm	Breaking strength kg	Length of spool* m
RLD00-0190	1,3	190	500
RLD00-0275	1,35	275	1000
RLD00-0350	1,7	350	1000
RLP00-0110	4	110	1000
RLP00-0150	4,5	150	1000



LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.

WITH
Dyneema\*

#### Colour



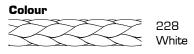
228 White

#### **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 well-suited for tandem towing. The extremely thin diameter increases capacity on winch drums.

- easy to splice
- low diameter increases winch capacity
- no water absorption
- very good UV resistance

Reference	app. Ø mm	Breaking strength kg	Length of spool m
SL000-0375	2,5	375	1000
SL000-0500	3,2	500	1000





Material Dyneema® Construction SL375 12-plaited / SL500 8-plaited

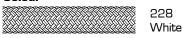
### **LIROS Harness**

Extremely flat hollow braided rope. LIROS Harness is qualified to replace common webbings in paragliding harness. Made of 100% Dyneema® for less weight and very good flexibility endurance and resistant to fatigue.

- lightweight
- high breakloads
- LIROS Heat-Stretch-System

Reference	app. Ø mm	Breaking strength kg	Length of spool m
CRS00-0500-228	5	500	500
CR000-1000-228	6	1000	500
CR000-1800-228	9	1800	500







Material100% Dyneema®Construction32-plaited

### **LIROS T-Webbing**

00185-1301

Technora® webbing with Polyester cover. A LIROS development for use in paragliding ultra light harnesses. Longlasting high tech quality.

app. width mm	Breaking strength kg	Length of spool m
13	850	100

- high breakloads
- good resistance to abrasion







Material Technora®/Polyester Construction webbing

57



#### LIROS V-Plus-XTR

#### 04007

V-Plus-XTR is made of 100% Vectran® with high tech XTR Coating. Perfect as a wire replacement or alternative to hard shackles. An ideal line for applications that require constant length, lowest stretch without creep, also under load. Vectran® delivers extreme precision. Perfect as bolt rope for high performance sails.

- grip factor 7
- no creep
- XTReme low initial elongation
- high-tech XTR coating
- easy to splice
- heat resistant

Vectran<sup>™</sup> L

LIROS LCS

Ø mm	Weight g/m	Working stretch %	Breaking strength kg
2	3	< 1,0	400
3	7	< 1,0	1100
4	10	< 1,0	1500
5	22	< 1,0	3000
6	32	< 1,0	5000
8	48	< 1,0	6800

Material 100% Vectran® with LCS Coating

Construction 12-plaited

#### Colour



188 Black

### LIROS D-Pro

#### 01505

LIROS Heat-Stretch-System for guaranteed optimum breaking load and lowest stretch. Top abrasion resistance, low weight, and easy spliceability make this line irreplaceable in numerous show-rigging applications. Perfect as a replacement for steel cables.

- mat black surface, not marking off
- non-reflective
- working stretch < 1%
- very high working load with minimum diameter and lightweight
- first choice for all extreme load applications
- best spliceability
- high UV stability and abrasion resistance
- LIROS Heat-Stretch-System

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
2	410	1,8	100
2,5	580	3,5	100
3	950	4,6	100
4	1300	7	100
5	2600	13	100
6	4300	23	100
8	5300	35	100
9	7500	49	100
10	9000	60	100
12	11900	72	100
14	14500	95	100
16	19000	131	100

### Colour



674 Deep Black

Material

Dyneema® SK78 coated

Construction

pre-stretched, coated, 12-plaited







Not certified for lifting loads and personal security!



### LIROS Max Load Black 02025

Full spectrum black cover is completely invisible in dark environments. High-quality, very low-stretch, with durable and abrasion resistant braided cover, inner cover and special coated Dyneema® SK78 core.

- working stretch < 1,5%
- exceptionally strong, durable, and lightweight
- extremely abrasion resistant Polyester cover
- LIROS Heat-Stretch-System

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
2	270	3	250
2,5	390	5	250
3	550	7	250
4	800	11	250
5	1100	15	250
6	2500	25	200
8	3800	42	200
10	5000	61	200
12	7200	88	200

#### Colour



525 Black NF





**Cover** special high-twisted Polyester

#### Construction

2-3 mm 4 mm and up 16-plaited 1:1 plaited

#### Core

coated Dyneema® SK78 with additional cover plait from 8 mm and up



### **LIROS Poly Black**

#### 01076

Affordable, extremely lightweight rope for theatre and other applications. Very easy-to-handle, deep black soft Polypropylene.

- working stretch < 12%
- very lightweight
- easy to handle
- floatable
- UV stabilised
- economical



#### Colour



525 Black NF

**Material**Polypropylene multifilament

**Construction** 8-plaited

Ø mm	Breaking strength kg	Length of spool m
1,5	38	100
2	70	100
3	140	100
4	280	100
5	390	250
6	550	200
8	900	200
10	1230	200
12	1700	200
14	2000	150
16	3700	100



### **LIROS Multi Black**

#### 01037

High-strength black braided Polyester. High-grip surface. Multi-purpose line.

- working stretch < 10%
- will not stiffen up
- very UV resistant
- flexible
- abrasion resistant



#### Colour



525 Black NF

mm	strength kg	spool m
1	35	100
2	90	100
3	150	100
4	280	100
5	450	250
6	640	200
8	1100	200
10	1700	200
12	2200	200
14	3000	150
16	3900	100

Breaking

Length of

Ø

#### Core

high-tenacity Polyester

#### Material

high-tenacity Polyester

#### Construction

16-plaited with core up to 8mm 20-plaited with core 10mm and up

#### LIROS Soft Black

#### 00174

Premium quality, high-grip Polyester line with flexible, soft-grip cover. Matt black cover is completely invisible in dark environments.

- working stretch < 6%
- soft easy-to-handle premium spun braid
- excellent knot hold

Ø mm	Breaking strength kg	Length of spool m
5	300	250
6	520	200
8	1000	200
10	1900	200
12	2400	200
14	2900	150
16	3400	100

#### Colour



525 Black NF



**Cover**Polyester

#### **Construction**

Ø 5 mm Ø 6 to 8 mm Ø 10 to 12 mm Ø 14 mm and up 8-plaited 16-plaited 20-plaited 24-plaited

#### Core

high-tenacity Polyester





#### 01019-0000

Core-cover rope, manufactured to **DIN EN 1891** for personal security. Specially designed with extremely low stretch for SRT (Stationary Rope Technique), or as efficient and power saving abseiling rope. Robust and resistant, very good grip and smooth handling. With optimized cover structure for optimal fulfilling the requirements of single-rope technique.

- very low stretch
- grippy and flexible
- robust and resistant
- available pre-spliced with sewn eye on both ends

#### Cover

high-tenacity Polyamide

#### Construction

16-1:1 plaited

#### Core

high-tenacity Polyamide



Ø	Breaking	Elongation	Weight	Cover ratio	Length
mm	strength kg	% at 100kg	g/m	%	m
9,6	2900	3,8	62	60	as required

#### Colour







#### 01015-0000

Semi-static rope manufactured to **DIN EN 1891** standards. Developed by LIROS for specialised industrial applications with double-braided construction and LIROS Heat-Stretch-System for minimal core-cover movement.

- low yo-yo effect when up- and abseiling
- very good handling
- non-kinking and easy stowing
- available with both ends sewn eye

#### Cover

high-tenacity Polyamide

#### Construction

32-plaited

#### Core

high-tenacity Polyamide



Ø	Breaking	Elongation	Weight	Cover ratio	Length
mm	strength kg	% at 100 kg	g/m	%	m
11,5	3400	3,8	80	46	as required

#### Colour









### **LIROS Safe Classic**

The LIROS semi-static rope is a strong and durable rope for life safety/rescue applications, or rope access/scaffolding. The unique abrasion-resistant braided cover protects the core from external weather conditions and dirt. Manufactured according **DIN EN 1891**.

