



# Unlimited Rope Solutions



Kite Paragliding Sailplane  
2024



## 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.



## Contents

<b>Kite Lines</b>		<b>SL</b>	20
Recommendations	6	Safety Line	20
DC Pro	7	Harness	21
DC	8	T-Webbing	21
PC	9		
Magic-High-Trim	10	<b>Gliding – Towing Lines</b>	
Bridle Line	10	Recommendations	22
DePower Lines / D-Pro	11	D-Pro (Glider Winch Launch Rope)	23
		Regatta 2000 (Glider Winch Launch Rope)	24
<b>Paragliding Lines</b>		Aero Tow Rope	24
Recommendations	13	Safety Cable	25
PPSLS	14		
PPSL	15	<b>Technical and chemical specifications</b>	
DSL	16	Comparing summary of synthetic fibres	26
DFL	17	Reaction of syntetic ropes	27
TSL	18		
LTC	19		



LIROS – YOUR EXCELLENT PARTNER



**Latest technology** Essential for producing premium products



**Laboratory** Technical development of unique rope solutions



**Quality control** guarantees continuous quality



**Production** Rope-finishing expertise Made in Germany

# LIROS HSS

||||| 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 wear resistance by up to 50%.*



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

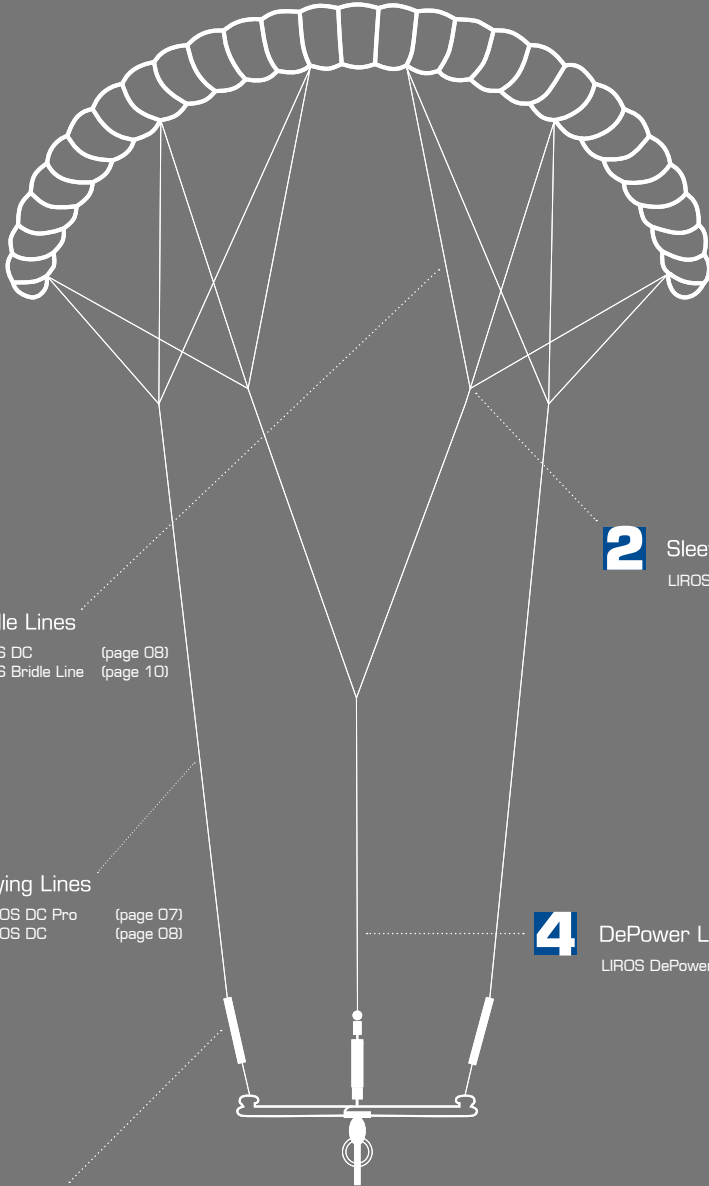
LIROS line optimization systems





## /// Recommendations

# KITE LINES



**1** Bridle Lines  
LIROS DC (page 08)  
LIROS Bridle Line (page 10)

**2** Sleeve Covers  
LIROS PC (page 09)

**3** Flying Lines  
LIROS DC Pro (page 07)  
LIROS DC (page 08)

**4** DePower Lines  
LIROS DePower Lines (page 11)

**5** Leader Lines  
LIROS Magic High Trim (page 10)  
LIROS DePower Lines (page 11)  
LIROS D-Pro (page 23)



## LIROS DC Pro

High-performance, 100% Dyneema® SK99 kitenline. Unmatched ratio between diameter and breaking strength. LIROS DC Pro 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.

