

# BI ROLLER 2

Technical *specifications*

**AIVIUK** BEYOND  
THE GLIDE

# TECHNICAL SPECIFICATIONS

			30	34
<b>Cells</b>	Number		37	37
<b>Aspect ratio</b>	Flat		4,5	4,5
	Projected		3,67	3,67
<b>Area</b>	Flat	m2	30,5	34
	Projected	m2	26,83	29,91
<b>Span</b>	Flat	m	11,72	12,37
<b>Chord</b>	Max	m	3,13	3,31
<b>Lines</b>	Total	m	200	205
	Main		3/4/3	3/4/3
<b>Risers</b>	Number	3	A/B/C	A/B/C
	Trimmers	mm	110	110
<b>Glider weight</b>		kg	6,15	6,67
<b>Total weight in flight</b>	Min-Max	kg	90-180	100-210
<b>Certification</b>			EN/LTF B	EN/LTF B

The total weight of the wing may differ  $\pm 2\%$  due to variations in the weight of the fabric supplied by the manufacturers.

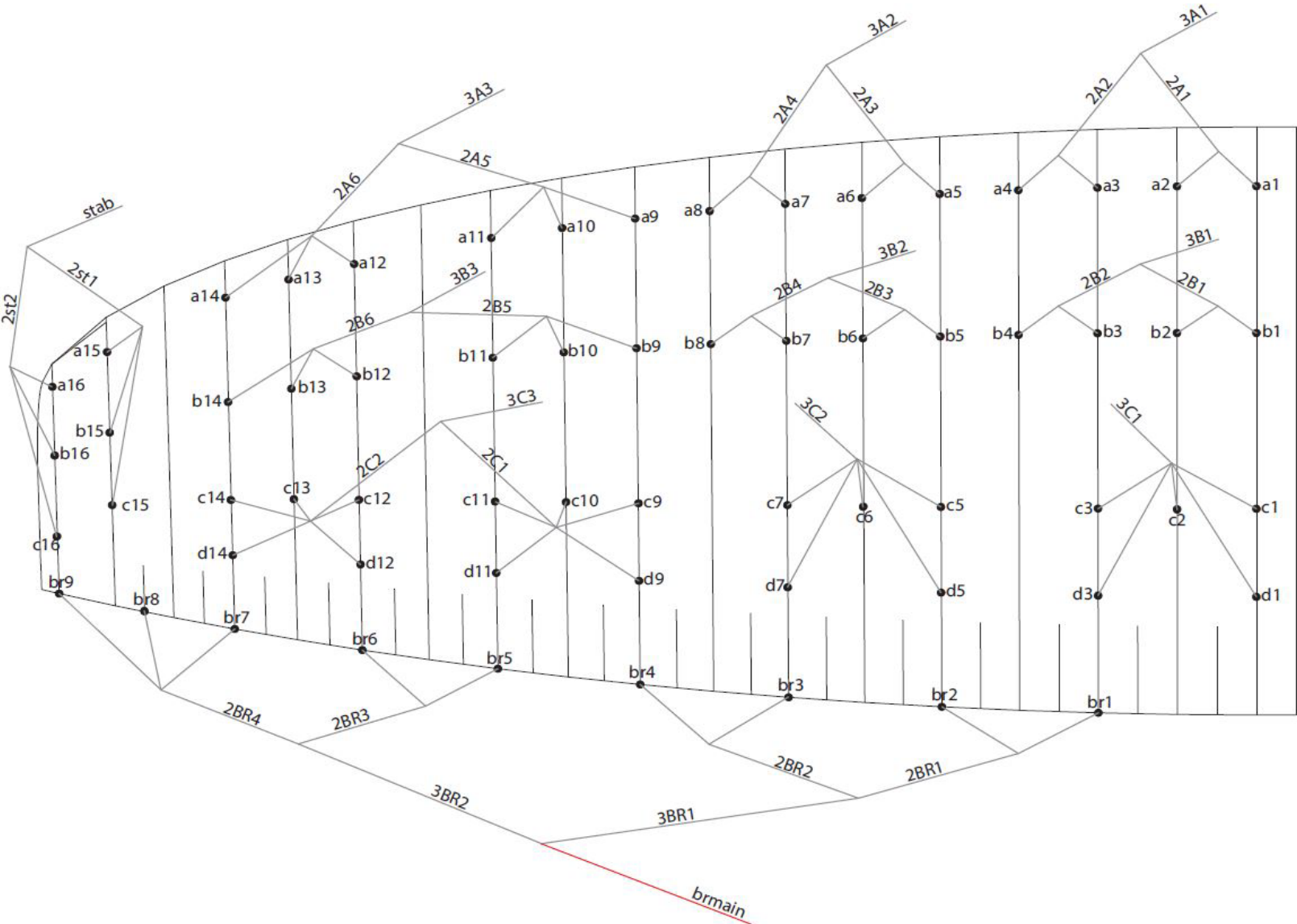
# MATERIALS

CANOPY	FABRIC CODE	SUPPLIER
UPPER SURFACE	30 DMF	DOMINICO TEX CO (KOREA)
BOTTOM SURFACE	N20 DMF	DOMINICO TEX CO (KOREA)
PROFILES	30 DFM	DOMINICO TEX CO (KOREA)
DIAGONALS	30 DFM	DOMINICO TEX CO (KOREA)