- long-lasting construction
- highly abrasion resistant
- exceptional knot hold
- extremely low cover-core movement
- available with both ends sewn eye

#### Cover

high-tenacity Polyamide

#### Construction

16-plaited

#### Core

special multi-braided Polyamide



Reference	Ø mm	Breaking strength kg	Elongation % at 100 kg	Weight g/m	Cover ratio %	Length m
00099-1116	10,5	3400	4,1	70	42	as required
00099-2369	11	3550	4,0	74	40	as required

#### Colours

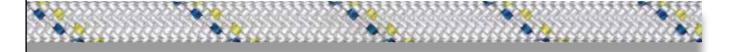


382 White-Blue-Black



525 Black NF





#### **LIROS Safe Pro**

01011

Semi-static rope manufactured to **DIN EN 1891** standards. Developed by LIROS for specialised industrial applications with double-braided construction and LIROS Heat-Stretch System for minimal core-cover movement.

- available with both ends sewn eye
- soft and flexible rope
- perfect and easy handling
- LIROS Heat-Stretch-System

#### Cover

high-tenacity Polyamide

#### Construction

32-plaited

#### Core

high-tenacity Polyamide





Reference	Ø mm	Breaking strength kg	Elongation % at 100 kg	Weight g/m	Cover ratio %	Length m
01011-1000	10	2600	4,4	58	43	as required
01011-1100	11	2850	4,2	71	53	as required
01011-1200	12	3900	4,0	82	45	as required
01011-1400	14	4550	3,4	102	46	as required

#### Colour



230 White-Blue-Yellow





#### **LIROS Safe Vision**

#### 01595/01596

New LIROS safety rope according to **DIN EN 1891**. Specially developed as a working line for the arborist. LIROS Safe Vision is especially smooth and flexible, so arborists can work and move quickly and safely. High strength Polyester cover is extremely abrasion resistant. Low diameter for very lightweight.

- optimum handling
- highly abrasion resistant
- exceptional knot hold
- extremely low cover-core movement

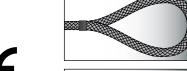
high twisted Polyester

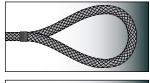
#### Construction

24-plaited

#### Core

plaited Polyamide









014 Blue-Yellow-White

Reference	Ø mm	Elongation % at 100 kg	Breaking strength DIN kg	Breaking strength eff. kg	Weight g/m	Cover ratio %	Length m
01595-0000	11,8	2,5	2200	3700	82	54	as required / without end connection
01595-1000	11,8	2,5	1500	2900	82	54	as required / incl. seam
01595-3000	11,8	2,5	1500	2400	82	54	as required / incl. splice
01596-0000	12,8	2,2	2200	4500	102	51	as required / without end connection
01596-1000	12,8	2,2	1500	3300	102	51	as required / incl. seam
01596-3000	12,8	2,2	1500	3000	102	51	as required / incl. splice



#### LIROS Safe Plus

### 01597-0000

The LIROS Safe Plus is a specially designed double braid manufactured and certified to DIN EN 1891 Type A. Developed for "Single Rope Technique" (SRT). Perfect control for efficient ascending, abseiling and working technique. The special construction with comparable reduced elongation with best breaking strength avoids any yo-yo effect during the ascent. This allows the pro-arborist to concentrate fully on his work and the safety improves considerably.

- available with both ends sewn eye
- exceptional knot hold

# $(\epsilon)$

### Polyamide

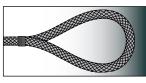
Cover

Polyester

32-plaited

Core

Construction





### Colour



652 Neon Yellow-Black

Ø	Breaking	Elongation %	Weight	Cover ratio	Length
mm	strength kg	at 100 kg	g/m	%	m
11,5	4300	1,5	100	46	as required





### LIROS Safe Prusik XTR

#### 01594

LIROS Prusik-XTR, according to **DIN EN 566,** is notable for its high strength and te cover of heat-re Polyester.

tri, according to Diff Elf 300, is notable for its riight
echnical construction, with a special combo-material
esistant hybrid fibres paired with high-strength

- very high strength
- impact force: 5.5 kN
- excellent abrasion resistance, even at high temperatures
- perfect cover-core attachment
- multiple applications
- sewn eye on each end
- standard length 60, 70, 80, 90, 100, 110 and 120cm

Ø mm	Breaking strength DIN kg	Breaking strength eff. kg
9	2200	2900

#### Cover

Aramid/Polyester 24-plaited

#### Core

Dyneema®, Aramid





#### Colour



Black-Yellow



#### LIROS Safe Prusik 01590/92/93

LIROS Prusik, according to **DIN EN 566**, is notable for its technical construction, with a special combo-material cover of heat-resistant hybrid fibres paired with high-strength Polyester.

- excellent abrasion resistance, even at high temperatures
- hybrid fibres inhibit cover melting
- perfect cover-core attachment
- mutliple applications
- sewn eye on each end
- standard length 60, 70, 80, 90, 100, 110 and 120cm

Reference	Ø mm	Breaking strength DIN kg	Breaking strength eff. kg
01592	8	2200	2500
01590	9,1	2200	2700
01593	10	2200	2900

Polyester/Aramid 20-plaited

high-tenacity Polyester



#### **Colour 01590**



064 Yellow-Red

### **Colour 01592**



321 Yellow-Silver



069 Yellow-Green



#### LIROS Safe Arb

#### 01527

Very easy-to-handle rope, extremely strong and durable. 100% Polyester cover-core construction will not stiffen up. Specially developed LIROS Coating for exceptional abrasion resistance.

- very easy to splice
- extremely strong and durable
- will not stiffen up
- very UV-resistant



Ø mm	Breaking strength kg	Length of spool m
12	4500	as required
14	5500	as required
16	6700	as required
18	7600	as required





14 mm 059 Yellow 18 mm 188 Black

#### Cover

high-twisted Polyester

#### Construction

20-plaited

#### Core

high-tenacity braided Polyester

### LIROS Heaving Line

#### 01519-0180

Designed through technical innovation and longevity in mind. Forms loose coils and guarantees easy throwing. High visibility to ensure safe working practice.

- kink resistant
- abrasion resistant
- spliceable

app. Ø mm	Breaking strength kg	Length of spool m
1,8	200	100



**LIROS HSS** LIROS LCS

#### **Colours**







096 Light Blue **Material** Construction Dyneema® impregnated braided



### LIROS Safe Spill

#### 01525

Capstan Winch Rope with high-strength core and abrasion resistant Polyester cover. The special core material provides an extremely high breaking strength and safety at lowest weight. Customised lengths available.

Ø mm	Breaking strength kg	Weight g/m	Length of spool m
10	3800	70	200

- working stretch < 1%
- abrasion and heat resistant
- very good knot hold
- very UV-resistant

Cove	er

Core

high-strength Polyester

Construction

1:1 plaited

**HMPE** 



239 White-Black



#### LIROS D-Steel

#### 01481

With this line LIROS guarantees highest breaking stength and lowest elongation values with all diameters, best abrasion resistance, low weight and easy spliceablility. Enabling new and innovative solutions in forestry and arboriculture. Optimal as replacement of steel ropes in various technical applications.