**Material** pre-stretched, coated Dyneema® SK99

**Construction** 12-braided

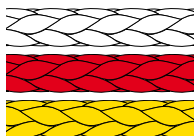


**LIROS HSS**  
Heat-Stretch-System

**LIROS LCS**  
LIROS Low Creep System

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

### Colours



228  
White  
594  
Red  
595  
Yellow



596  
Black  
616  
Green  
636  
Blue

Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]
DC 000-0161	0,83	160	170	2,4
DC 000-0201	1,10	200	230	3,7
DC 000-0301	1,30	300	325	3,6
DC 000-0401	1,55	400	490	3,4
DC 000-0701	2,00	700	730	3,2

Reference	Elongation / Line creep at 10 daN [%]	Elongation / Line creep at 30 daN [%]	Strength after 5000 bending cycles [daN]	Weight [g/m]	Length of spool* m
DC 000-0161	0,36 / 0,19	0,77 / 0,32	156	0,56	1000
DC 000-0201	0,20 / 0,19	0,43 / 0,23	245	0,88	1000
DC 000-0301	0,19 / 0,14	0,41 / 0,22	330	1,45	1000
DC 000-0401	0,20 / 0,18	0,42 / 0,21	450	1,94	1000
DC 000-0701	0,15 / 0,10	0,33 / 0,19	667	3,05	1000

\* LIROS Flight sport lines may come six pieces to a spool. No line will be shorter than 25m.  
Not all colours available in all diameters.



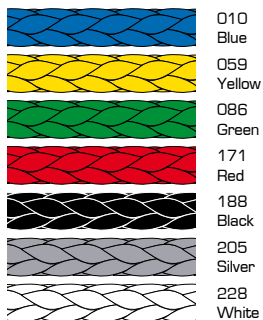
## LIROS DC

High-end, 100% Dyneema® SK 75 kitenline. 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*

### Colours



### Material

pre-stretched, coated Dyneema® SK75

### Construction

12- and 16-braided

Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]
DC000-0035	0,38	35	38	2,5
DC000-0040	0,5	40	48	2,2
DC000-0060	0,6	60	84	3,2
DC000-0100	0,8	100	110	3,0
DC000-0120	0,85	120	133	1,9
DC000-0160	1,1	160	200	2,3
DC000-0200	1,6	200	248	3,7
DC000-0300	1,8	300	368	3,7
DC000-0500	2,05	500	600	3,2

Reference	Elongation / Line creep at 10 daN [%]	Elongation / Line creep at 30 daN [%]	Strength after 5000 bending cycles [daN]	Weight [g/m]	Length of spool* m
DC000-0035	0,77 / 0,19	–	33	0,11	1000
DC000-0040	0,64 / 0,18	–	33	0,19	1000
DC000-0060	0,43 / 0,08	1,20 / 0,31	74	0,24	1000
DC000-0100	0,36 / 0,08	1,00 / 0,20	99	0,42	1000
DC000-0120	0,44 / 0,24	0,96 / 0,38	132	0,59	1000
DC000-0160	0,57 / 0,13	1,59 / 0,31	182	0,87	1000
DC000-0200	0,40 / 0,24	0,78 / 0,40	240	1,42	1000
DC000-0300	0,25 / 0,12	0,49 / 0,24	360	2,01	1000
DC000-0500	0,42 / 0,29	0,70 / 0,49	536	2,73	1000

\* LIROS FlightSport lines may come six pieces to a spool. No line will be shorter than 25m.  
Not all colours available in all diameters.

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





## 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*

### Colours



086  
Green



188  
Black



171  
Red

**Material** hollow-braided Polyester

Reference	suitable for	Length of spool <sup>1)</sup> m
PC000-0060	DC60, DC100	100
PC000-0120	DC120, DC160, DC161, DC201	100
PC000-0200	DC200, DC301	100
PC000-0300	DC300, DC401, DC701	100

<sup>1)</sup> LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.