LOOPS	LKI - 10	KOLON IND. (KOREA)
REINFORCEMENT LOOPS	RIPSTOP FABRIC	DOMINICO TEX CO (KOREA)
TRAILING EDGE REINFORCEMENT	MYLAR	D-P (GERMANY)
RIBS REINFORCEMENT	LTN-0.8/1 STICK	SPORTWARE CO.CHINA
THREAD	SERAFIL 60	AMAN (GERMANY)

SUSPENSION LINES	FABRIC CODE	SUPPLIER
UPPER CASCADES	PPSL - 120	LIROS GMHB (GERMANY)
UPPER CASCADES	MATRIX - 80	EDELRID (GERMANY)
MIDDLE CASCADES	PPSL - 200	LIROS GMHB (GERMANY)
MIDDLE CASCADES	PPSL - 120	LIROS GMHB (GERMANY)
MIDDLE CASCADES	TNL - 140	TEIJIM LIMITED (JAPAN)
MAIN	TNL - 400	TEIJIM LIMITED (JAPAN)
MAIN	TNL - 280	TEIJIM LIMITED (JAPAN)
MAIN	TNL - 140	TEIJIM LIMITED (JAPAN)
MAIN BREAK	TARAX-240	EDELRID (GERMANY)
THREAD	SERAFIL 60	AMAN (GERMANY)

RISERS	FABRIC CODE	SUPPLIER
MATERIAL	G-R 22	TECNI SANGLES (FRANCE)
COLOR INDICATOR	210D	TECNI SANGLES (FRANCE)
THREAD	V138	COATS (ENGLAND)
MAILLONS	MRI4	ANSUNG PRECISION (KOREA)
PULLEYS	RF25109	RONSTAN (AUSTRALIA)