- working stretch < 1%
- very high breaking load with smallest diameter and lowest weight
- first choice for all applications with extreme loads
- 10 x lighter than steel
- excellent spliceability, can also be used with cover
- high UV stability and durability
- water repellent
- LIROS Heat-Stretch-System

Material	ultrahigh-strength HMPF

Construction 12-plaited, heat set and coated

Breaking

strength kg

6800

10500

14500

17500

22000

26000

32000

38000

44000

50000

mm

8

10

12

14

16

18

20

22

24

26

Length of spool

100/as required

200 (coil)





316 Carbon



### LIROS Felling Aid Rope 02008

Our very low weight and abrasion resistant PES-Vectran Fällhilfeseile/tree towing rope is manufactured with extremely low stretch HMPE-core. The indicated Forest Tractive Force (FTF) on the respective Fällhilfeseil resembles the maximum traction of your forestry windlass.

- working stretch < 1%
- with FTF-label 2,5t, 4,5t, 6t, 8,5t or 10t
- available length: 9, 12, 15, 20, 30 and 40m
- extremely abrasion resistant PES-Vectran protective cover
- eye splice on both ends (length 200mm)
- long service life
- extremely low weight at high breaking strength

#### Cover

50% Vectran®/50% Polyester 32-plaited

#### Construction

32-plaited

#### Core

Dyneema® SK78 with XTR-Grip-Coating Silver



**Vectran**<sup>®</sup>

LIROS HSS

#### Colours



263 Beige-Steelblue 419 Beige-Orange

Ø mm	Breaking strength kg	FTF t	Weight g/m
10	6900	2,5	40
12	9900	3,5	80
14	13000	4,5	120
16	15200	6,5	160
18	18500	7,5	200
20	21700	8,5	240
22	24600	10	280





#### LIROS Offroad XTR

#### 04010

#### The world first LIROS XTR Offroad!

100 % Vectran® winch rope special braid with utility patent protected end connection without metal parts. The easy-to-use LIROS Soft Shackle ensures a permanently secure connection.

- Flexible and lightweight with extreme breaking load
- Permanently integrated high-strength LIROS Soft Shackle
- Constructed from high-tech material Vectran® extremely heat resistant
- Low noise and easy handling
- Minimize the risk of injury due to use of 100% textile fibers

LIROS Offroad Extension

- No metal components to prevent scratching the paint
- Signal colour "red" for safe and fast work in the field and in poor visibility
- Registered design (DPMA)

04010-
0901

This rope is the extension for the Liros Offroad XTR. It can be used with every conventional winch rope. The length is infinitely variable and can be shorted to approximately half the length. Using this material is far superior in terms of handling and safety.

- Flexible and lightweight with extreme breaking load
- Length easily changeable
- Constructed from high-tech material Vectran® extremely heat resistant
- Signal colour "red" for safe and fast work in the field and in poor visibility
- Low noise
- Safer and easier to handle
- Minimize the risk of injury due to use of 100% textile fibers

Ø mm	Breaking strength kg	Weight kg/pce.	Length m
9,4	9000	2,4	27
11	10800	2,7	20

Material 100% Vectran® with XTR-Coating

Construction 12-plaited

#### Colour



638 Red

Vectran™ LIROS LCS

Ø	Breaking	Weight	Length
mm	strength kg	kg/pce.	m
9,4	9000	0,76	10

Material 100% Vectran® with XTR-Coating

Construction 12-plaited

#### Colour



638 Red

**Vectran**<sup>®</sup>





### **LIROS Offroad Winch Rope**

Specially-designed recovery rope for extreme winch applications. Perfect replacement for wire cable. Strong and 10x lighter than steel, LIROS Offroad Winch Rope offers perfect performance and safety. Ready-to-use: carabine hook on one end, plus 2 movable protective jackets for friction points. Winchend: special flat terminal for winch drum attachment, protected by 3 m heat resistant monofilament braid.

- working stretch < 1%
- extremely high breaking load with smallest diameter and lowest weight
- Two 1 m protective jackets
- ideal replacement for steel cable
- very easy to splice
- high UV stability and abrasion resistance
- LIROS Heat-Stretch-System

Reference	Ø mm	Length m	Winch size t	Breaking strength rope kg
01481-0602	6	20	1,3	4000
01481-0603	6	30	1,3	4000
01481-0801	8	30	4,3	5500
01481-0802	8	40	4,3	5500
01481-1001	10	30	4,3	8500
01481-1002	10	40	4,3	8500

Hook breaking strength: 2.5t safe working load



\* Winner in "4X4 Action" Magazine for real offroaders. 6 other winch lines tested (4/2014 issue)

#### Colour



316 LIRUS LCS

Material ultra high-strength HMPE

### **LIROS Offroad Towing Rope**

LIROS Offroad Towing Rope has been specially designed by LIROS to withstand extremely high forces during dynamic towing (e.g. in sand). The line make it possible to drag stranded SUVs out of the toughest situations. Both ends eye with protective sleeve of abrasion resistant Polyester

- double-ended eyes with protective sleeve
- up to 30% stretch under shock loading
- extremely easy to handle under working conditions
- custom lengths available



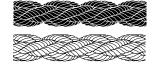
#### Material

high-tenacity Polyamide

#### Construction

8-strand octoplait

#### Colours



188 Black 228 White

Reference	Ø mm	Breaking strength kg	Length of spool m
01058-2401	24	9500	5
01058-2402	24	9500	8
01058-2403	24	9500	12
01058-2404	24	9500	15
01058-2802	28	12000	9
01058-2803	28	12000	12
01058-2804	28	12000	15

### **LIROS Offroad Performance**

01481 -1201

LIROS XTR Towing has been developed in collaboration with the best teams in international desert rallying. Successfully tested with the most prestigious teams. LIROS XTR Towing is 100% textile high-strength material. It replaces heavy wire ropes and steel fittings. The two integrated LIROS Soft Shackle enable a fast and secure connection. Best handling thanks to low weight.



- Two integrated high-strength LIROS Soft Shackles
- Registered design (DPMA)
- Low noise and easy handling
- Minimize the risk of injury due to use of 100% textile fibers
- No metal components to avoid scratching the paint

Ø mm	Breaking strength kg	Weight kg/pce.	Length of spool m
12	13000	1,3	12



#### Colour



Carbon-Red

Material

100% HMPE with XTR-Coating

#### Confection

Both ends LIROS Special Soft Shackle



### LIROS Offroad Shackle

LIROS Offroad Shackle combines exceptional flexibility and super light weight with enormous breaking load. Extremely abrasion resistant protective sleeve specially developed for off-road use gives this shackle tremendous durability and massive holding power. A must for offroaders.

- super lightweight and easy to handle
- high breaking load
- can't open accidentally under load
- reduces risk of injury
- premium LIROS quality

#### Colour



316 Carbon



#### Material

100% Dyneema®



#### **Protective sleeve**

Polyester

Reference	Breaking strength kg	SWL** kg	<b>A</b> material Ø mm	<b>B</b> final Ø app. mm	<b>C</b> inner length mm
00146-0077	7000	4000	10	18,5	220
00146-0078	12000	7000	12	21	240
00146-0079	20000	12000	14	23	270
00146-0317	35000	21000	16	42	300

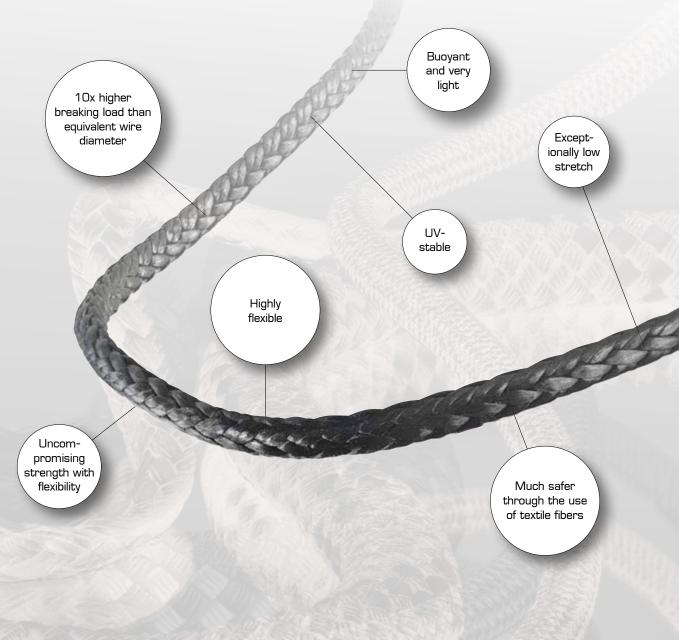


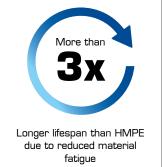


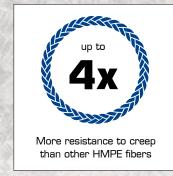
### Unlimited Rope Solutions for steel rope replacement

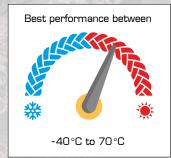
LIROS high tech fiber ropes and perfect for replacing steel ropes and offer many advantages! Exceptional strength to weight ratio, ultimately leads to a cost saving through innovative design and less component requirements.