## LIROS Magic-High-Trim

02080

### Colours



188  
Black  
228  
White

Pre-stretched, extreme low elongation extension line for excellent kitebar control. High-strength continuous Polyester for high-grip and durability. Perfect cleat hold.

- *working stretch < 1.5 %*
- *extremely low-stretch*
- *built for maximum hold in cleats*
- *round, firm, abrasion resistant braiding*
- *LIROS Heat-Stretch-System*



LIROS HSS  
... 12.5 Heat-Stretch-System

**Cover**  
Polyester

**Construction**  
8-plaited

**Core**  
pre-stretched Dyneema® SK78

Reference	app. Ø (mm)	Breakload min. (daN)	Elongation at Breakload (%)	Weight (g/m)	Length of spool <sup>1)</sup> m
02080-0400	4	800	3,6	0,56	250
02080-0500	5	1100	3,5	0,88	250
02080-0600	6	2200	3,4	1,45	250

## LIROS Bridle Line

22138



LIROS HSS  
... 12.5 Heat-Stretch-System  
LIROS LCS  
... 12.5 LCS-System

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*

### Colour



188  
Black

**Cover** high-strength Polyester

**Construction** 12-plaited

**Core** Dyneema® plaited

Reference	approx. Ø (mm)	Breakload min. (daN)	Breakload eff. (daN)	Elongation at Breakload (%)	Weight (g/m)	Length of spool <sup>1)</sup> m
22138-0200	2	300	313	3,1	2,7	1000
22138-0330	3,3	500	537	3,3	7,81	500

<sup>1)</sup> LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25m.