# LINE PLAN



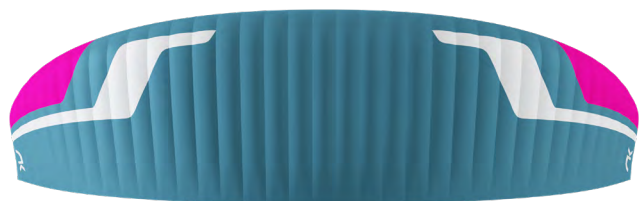
# RISER PLAN



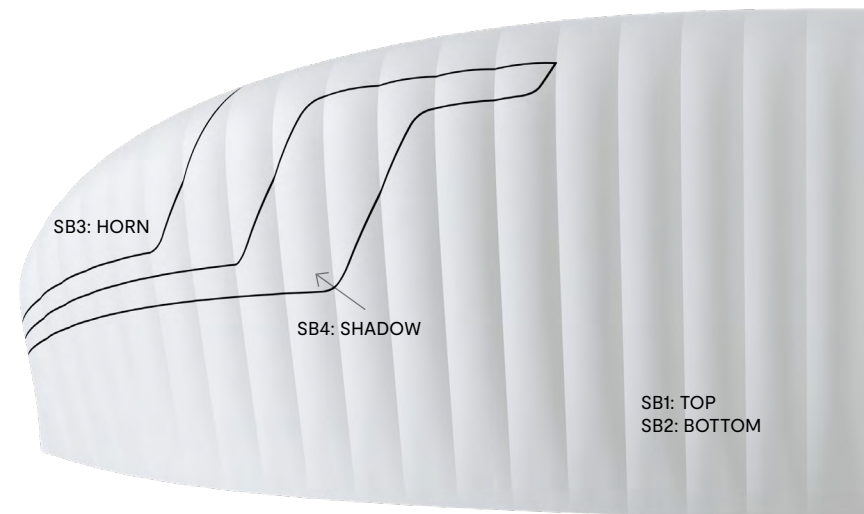
# COLORS



<b>KRYSTALL</b>	SB1	SPECTRA GREEN	TOP	REF: 5335
	SB2	WHITE	BOTTOM - ALL WHITE	REF: 001
	SB3	BLACK	HORN	REF: 102
	SB4	WHITE	SHADOW	REF: 001



<b>KYANITE</b>	SB1	SLATE BLUE	TOP	REF: 317
	SB2	WHITE	BOTTOM - ALL WHITE	REF: 001
	SB3	PINK	HORN	REF: 19-2047
	SB4	WHITE	SHADOW	REF: 001



# WING LOAD

## BI ROLLER 2

30		
P.T.V.	=	KG/M2
90	=	2,95
95	=	3,11
100	=	3,28
105	=	3,44
110	=	3,61
115	=	3,77
120	=	3,93
125	=	4,10
130	=	4,26
135	=	4,43
140	=	4,59
145	=	4,75
150	=	4,92
155	=	5,08
160	=	5,25
165	=	5,41
170	=	5,57
175	=	5,74
180	=	5,90

34		
P.T.V.	=	KG/M2
100	=	2,94
105	=	3,09
110	=	3,24
115	=	3,38
120	=	3,53
125	=	3,68
130	=	3,82
135	=	3,97
140	=	4,12
145	=	4,26
150	=	4,41
155	=	4,56
160	=	4,71
165	=	4,85
170	=	5,00
175	=	5,15
180	=	5,29
185	=	5,44
190	=	5,59
195	=	5,74
200	=	5,88
205	=	6,03
210	=	6,18