- LIROS 01505 D-Pro
- LIROS 01418 D-Steel
- LIROS 02000 Regatta 2000
- LIROS 00146 Soft Shackle
- LIROS 00148 Dyneema® Braid
- LIROS EO148 Dyneema® Braid











#### LIROS D-Steel

#### 01481

With this line LIROS guarantees highest breaking strength and lowest elongation values with all diameters, best abrasion resistance, low weight and easy spliceability. Enabling new and innovative solutions in forestry and arboriculture. Optimal as replacement of steel ropes in various technical applications.

- working stretch < 1%
- very high breaking load with smallest diameter and lowest weight
- first choice for all applications with extreme loads
- 10x lighter than steel
- excellent spliceability, can also be used with cover
- high UV stability and durability
- water repellent
- LIROS Heat-Stretch-System

Ø mm	Breaking strength kg	Length of spool m
8	6800	100/as required
10	10500	100/as required
12	14500	100/as required
14	17500	100/as required
16	22000	100/as required
18	26000	100/as required
20	32000	100/as required
22	38000	100/as required
24	44000	100/as required
26-40	50000	as required

#### Colour



316 Carbon



**Material** 

ultra high-strength HMPE

Construction

12-plaited, heat set and coated

# LIROS Dyneema® Braid

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

- working stretch < 1 %
- extremely strong
- very low stretch
- available in diameters from 0,06-24 mm
- custom lengths, construction, and colour impregnation available
- 500m X-Spool standard

**Material** 

Dyneema®



LIROS HSS

Reference	Ø mm	Breaking strength kg	Con- struction
00148-0006	0,06	3,8	3-plaited
00148-0014	0,14	8,0	3-plaited
00148-0018	0,18	11,5	3-plaited
00148-0024	0,24	16	6-plaited
00148-0030	0,3	25	6-plaited
E0148-0049	0,49	46	12-plaited
E0148-0058	0,58	80	16-plaited
E0148-0079	0,79	104	12-plaited
E0148-0085	0,85	130	16-plaited
E0148-0110	1,10	170	12-plaited
E0148-0111	1,11	200	12-plaited
E0148-0151	1,5	300	12-plaited
E0148-0161	1,6	400	12-plaited
E0148-0201	2,0	700	12-plaited

Colour



Additional diameters available upon request.



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

#### 01505

LIROS Heat-Stretch-System guarantees optimal breaking loads and stretch characteristics of this line. Excellent chafing resistance, light weight, and easy spliceability make this line irreplaceable in all sorts of applications on racing boats of any size. Perfect as a replacement for steel cabling in technical applications.

- working stretch < 1%
- very high breaking load with small diameter and very low weight
- first choice for any application under extreme loads
- very spliceable
- highly UV stable and chafe resistant
- LIROS Heat-Stretch-System

Coated Dyneema® SK78 Material

Construction 12-plaited, heat-set and coated

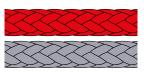


Not certified for lifting loads and personal security!

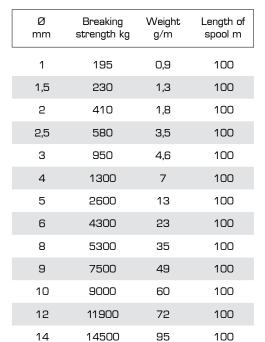
#### Colours



010 Blue 059 Yellow 086 Green



171 Red 205 Silver



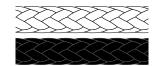


19200



100

131



Ø

mm

2

2,5

3,5

5

6 8

10

12

14

Breaking

strength kg

170

260

500

800

1100

2000

2600

3600

5200

16

228 White 674 Deep Black (2 and up)

Length of

spool m

500

500

500

250

200

200

200

200

150

### **LIROS Aramid**

00144

Very low stretch, durable and strong Aramid rope with Polyester cover for optimal UV and abrasion resistance.

- working stretch < 1,5%
- strong
- extremely low stretch

Twaron®

Cover	Construction		Core
Polyester	up to 2.5 mm 3.5 mm and up	16-plaited 1:1 plaited	braided Aramid

#### Colours



236 White-Red



NF



LIROS LTC - performance at its best! The high tech line with double coating for the best in aerodynamics. The unique LIROS LTC process coats Technora® fibres before braiding for the best in static hold, UV stability, lateral strength, and line handling. LIROS LTC is the perfect line for competitive and advanced-intermediate use.

- lowest stretch
- very low creep
- double nanocoating
- optimum surface finish
- peak performance
- LIROS Heat-Stretch-System

app. Ø mm	Breaking strength kg	Length of spool* m
0,55	45	1000
0,65	65	1000
0,70	80	1000
1,10	120	1000
1,20	160	1000
1,30	200	1000
1,75	350	500
1,90	400	500
	0,55 0,65 0,70 1,10 1,20 1,30 1,75	mm strength kg  0,55 45  0,65 65  0,70 80  1,10 120  1,20 160  1,30 200  1,75 350



\* LIROS LTC lines may come in pieces to a spool. No line will be shorter than 25 m.









## LIROS Aramid Cord 00147

Extremely strong and low-stretch cord for specialised industrial and leisure applications. Extremely strong, low stretch, with high heat resistance.

- working stretch < 1,5%
- very good steel cable replacement
- customised lengths available
- additional diameters available upon request

Ø mm	Breaking strength kg	Con- struction	Length of spool m
0,4	45	6-plaited	500
0,9	80	6-plaited	500
1	100	16-plaited	500
1,5	135	8-plaited	500
2,1	290	8-plaited	500
3	560	12-plaited	500
4	700	12-plaited	500
5	1000	12-plaited	250
6	2000	12-plaited	200

#### Colour



**Material** braided Aramid





8-plaited 16-plaited

## LIROS Polyester Braid 01037/01038/01040

High-strength Polyester rope. Flexible, very UV- and abrasion resistant. Will not stiffen up.

- working stretch < 10%
- custom lengths available



### Colour 01037



525 Black

#### **Colour 01038**



171

#### **Material**

high-tenacity Polyester

Length of

spool m

500

500

500

500

500

500

250

200

200

200

200

150

100

Ø

mm

1

1,5

2

2,5

3

4

5

6

8

10

12

14

16

White & Colour

White & Black

Breaking

strength kg

45

65

100

150

200

330

500

800

1150

2000

2900

3900

4200

#### Colours 01040





## Construction 01037/01038

16-plaited with core up to 8 mm 10mm and up 20-plaited with core

#### **Construction 01040**

1 mm - 1,5 mm 6-plaited 2mm and up 8-plaited

#### **LIROS Polyester Spiral Braid** 01045

Flexible high-strength Polyester rope. Very UV- and abrasion resistant and will not stiffen up.