## 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



**LIROS HSS**  
High Stretch System  
**LIROS LCS**  
Low Stretch System

### Colours



716  
Silver  
521  
White

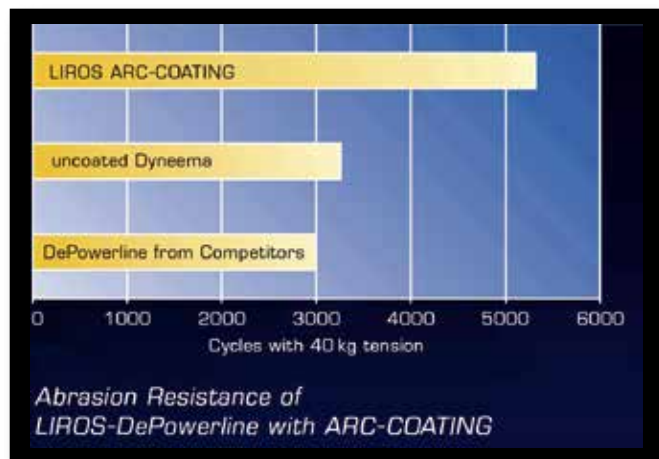


735  
Deep Black

**Material** Dyneema®

**Construction** plaited, heat set and coated

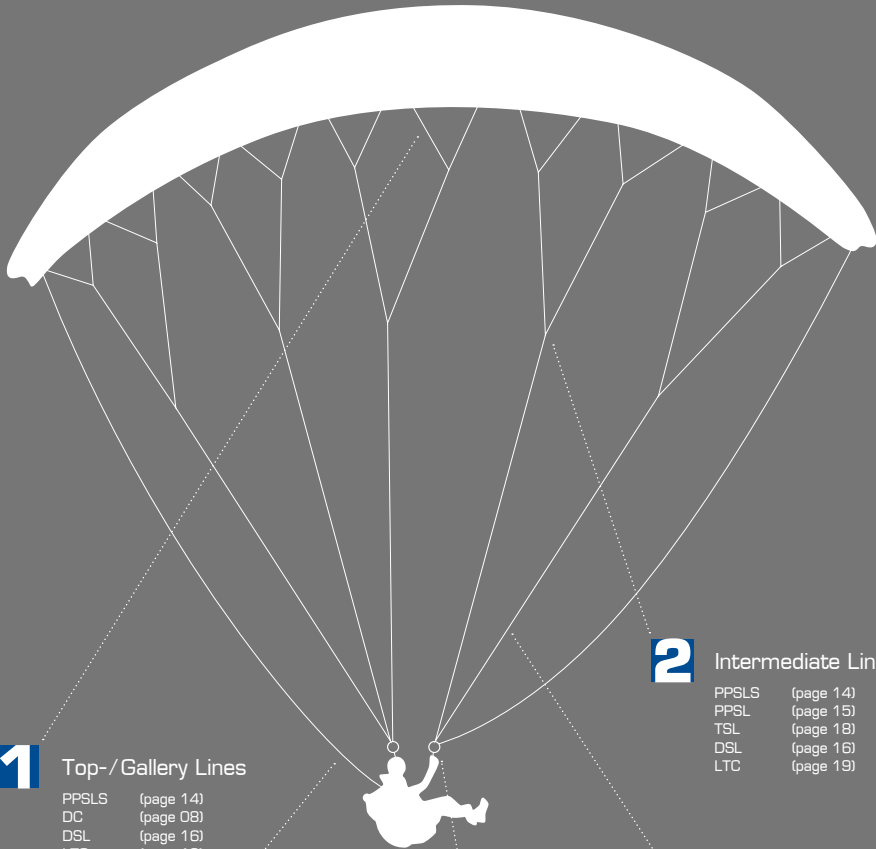
Reference	app. Ø [mm]	Breakload min. [daN]	Weight [g/m]	Length of spool <sup>®</sup> m
DPLPO-1300	4	1300	7	100/500
DPLPO-1750	4,5	1750	10,3	100/500
DPLPO-2600	5	2600	13	100/500
DPL00-1550	4,4	1550	10,9	500
DPL00-1700	5,2	1700	16,0	500
DPL00-1800	5,6	1800	17,5	500





# PARAGLIDING LINES





**1** Top-/Gallery Lines

- PPSLS (page 14)
- DC (page 08)
- DSL (page 16)
- LTC (page 19)
- TSL (page 18)

**2** Intermediate Lines

- PPSLS (page 14)
- PPSL (page 15)
- TSL (page 18)
- DSL (page 16)
- LTC (page 19)

**3** Break-/Frame Lines

- DFL (page 17)

**4** Bottom Lines

- PPSLS (page 14)
- TSL (page 18)
- PPSL (page 15)
- DSL (page 16)
- LTC (page 19)

**5** Lines and Webbing for Harness

- LIROS Harness (page 21)
- LIROS T-Webbing (page 21)



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

### Colours



010

Blue

059

Yellow

086

Green



150

Orange

171

Red



LIROS HSS

... 1 1 1 Heat Stretch-System

**Cover** Polyester

**Core** pre-stretched Dyneema®

Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]
PPSLS-0065	0,76	65	80	3,0
PPSLS-0125	1,05	125	150	2,7
PPSLS-0180	1,2	180	200	3,2
PPSLS-0200	1,3	200	220	3,0
PPSLS-0260	1,58	260	300	2,8

Reference	Elongation / Line creep at 10 daN [%]	Elongation / Line creep at 30 daN [%]	Strength after 5000 bending cycles [daN] <sup>(2)</sup>	Weight [g/m]	Length of spool <sup>1)</sup> m
PPSLS-0065	0,37 / 0,06	–	49	0,4	1000
PPSLS-0125	0,27 / 0,12	0,65 / 0,21	107	0,89	1000
PPSLS-0180	0,29 / 0,17	0,62 / 0,27	179	0,92	1000
PPSLS-0200	0,27 / 0,17	0,53 / 0,26	204	1,65	1000
PPSLS-0260	0,24 / 0,16	0,48 / 0,26	212	1,98	1000

<sup>1)</sup> LIROS Flight sport lines may come six pieces to a spool. No line will be shorter than 25m.

Not all colours available in all diameters.

<sup>(2)</sup> Test reports upon request.