- working stretch < 10%
- custom lengths available



#### Colour



228 White

#### **Material** high-tenacity Polyester

**Construction** spiral-plait

Ø mm	Breaking strength kg	Length of spool m
3	160	500
4	280	500
5	435	250
6	670	200
8	840	200
10	1500	200
12	2200	200
14	3600	150

8-plaited

## LIROS Polyamide Braid 01025/01030/01027

High strength Polyamide Cord. Highly elastic and flexible, very UV- and abrasion resistant.

- working stretch < 15%
- custom lengths available

#### Material

high-tenacity Polyamide

# Construction 01025/01030

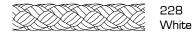
0,5 mm - 1 mm 6-plaited 1,5 mm and up 8-plaited

# Construction 01027

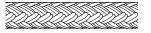
16-plaited with core



#### **Colour 01025**



#### **Colour 01027**



228 White

#### Colours 01030



#### 16-plaited

	Ø mm	Breaking strength kg	Length of spool m
01025/01030			
VVhite	0,5	15	500
White & Colour	1	50	500
	1,5	65	500
	2	115	500
	2,5	160	500
	3	200	500
	3,5	300	500
	4	350	500
	5	570	250
	6	880	200
	8	1600	200
	10	2400	200
White & Black	12	3200	200
	14	3600	150
	16	4300	100
01027			
White	1,5	50	500
	2	110	500
	2,5	190	500
	3	240	500
	4	400	500
	5	590	250
	6	1000	200
	8	1800	200
	10	2800	200

# LIROS Polyamide Spiral Braid 01035

Spiral plaited Polyamide Cord. Round, flexible, high stretch and very UV-resistant.

- working stretch < 20%
- custom lengths available

### **Colour 01035**







**Material** high-tenacity Polyamide

**Construction** spiral braiding

Reference	Ø mm	Breaking strength kg	Length of spool m
01035	2	90	500
	2,5	120	500
	3	160	500
	3,5	210	500
	4	290	500
	5	450	250
	6	600	200
	8	1000	200
	10	1800	200
	12	2200	200
	14	2800	150
	16	3600	100



## **LIROS** Coloured **Polypropylene Braid**

#### 01072

Spun-dyed Polypropylene multifilament. Economical with wide variety of use.

- working stretch < 12%
- UV stabilised
- 6 mm and up with blue/gold flecks
- custom lengths available

mm	Breaking strength kg	Length of spool m
1	30	500
1,5	38	500
2	70	500
3	140	500
4	280	500
5	390	250
6	550	200
8	900	200
10	1230	200
12	1700	200
14	2000	150
16	3700	100









010 Blue 059 Yellow 086 Green 150 Orange 171 Red 188 Black 541 Grey NF 543 Brown NF



#### **Material**

spun-dyed Polypropylene multifilament

## Construction

8-plaited

#### **LIROS Nautic Hollow Braid** 01072

All-purpose spun-dyed Polypropylene multifilament. Very easy to splice, floats. 16-plaited hollow braid.

- working stretch < 15%
- very easy to splice
- durable and UV stabilised

Reference	Ø mm	Breaking strength kg	Length of spool m
01072-0900	9	1000	200
01072-1012	11	1300	200



#### **Colours**









8-plaited Spiral braid

## LIROLEN Braid 01070/E1070/01075

High-strength Polypropylene multifilament, good UV resistance, floats.

- working stretch < 12%
- UV-stabilised
- custom lengths available

Ø1-16mm

1 mm 6-plaited 2 mm and up 8-plaited

#### **Colour 01070**

228
White

Ø	Breaking	Breaking	Length of
mm	strength kg 01070/E1070	strength kg 01075	spool m
			F00
1	30	_	500
2	75	-	500
3	140	90	500
4	280	140	500
5	390	200	250
6	550	310	200
8	1000	600	200
10	1300	1100	200
12	1600	1700	200
14	2000	2000	150
16	3300	2600	100



#### **Construction E1070**

Ø 2–16mm 16-plaited with core

## Colour E1070



#### **Construction 01075**

Ø3-16mm spiral braid

#### **Colour 01075**



#### Material

high-tenacity Polypropylene multifilament



## LIROS All-Purpose

## 01060/01061

Economical, floating all-purpose line in UV-stabilised Polypropylene fibres.

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

### **Colour 01060**



150 Orange

#### **Colour 01061**



021 Blue-White



Material 01060 Material 01061 Polypropylene monofilament Polypropylene split-fibre Construction

8-plaited



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

100% Polyester from 2.5 mm with core, tight braided. UV- and abrasion resistant.

- round, dimensionally stable braid
- custom lengths and colours available

Reference	Ø mm	Length of spool m
20140/22140	0,8	500
	1	500
	1,5	500
	1,7	500
	2	500
20145/22145	2,5	500
(with core)	3	500
	3,5	500

Colour 20140/20145



228 White Colour 22140/22145



188 Black



Material

high-tenacity Polyester

Construction

16-plaited with core

## **LIROS Starter Cord**

10145/10445

Special twist and compact braid construction for extreme abrasion resistance.  $100\,\%$  Polyamide. Durable and high stretch to minimise recoil.

- special impregnation upon request (Ref. 10445)
- custom lengths available

Ø mm	Length of spool m
3	500
3,5	500
4	500
4,5	500
5	250
6	200

**Colour 10145** 



**Colour 10445** 



White, impregnated



Material

high-strength Polyamide

Construction

16-plaited without core

## **LIROS Trim Line**

#### 01051

Low-stretch, high-grip, great holding power in cleats. Compact, round, UV- and abrasion resistant braiding.

- working stretch < 5 %
- low-stretch, high-grip
- excellent for windsurfing



Ø mm	Breaking strength kg	Length of spool m
3	200	100
4	320	100
4,5	500	100
5	610	100
6	800	100

#### Colours



188 Black 229 White-Blue

**Material** Polyester Construction

16-plaited with twisted core

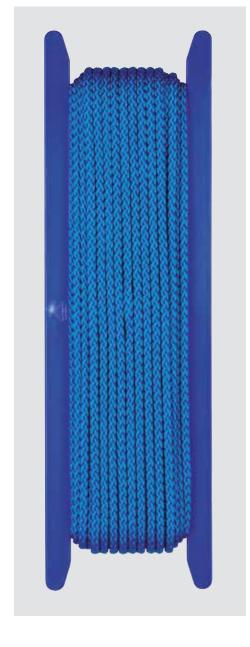


10070/10072

For camping, outdoor, around the house. Handy winder pre-packed in LIROS polybag.

- attractive, selfservice product
- UV resistant
- multiple outdoor and industrial applications

Reference	Ø mm	Winder length m
10070/10072-0230	3	20
10070/10072-0330	3	30
10070/10072-0530	3	50
10070/10072-0240	4	20
10070/10072-0340	4	30
10070/10072-0250	5	20
10070/10072-0350	5	30



## **Colour 10070**



White

#### Colours 10072





**Material** 

Polyproplylene multifilament

Construction

8-plaited



## **LIROS Barrier Color**

01160/01161

Visually appealing cable braid, specially designed for stairways and cordoned areas.

- Ø 28-30mm
- custom lengths available

#### Colours 01160



044 Dark Brown

046

Dark Green

Material 01160 Material 01161 Acrylic yarn Spun Polyester **Colour 01161** 



188 Black

Construction

4-strand cable braiding



## **LIROS Barrier Classic**

1140D/0114D

Cable braided rope, specially designed for stairways and cordoned areas. Polyhemp has the same good grip as hemp, but is even softer and more weather-resistant.

- abrasion resistant
- easy to splice

Material 1140D

#### Colour



spun Polypropylene rope yarn

546 Hemp NF

> Material 0114D natural spun hemp

GREEN WAVE

LIROS

Construction

4-strand cable twist



## **LIROS Barrier Classic**

01141

Cable braided rope, specially designed for stairways and cordoned areas. Polyhemp has the same good grip as hemp, but is even softer and more weather-resistant.

- Diameter 35 mm
- 100m coil

## Colour



546 Hemp NF Material

spun Polypropylene rope yarn

Construction

4-strand cable twist





## LIROS Seastar Classic

## 00173

Premium high-grip, natural-coloured cover-core sheet for traditional yachts.

- working stretch < 6%
- high-grip, easy to handle
- high-end, classic look
- available with low-stretch Dyneema® core for racing applications (Ref. 02520)

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

#### Colour



546 Hemp NF

Cover matt Polyester yarn

 Construction
 6 - 8 mm
 16-plaited

 10 - 12 mm
 20-plaited

10 – 12 mm 20-plaited 14 mm and up 24-plaited

**Core** high-tenacity braided Polyester





## LIROS Classic 3-strand

01172

Premium high-grip, natural-coloured 3-strand rope for traditional yachts. Durable and abrasion resistant.

- working stretch > 15%
- high-grip, very easy to handle
- premium appearance

Ca	In	ıır



546 Hemp NF

Material matt Polyester yarn

Construction 3-strand



Ø mm	Breaking strength kg	Length of spool m
3	100	250
4	170	250
5	250	250
6	350	200
8	730	200
10	1100	200
12	1300	200
14	1700	150
16	2200	100
18	3500	100
20	4900	100



## LIROS ClassTech

#### 01127

LIROS ClassTech is the ideal line for classic sailors with ambition. Combines the high abrasion resistance and durability of synthetic fibres with the classic look of hemp ropes.

- working stretch > 8%
- durable and UV stabilised
- acid- and base-resistant
- very abrasion resistant
- spliceable
- floatable
- only available in 220m coils

Ø mm	Breaking strength kg	Length of coil m
10	1600	220
12	2250	220
14	3100	220
16	3850	220
18	4900	220
20	5900	220
22	7100	220
24	8300	220
26	9550	220
28	10900	220
32	13750	220

#### Colour



705 Beige NF

Material high-tenacity Polypropylene fibre

Construction 3-strand





### **LIROS Historic**

01140

Looks like hemp, but softer, more weather-resistant, and better durability, UV resistant.

- working stretch > 15%
- easy to splice
- soft, good grip
- classic appearance
- weather-resistant
- floatable



#### Colour



546 Hemp NF

Material spun Polypropylene yarn

Construction 3-strand

Ø mm	Breaking strength kg	Length of spool m
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



## **LIROS Hemp Cord**

100% flax for a classic appearance.

- Perfect for decretive applications
- environmentally friendly
- naturally bio-degrades

#### Colour



546 Hemp NF LIROS GREEN WAVE

00310

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

**Material** Flax **Construction** 8-plaited

00114

## **LIROS Hemp Rope**

100% natural hemp, according to **DIN EN 1261** (previously DIN 83325).

- high grip
- environmentally friendly
- naturally bio-degrades

#### Colour



546 Hemp NF

Ø mm	Breaking strength kg	Length of spool m
6	285	200
8	450	200
10	700	200
12	1080	200
14	1375	150
16	1825	100
18	2250	100
20	2780	100
22	3240	100
24	3980	100

**Material** Natural hemp Construction

6mm 8mm and up 3-strand 4-strand





8-plaited

16-plaited

## **LIROS Cotton Cord**

100% natural cotton.

- soft and high grip
- environmentally friendly
- naturally bio-degrades

8-р	laited
-----	--------

140 Natural

## 16-plaited without core



140 Natural

## 00510/00512

Ø mm	Length of spool m
3	500
4	500
5	250
6	200
8	200
10	200



Material Cotton

Construction 00510

8-plaited

**Construction 00512** 

16-plaited available in Ø 2-12 mm

16

## **LIROS Sisal Rope**

100% natural, cropped sisal.

- compact
- environmentally friendly
- naturally bio-degrades

#### Colour



140 Natural

Ø mm	Breaking strength kg	Length of spool m
6	310	200
8	425	200
10	560	200
12	840	200
14	1100	150

1490

Material Sisal

Construction

6mm 8 mm and up 3-strand 4-strand

00113



100









## LIROS Rigger Bag

00146-0056

Premium splicing kit for the professional sailor. Contains all the splicing tools and accessories needed to work on all known LIROS yachting rope types.

- ext. dimensions: 41x31x10cm
- Contains: 1x Whipping needle; 1x swedish fid; 3x splicing needles (5,5–7,5–10mm); LIROS rope catalogue; 1x scissor; LIROS USB-Stick with splicing instructions; LIROS Tape; Dyneema® whipping twine; 1x pen; 1x lighter

### LIROS Protect

Perfect protection for mooring lines up to 30 mm diameter. To be fixed with or without wire ties for flexible adjustment at the rope.

- width 37 mm for ropes up to 16 mm
- width 60 mm for ropes from 18 mm up to 30 mm diameter
- LIROS Protect is available in pieces or provided on reels

Reference	Ø mm	for rope Ø	Length m
00146-0272	37	8-16	50 (spool)
00146-0273	37	8-16	2x0,75 (kit incl. cable ties)
00146-0274	60	18-30	50 (spool)
00146-0275	60	18-30	2×0,75 (kit incl. cable ties)







00143

The professional tool for our LIROS splicing department – ideal for all core-cover splices.

Reference	Size	Splice mm*	Measurements mm
00143-1000	S	4-8	180×6
00143-2000	М	10-12	300x8
00143-3000	L	12-14	335x9
00143-3050	XL	16-20	260x12
00143-5008	XXL	22-28	500x18

<sup>\*</sup>depends on the rope plait



## LIROS Splicing Needle Set 00143

Five premium stainless steel splicing needles, perfect for splicing ropes from  $4-14\,\mathrm{mm}$  in diameter. Suitable for twisted and for plaited lines. Comes in a convenient plastic tube with screw-top.

 Measurements: 233 x 12,5mm; 175 x 9mm; 115 x 7mm; 135 x 5mm

Reference	Size	Content	for rope Ø mm
00143-5004	Standard	set of 4	4-14mm
00143-5011	Dinghy	set of 2	4-6mm
00143-5012	Cruising	set of 2	8-14mm



## LIROS Whipping Needle

00143-4000

LIROS Splicing Department-approved needle for splicing and whipping lines up to 4mm. Usable without sailmaker gloves. Saves time and energy while whipping any kind of rope.





## LIROS Swedish Fid

00143

Classic, reliable splicing tool for 3-strand and square-braided ropes.

- 00143-0005 up to 12 mm
- 00143-0006 14 mm and up

## LIROS Micro-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 Connect**

00104

Extremely safe – extremely easy – extremely strong. A high-quality alternative to common forest winch attachments. Simply loop your rope around LIROS Connect and attach your hook for a professional installation. Can be done by any user directly on-site.

Reference	00104-0001	00104-0002
Rope diameter	10mm	12-16mm
Max. load	5t	10t
Pin diameter:	16,5 mm	21,5 mm
Distance between end plates	50mm	57 mm
End plate diameter	36,5 mm	53,5 mm







Usage example (rope and hook not included)



## LIROS XTR-Finish

00146-0057

LIROS XTR-Finish is the perfect coating for additional protection against abrasion and UV effects on all kind of ropes (Polyester, Dyneema®, Zylon®). LIROS XTR-Finish comes in 250 ml bottles.