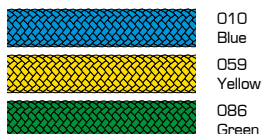


## LIROS PPSL

LIROS PPSL is lightweight, with minimal creep, as well as unrivaled 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*

### Colours



010  
Blue  
059  
Yellow  
086  
Green



150  
Orange  
171  
Red



**LIROS HSS**  
... 111 Heat Stretch-System

**Cover** Polyester 16-plaited

**Core** pre-stretched Dyneema®

Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]
PPSLO-0120	1,15	120	159	2,0
PPSLO-0160	1,4	160	177	3,7
PPSLO-0200	1,42	200	241	2,5
PPSLO-0275	1,9	275	283	2,3
PPSLO-0350	2,25	350	407	2,7

Reference	Elongation / Line creep at 10 daN [%]	Elongation / Line creep at 30 daN [%]	Strength after 5000 bending cycles [daN]	Weight [g/m]	Length of spool* m
PPSLO-0120	0,20 / 0,036	0,58 / 0,13	135	1,0	1000
PPSLO-0160	0,31 / 0,11	0,62 / 0,23	168	1,34	1000
PPSLO-0200	0,24 / 0,128	0,55 / 0,26	191	1,6	1000
PPSLO-0275	0,20 / 0,091	0,44 / 0,18	246	2,26	1000
PPSLO-0350	0,15 / 0,012	0,29 / 0,16	374	3,49	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.



## LIROS DSL

High-tech Dyneema® core, combined with our superior Polyester braided cover, guarantees a long-lasting and 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 differentiation*
- *optimum durability*
- *LIROS Heat-Stretch-System*

### Colours



010  
Blue



086  
Green



157  
Pink



059  
Yellow



150  
Orange



171  
Red

**Cover** Polyester 32-plaited  
**Core** pre-stretched Dyneema®



**LIROS HSS**  
Heat-Stretch-System

Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]
DSL00-0025 Black	0,8	25	38	3,7
DSL00-0035 White	0,9	35	45	3,6
DSL00-0070	0,95	70	92	3,6
DSL00-0140	1,25	140	147	3,3
DSL00-0350	2,0	350	436	3,2
DSL00-0600	2,4	600	675	3,1

Reference	Elongation / Line creep at 10 daN [%]	Elongation / Line creep at 30 daN [%]	Strength after 5000 bending cycles [daN]	Weight [g/m]	Length of spool <sup>1)</sup> m
DSL00-0025 Black	1,35 / 0,60	–	35	0,45	1000
DSL00-0035 White	0,83 / 0,37	–	42	0,64	1000
DSL00-0070	0,19 / 0,14	0,41 / 0,22	85	0,67	1000
DSL00-0140	0,54 / 0,16	0,42 / 0,21	120	1,14	1000
DSL00-0350	0,15 / 0,10	0,33 / 0,19	412	3,25	1000
DSL00-0600	0,08 / 0,00	0,24 / 0,08	550	4,3	500

<sup>1)</sup> LIROS Flightsport lines may come six pieces to a spool. No line will be shorter than 25 m.





## 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

### Colours



059  
Yellow



171  
Red



150  
Orange



**Cover** Polyester 16-plaited, DFLPO-0232 32-plaited

**Core** Dyneema®

Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]	Weight [g/m]	Length of spool** m
DFL00-0115	1,4	115	120	3,3	1,18	1000
DFLS0-0200	2,0	200	218	3,6	3,10	1000
DFLPO-0232	2,1	200	219	3,4	2,58	1000
DFL00-0350	2,7	350	390	3,5	4,98	1000

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

\*\* Only available in 059 Yellow and 150 Orange.





## 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 differentiation.

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

### Colours



010  
Blue



086  
Green



171  
Red



059  
Yellow



150  
Orange

**Cover** Polyester

**Core** Technora®



Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]
TSL00-0090	1,2	90	109	3,3
TSL00-0115	1,25	115	132	4
TSL00-0140	1,3	140	172	4,6
TSL00-0190	1,55	190	227	4,6
TSL00-0220	1,65	230	256	5
TSL00-0280	1,80	280	325	4,5
TSL00-0380	2,2	380	464	5
TSL00-0500	2,37	500	575	4,9

Reference	Elongation / Line creep at 10 daN [%]	Elongation / Line creep at 30 daN [%]	Strength after 5000 bending cycles [daN]	Weight [g/m]	Length of spool* m
TSL00-0090	0,45 / 0,04	1,38 / 0,24	50,5	1,06	1000
TSL00-0115	0,42 / 0,04	1,21 / 0,21	59	1,18	1000
TSL00-0140	0,25 / 0,00	0,88 / 0,13	74	1,39	1000
TSL00-0190	0,25 / 0,04	0,71 / 0,08	110	1,76	1000
TSL00-0220	0,29 / 0,04	0,75 / 0,13	121	2,12	1000
TSL00-0280	0,17 / 0,00	0,46 / 0,04	139	2,55	1000
TSL00-0380	0,18 / 0,03	0,46 / 0,09	195	3,46	1000
TSL00-0500	0,16 / 0,04	0,42 / 0,11	240	4,6	500