- ready to use
- optimized UV-protection
- easy-to-clean, water-based solution
- each package: 250ml bottle + sponge
- available colours: O10 Blue, O59 Yellow, O78 Grey, O86 Green, 171 Red, 220 Transparent



# LIROS Heat Cutter

Cutting and sealing synthetic ropes and lines. 21 mm cutting edge.

- 60W rating
- for adult use only
- 00146-0000 Heat cutter
- 00146-0001 Replacement blade



# LIROS Heat Cutter Pro

For professional use. Cutting and sealing of synthetic ropes and lines. 40 mm cutting edge. Quick setup and cutting edge heating.

- 120 W rating
- for adult use only
- 00146-0276 Heat Cutter Pro
- 00146-0018 Replacement blade



# LIROS Heat Cutter Cordless 00146

- 115W rating
- ideal for mobile use
- quick setup and cutting edge heating
- 00146-0284 Heat Cutter Pro
- 00146-0001 Replacement blade







#### LIROS Scissor Pro

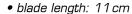
00146-0277

Specially designed to cut Dyneema®, Vectran®, Aramid, PBO. Micro-serrated.

- total length 16cm
- cutting length 3cm
- for adult use only

## LIROS Ceramic Pro 00146-0278

Top quality riggers knife for clean dry cuts. Perfect for cutting Dyneema®, Vectran®, Aramid, PBO.



- razor sharp
- rust resistant
- very lightweight





Professional splicing bench designed by LIROS to provide perfect working conditions for professional splicing and rigging. Features Antal-W48ST aluminium winch for pretensioning ropes. Special LIROS anchor point for making eye splices.

- (I) 2,00m x (w) 0,80m x (h) 1,20m
- also available without winch
- with detailed fid-length stencil for optimal splice lengths



## LIROS Rope Measuring Gauge

00138

High quality and robust construction. For plaited cords, plaited lines and ropes with diameters between  $3\,\mathrm{mm}$  and  $20\,\mathrm{mm}$ . For wall mounting.

size: 43 x 26cmweight: 2,9 kg



## **LIROS Rope Display**

Premium free-standing or wall-mount rope display. Guarantee for superior presentation of LIROS rope. Premium powdercoated brush metal appearance.

Reference	Description	pieces required for one free- standing display	pieces required for one wall display
00135-3001	Side element (175cm height)	4	2
00135-3002	Extension (80 cm height)	(4)	(2)
00135-3003	Top for headline (25 cm height)	4	2
00135-3004	Bars (92 cm width)	12	6
00135-3005	Reinforcement braces (2-piece)	1	-
00135-3006	Advertising sign (92 cm width/ 25 cm height)	2	1





# LIROS Infoboard

LIROS Infoboard ensures optimal presentation of LIROS products at the point of sale. The detailed, individual description of each LIROS rope product facilitates and supports the salesperson on site. Fits LIROS Rope display.

#### Contents:

- 1x Infoboard
- 2x self-adhesive marking strips
- 1x cover sheet for product cards
- 1x rubber cord 105 cm
- 1x fitting instructions
- width: 90 cm/ depth: 43 cm (exceeding the bars by 26 cm)

## LIROS Cutting Plate 00135-3015

Variable fixable cutting plate. Includes two hooks for hanging the heat cutting device, scissors, etc. Keeps order on LIROS Rope Displays.

• Measurements: (w) 13cm x (d) 37cm



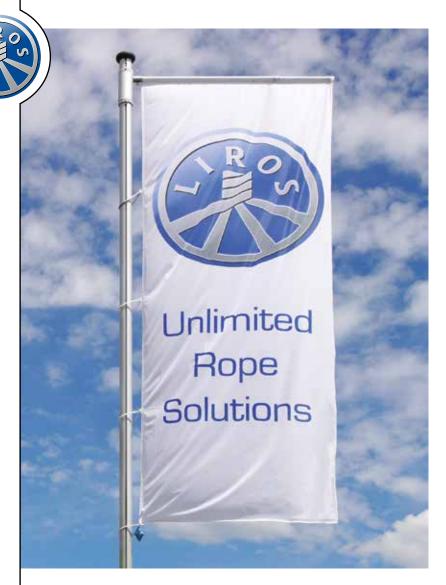


# LIROS Counter Display 00146-0016

Premium silver powder-coated metal display for optimal presentation at the point of sale.

Can be fitted with 4 sales packages e.g. Magic Sport, Trimline or whipping twine (see page 47-50).

• Colour Silver



## **LIROS Flag**

Reference	Measurements
00146-0099	80 x 80 cm
00146-0032	160 x 160 cm
00146-0028	150 x 300 cm
00146-0204	150 x 400 cm



LIROS Coffee Cup 00146-0029





## LIROS Backpack

High quality LIROS backpack with a storage capacity of 20 litres.

- one large main + two side compartments
- padded back
- adjustable shoulder straps and chest strap

Reference	Capacity L
00146-0318	20



LIROS Fleece Vest

Made of Polyester, sizes from S to 3XL.





## LIROS Sticker

	Reference	Measure- ments
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
<b>5</b>	00146-0048	Ø 9 cm

## LIROS Canvas Sticker

	Reference	Measure- ments
6	00146-0216	Ø 40cm
7	00146-0205	Ø 25 cm
8	00146-0215	Ø 20cm
	00146-0214	Ø 15cm



## **LIROS Carpet**

Premium LIROS doormat. Easy to clean.

Reference	Measure- ments
00146-0075	60 x 40cm
00146-0040	85 x 120cm

# LIROS Drinks bottle 00146-0325

High quality thermal drinks bottle, made from stainless steel. Capacity: 0,75L.





## **Recommended Line Diameters**

Regatta										
sail surface (m²)	10	20	30	40	50	60	70	80	90	100
Racer-XTR 02008	_	-	8	8	8	10	10	12	12	14
Racer Hybrid 02026	_	_	8	8	8	10	10	12	12	14
Racer Vision 02027	-	-	8	8	8	10	10	12	12	14
Racer 02001	_	6	8	10	10	12	12	14	14	16
Regatta 02000	5	6	8	10	10	12	12	14	14	16
Dynamic 02004/02028	6	8	10	12	14	14	14	-	_	_
D-Pro 01505/01508	4	5	6	8	8	9	9	10	12	14
Control-XTR 02024/02224	5	6	8	8	8	10	10	12	12	14
V-Force 04000	6	8	8	10	12	_	_	_	-	_
į										

Cruising										
sail surface (m²)	10	20	30	40	50	60	70	80	90	100
Racer 02001	-	6	8	10	10	12	12	14	14	16
Regatta 02000	5	6	8	10	10	12	12	14	14	16
Dynamic 02004/02028	6	8	10	12	12	14	14	-	_	-
TopGrip 01540	6	8	10	12	14	14	14	_	_	_
Herkules 00154/01550/01552	6	8	10	12	14	14	14	16	16	18
Top-Cruising 00152/01528	6	8	10	12	14	14	14	16	16	18
Prestretch 00121/00122	6	8	10	12	-	-	-	_	_	-
Allround 00151	8	10	12	14	14	16	_	_	_	_
Seastar 00162/00172	6	8	10	12	14	14	16	18	18	-

For guy ropes, choose a heavier diameter



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

## **Recommended Mooring Lines**



## **Mooring Lines**

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



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



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

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

Please find safety instructions for LIROS ropes on www.liros.com/support/technical informationen

LIROS products for personal safety and for lifting loads are spezially labelled.

Technical specifications are not binding and do not set the customer free from his duty to check if the products are suitable for the intended operation and purpose.

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

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

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

## CRUISING

CHUISIING	
1. Main halyard	pag
LIROS Regatta 2000 LIROS Dynamic	17 18
LIROS Herkules	20
LIROS Taper Pro  2. Genoa halyard	41
LIROS Regatta 2000 LIROS Dynamic	17 18
<b>3. Spinnaker halyard</b> LIROS Dynamic	18
LIROS Herkules LIROS Magic Pro	20
<b>4. Boom topping lift</b> LIROS Herkules	20
LIROS Top Cruising LIROS Magic Sport	22
5. Pole topping lift (not sh	
LIROS Herkules LIROS Top Cruising	20 22
6. Pole downhaul (not sho	
LIROS Dynamic LIROS Herkules	18 20
LIROS Top Cruising	22
7. Genoa sheet LIROS Herkules	20
LIROS Top Grip LIROS Top Cruising	21 22
LIROS Seastar LIROS Magic Sport	23 38
8. Main sheet	
LIROS Top Grip LIROS Top Cruising	21 22
LIROS Seastar LIROS Magic Sheet	23 38
LIROS Magic Sport	38
9. Boomvang LIROS Herkules	20
LIROS Top Cruising	22
LIROS Magic Sheet  10. Spinnaker sheet	38
(not shown) LIROS Top Grip	21
LIROS Top Cruising Color	22
LIROS Allround LIROS Seastar	23 23
LIROS Magic Sheet LIROS Magic Sport	38 38
11. Backstay/running bac	
LIROS Dynamic LIROS Herkules	18 20
LIROS Magic Sheet	38
<b>12. Cunningham</b> LIROS Top Cruising Color	22
LIROS Top Cruising LIROS Magic Sport	22 38
13. Outhaul	

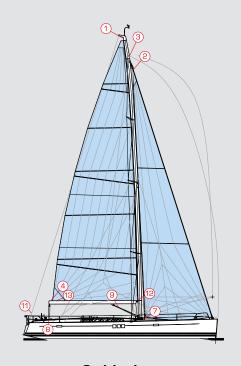
LIROS Herkules

LIROS Top Cruising

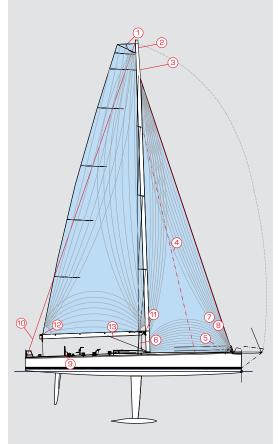
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# LIROS usage recommendations



**Cruising boat** 



## Racing boat

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

Source: Hanse Yachts / Judel Vrolijk

## **REGATTA**

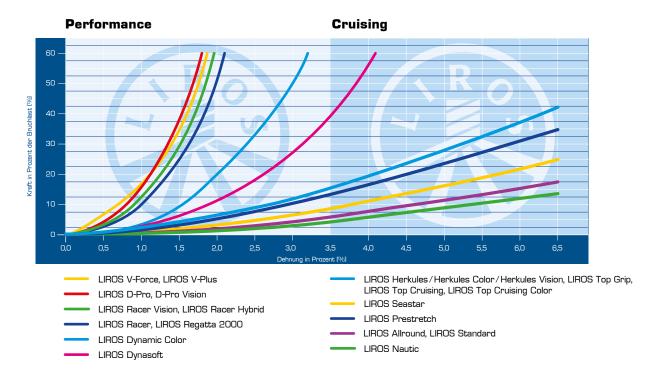
	page
1. Main halyard LIROS Racer-XTR LIROS Racer Hybrid LIROS Racer Vision LIROS Racer LIROS Regatta 2000 LIROS Control XTR	12 15 15 16 17
2. Genoa halyard LIROS Racer-XTR LIROS Racer Hybrid LIROS Racer Vision LIROS Racer LIROS V-Force LIROS Regatta 2000	12 15 15 16 16
3. Spinnaker halyard LIROS Racer-XTR LIROS Racer Hybrid LIROS Racer LIROS Dynamic	12 15 16 18
4. Pole topping lift LIROS Racer-XTR LIROS Racer Hybrid LIROS V-Force LIROS Dynamic LIROS Regatta 2000	12 15 16 18 17
5. Pole downhaul LIROS Racer-XTR LIROS Racer Hybrid LIROS Racer	12 15 16
6. Genoa sheet LIROS Racer-XTR LIROS Racer Hybrid LIROS Racer LIROS Regatta 2000	12 15 16 17
7. Spinnaker sheet LIROS Racer LIROS Dynamic LIROS Control-XTR LIROS Magic Edge LIROS Dynasoft	16 18 11 36 37
8. Guy LIROS Racer Vision LIROS V-Force	15 16
9. Main sheet LIROS Racer LIROS Dynamic LIROS Magic Pro LIROS Dynasoft	16 18 36 37
10. Backstay/ running backstay	
LIROS V-Force LIROS Regatta 2000 LIROS D-Pro-XTR LIROS D-Pro Static	16 17 12 13
<b>11. Cunningham</b> LIROS Racer LIROS Regatta 2000 LIROS D-Pro	16 17 19
<b>12. Outhaul</b> LIROS V-Force LIROS Regatta 2000 LIROS D-Pro LIROS Magic Edge	16 17 19 36
13. Boomvang LIROS Racer LIROS Dynamic LIROS D-Pro LIROS V-Plus-XTR LIROS Magic Pro	16 18 19 13 36
14. Boom topping lift (not shown)	

LIROS Dynamic

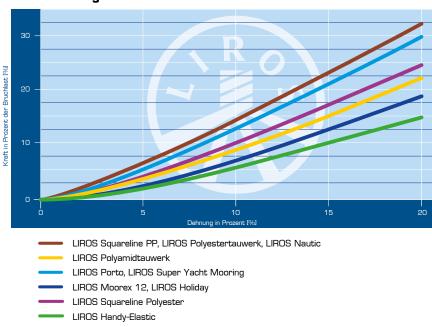


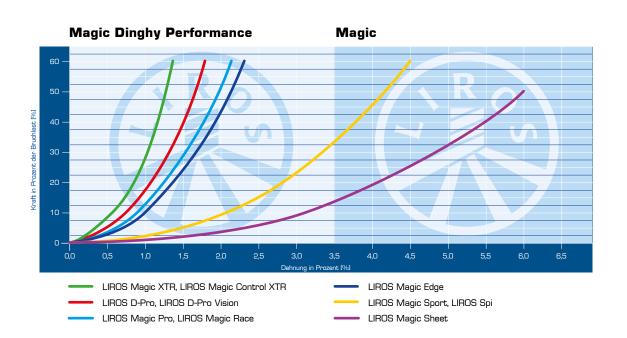
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# Comparing summary of synthetic fibres

### Material

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

# Reaction of synthetic ropes under different conditions

### Material

	Polyamide (PA) 6 / 6,6	Polyester (PES)	Polypropylene (PP)	Polyethylene (PE, (HMPE)	Aramid	LCP	PBO
Brand	Perlon Nylon			Dyneema® Spectra®	Twaron® Kevlar® Technora®	Vectran®	Zylon®
Washing temp.	40	40	30	30	60	60	60
	·-						
Acids (50% concentr.) 25°C / 100°C Rest %	17 / 5–10	80 / 0	no reaction	no reaction	good resistance	very good resistance	good resistance
X							
Gasoline	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction
ÖL Diesel							
and Oil	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction
Solvents	minimal reaction	minimal reaction	minimal reaction	minimal reaction	minimal reaction	minimal reaction	minimal reaction
Alkalien (Leaches)	resistant against weak alkalis	resistant against weak alkalis at 20°C	resistant against weak alkalis	resistant	resistant against weak alkalis	resistant	resistant
Insulating properties	good (when dry)	excellent	excellent	excellent	good (when dry)	excellent	excellent
Highest temp. Short load	400	470	90	70	400	200	550
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