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



## 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



### Colour



705  
Beige NF

**Material** 100% Technora®  
**Construction** 12-plaited

Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]
LTC00-0025	0,39	25	29	4,8
LTC00-0045	0,55	45	58	5,2
LTC00-0065	0,65	65	72	5,1
LTC00-0080	0,7	80	103	4,6
LTC00-0120	1,1	120	172	3,5
LTC00-0160	1,2	160	201	4,5
LTC00-0200	1,3	200	244	4,7
LTC00-0350	1,75	350	355	2,2
LTC00-0400	1,9	400	415	3,0

Reference	Elongation / Line creep at 10 daN [%]	Elongation / Line creep at 30 daN [%]	Strength after 5000 bending cycles [daN]	Weight [g/m]	Length of spool* m
LTC00-0025	—	—	18	0,13	1000
LTC00-0045	0,85 / 0,20	—	37	0,28	1000
LTC00-0065	0,80 / 0,30	—	43	0,45	1000
LTC00-0080	0,65 / 0,30	1,65 / 0,50	76	0,57	1000
LTC00-0120	0,60 / 0,30	1,20 / 0,40	96	0,84	1000
LTC00-0160	0,55 / 0,25	1,05 / 0,35	135	1,17	1000
LTC00-0200	0,60 / 0,25	1,10 / 0,40	149	1,42	1000
LTC00-0350	0,50 / 0,17	0,95 / 0,38	199	2,16	500
LTC00-0400	0,45 / 0,20	0,95 / 0,40	260	2,89	500

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



## 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



### Colour



228  
White

### Material

Dyneema®

### Construction

SL375 12-plaited / SL500 8-plaited

Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]	Weight [g/m]	Length of spool* m
SL000-0375	2,5	375	468	8	2,18	1000
SL000-0500	2,8	500	670	8	2,92	1000

\* Individual lengths possible. 1000 - 1800 in one joint.

## 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®

### Colour



228  
White



Reference	approx. Ø [mm]	Breakload min. [daN]	Breakload eff. [daN]	Elongation at Breakload [%]	Weight [g/m]	Length of spool* m
RLD00-0190	1,3	190	193	6,25	0,82	500
RLD00-0275	1,35	275	289	3,3	1,19	1000
RLD00-0350	1,7	350	364	5	1,32	1000
RLP00-0110	4	110	118	25,2	1,68	1000
RLP00-0150	4,5	150	153	32	2,7	1000

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



## 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*



### Colour



228  
White

**Material** 100% Dyneema®  
**Construction** 32-plaited

Reference	approx. Ø (mm)	Breakload min. (daN)	Weight (g/m)	Length of spool* (m)
CRS00-0500-228	5	500	3,2	500
CR000-1000-228	6	1000	6,33	500
CR000-1800-228	9	1800	13,3	500



## LIROS T-Webbing

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

- *high breakloads*
- *good resistance to abrasion*



### Colour



188  
Black

**Material** Technora® / Polyester  
**Construction** webbing

Reference	approx. Ø (mm)	Breakload min. (daN)	Weight (g/m)	Length of spool* (m)
00185-1301	13	> 850	23	100



# /// Recommendations

## GLIDING – TOWING LINES



**1**

Synthetic winch cable

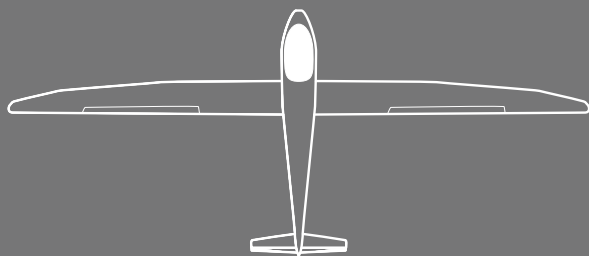
LIROS D-Pro (page 23)  
LIROS Regatta 2000 (page 24)



**2**

Safety Cable .....

LIROS Safety Cable (page 25)





## LIROS D-Pro (Glider Winch Launch Rope)

LIROS Heat-Stretch-System guarantees the optimal breaking load and stretch characteristics of this line. Excellent chafing resistance, light weight, and easy spliceability make this line irreplaceable for towing sailplanes.

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

### Colours



171  
Red



010  
Blue



059  
Yellow

**Material** coated Dyneema® SK78

**Construction** pre-stretched,  
coated 12-plaited



LIROS HSS  
Heat-Stretch-System

Reference	approx. Ø (mm)	Breakload min. (daN)	Weight (g/m)	Length of spool* m
01505-0300	3	950	4,6	100
01505-0400	4	1300	7	100
01505-0500	5	2600	13	1000
01514-0450	4,5	2200	10	1000
01514-0500	5	3000	12	1000

\* Individual lengths possible. 1000 - 1800 m in one joint.





## LIROS Regatta 2000 (Glider Winch Launch Rope)

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, and specialised core of coated Dyneema® SK7B.

- *working stretch < 1.5%*
- *extreme break resistant, light and durable*
- *30% more abrasion resistant than conventional Polyester*
- *LIROS-Heat-Stretch-System*



LIROS HSS  
 LIROS LCS

**Cover** Special Polyester high-twisted  
**Construction** 2-3 mm 16-plaited  
 4 mm and up 1:1 plaited  
**Material** Coated Dyneema® SK7B,  
 8 mm and up with additional cover plait

### Colours



354  
 Steelblue-Red



352  
 Steelblue-Yellow

Reference	approx. Ø [mm]	Breakload min. [daN]	Weight [g/m]	Length of spool* m
02000-0600	6	2500	25	1000

\* Individual lengths possible. 1000 - 1800 m in one joint.

## LIROS Aero Tow Rope

Compact, braided, shape-retaining rope for aero-towing – perfect shock absorption.

- *round*
- *compact*

### Colour



228  
 White

**Material** 100% Polyester

Reference	approx. Ø [mm]	Length of spool* m
01046-0200	2	250
01046-0250	2,5	250
01046-0300	3	250
01046-0350	3,5	250
01046-0400	4	250
01046-0450	4,5	250
01046-0500	5	250
01046-0550	5,5	250
01046-0600	6	200
01046-0700	7	200
01046-0800	8	200





## LIROS Safety Cable

Robust and stiff braiding with highest abrasion resistance. Fabrication: one ending with oval ring, the other ending connection ring pair according to LNB5091. On both endings shrinking tube with LIROS-branding.

- abrasion resistant
- 10x lighter than steel
- highest UV-resistance
- dirt- and water-repellent
- version 00099-1235 Easy Find for easier identification by harvesting vehicles
- LIROS 00099-2424 with reinforcement hose, according to german SBO (pic. 3)

**Material**    **Cover** Polyester  
                   **Core** Dyneema®

**Construction** 32-plaited



**LIROS HSS**  
... 12 11 Real Safety Equipment

### Colour



171  
Red



pic. 1



pic. 2



pic. 3

Reference	Picture	approx. Ø (mm)	Breakload min. (daN)	Working stretch	Length (m)
00099-1630	1	10	3500	<1,5	3
00099-1235	2	10	1600	<1,5	3
00099-2424	3	12	7200	<1,5	3

\* Individual lengths possible. 1000 - 1800 m in one joint.








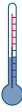
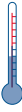
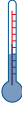


**Material**

	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							
eN/dtex	7 – 8	7 – 9	6 – 7	28 – 40	20 – 25	22 – 25	ca. 37
Specific weight							
kg/dm³	1,14	1,38	0,91	0,96	1,44	1,41	1,52
Strength loss due to humidity							
%	5 – 10	0	0	0	0	0	0
Water absorption							
%	1 – 7	0,5 – 2	0	0	2 – 5	1	0,6
Knot tenacity (residual value breaking strength)							
%	60 – 65	55 – 60	55 – 65	35 – 50	30 – 40	30 – 35	35 – 55
Light resistance							
	good	very good	adequate	very good	poor	adequate	poor
Breaking stretch							
%	16 – 27	10 – 16	12 – 20	2 – 3	2 – 4	2 – 3	2,5
Abrasion resistance	very good	very good	fair	very good	adequate	very good	adequate

Reaction of synthetic ropes under different conditions

**Material**

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



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