# LINES

## BI ROLLER 2 30

REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm		
<b>A</b>					<b>B</b>					<b>C</b>					<b>D</b>					<b>BRAKE</b>						
a1	PPSL	120	YELLOW	830	b1	PPSL	120	YELLOW	827	c1	PPSL	200	YELLOW	1759	d1	MATRIX	80	YELLOW	1859	br1	TNL	80	RED	1123		
a2	PPSL	120	YELLOW	757	b2	PPSL	120	YELLOW	756	c2	PPSL	120	YELLOW	1701	d3	MATRIX	80	YELLOW	1808	br2	TNL	80	RED	647		
a3	PPSL	120	YELLOW	773	b3	PPSL	120	YELLOW	768	c3	PPSL	120	YELLOW	1709	d5	MATRIX	80	YELLOW	1782	br3	TNL	80	RED	994		
a4	PPSL	120	YELLOW	819	b4	PPSL	120	YELLOW	816	c5	PPSL	200	YELLOW	1685	d7	MATRIX	80	YELLOW	1775	br4	TNL	80	RED	1031		
a5	PPSL	120	YELLOW	801	b5	PPSL	120	YELLOW	795	c6	PPSL	120	YELLOW	1660	d9	MATRIX	80	YELLOW	1663	br5	TNL	80	RED	970		
a6	PPSL	120	YELLOW	752	b6	PPSL	120	YELLOW	750	c7	PPSL	120	YELLOW	1688	d11	MATRIX	80	YELLOW	1513	br6	TNL	80	RED	866		
a7	PPSL	120	YELLOW	733	b7	PPSL	120	YELLOW	722	c9	PPSL	120	YELLOW	1581	d12	MATRIX	80	YELLOW	1438	br7	TNL	80	RED	945		
a8	PPSL	120	YELLOW	777	b8	PPSL	120	YELLOW	771	c10	MATRIX	80	YELLOW	1488	d14	MATRIX	80	YELLOW	1399	br8	TNL	80	RED	987		
a9	PPSL	120	YELLOW	1610	b9	PPSL	120	YELLOW	1583	c11	MATRIX	80	YELLOW	1441						br9	TNL	80	RED	1164		
a10	MATRIX	80	YELLOW	1525	b10	MATRIX	80	YELLOW	1505	c12	MATRIX	80	YELLOW	1377												
a11	MATRIX	80	YELLOW	1484	b11	MATRIX	80	YELLOW	1471	c13	MATRIX	80	YELLOW	1347												
a12	MATRIX	80	YELLOW	1473	b12	MATRIX	80	YELLOW	1432	c14	MATRIX	80	YELLOW	1354												
a13	MATRIX	80	YELLOW	1424	b13	MATRIX	80	YELLOW	1393	c15	MATRIX	80	YELLOW	1900												
a14	MATRIX	80	YELLOW	1412	b14	MATRIX	80	YELLOW	1390	c16	MATRIX	80	YELLOW	1873												
a15	MATRIX	80	YELLOW	1865	b15	MATRIX	80	YELLOW	1826																	
a16	MATRIX	80	YELLOW	1779	b16	MATRIX	80	YELLOW	1765																	
2A1	PPSL	200	YELLOW	1100	2B1	PPSL	200	BLUE	1094	2C1	PPSL	200	BLUE	967						2BR1	TNL	140	RED	1369		
2A2	PPSL	200	YELLOW	1071	2B2	PPSL	200	BLUE	1070	2C2	PPSL	120	BLUE	957						2BR2	TNL	140	RED	863		
2A3	PPSL	200	YELLOW	1035	2B3	PPSL	200	BLUE	1020										2BR3	TNL	140	RED	1056			
2A4	PPSL	200	YELLOW	1052	2B4	PPSL	200	BLUE	1051										2BR4	TNL	140	RED	940			
2A5	PPSL	200	YELLOW	1641	2B5	PPSL	200	BLUE	1593										3BR1	TNL	140	RED	1909			
2A6	PPSL	200	YELLOW	1566	2B6	PPSL	200	BLUE	1562										3BR2	TNL	140	RED	1627			
2ST1	PPSL	120	RED	592																						
2ST2	PPSL	120	RED	602																						
3A1	TNL	400	GREEN	5076	3B1	TNL	400	BLUE	4989	3C1	TNL	400	BLUE	5226						BRMAIN	TARAX	240	RED	3805		
3A2	TNL	400	GREEN	5127	3B2	TNL	400	BLUE	5062	3C2	TNL	400	BLUE	5252												
3A3	TNL	400	GREEN	3229	3B3	TNL	400	BLUE	3726	3C3	TNL	280	BLUE	4466												
3A3'	TNL	400	GREEN	500	STAB	TNL	140	RED	4016											POINT AT:				3605		



# LINES

## BI ROLLER 2 34

REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	MAT.	kg	COLOR	mm	REF.	MAT.	kg	COLOR	mm	
<b>A</b>					<b>B</b>					<b>C</b>					<b>D</b>				<b>BRAKE</b>					
a1	PPSL	120	YELLOW	876	b1	PPSL	120	YELLOW	874	c1	PPSL	200	YELLOW	1856	d1	MATRIX	80	YELLOW	1962	br1	TNL	80	RED	1186
a2	PPSL	120	YELLOW	801	b2	PPSL	120	YELLOW	799	c2	PPSL	120	YELLOW	1795	d3	MATRIX	80	YELLOW	1910	br2	TNL	80	RED	685
a3	PPSL	120	YELLOW	815	b3	PPSL	120	YELLOW	810	c3	PPSL	120	YELLOW	1805	d5	MATRIX	80	YELLOW	1881	br3	TNL	80	RED	1048
a4	PPSL	120	YELLOW	865	b4	PPSL	120	YELLOW	862	c5	PPSL	200	YELLOW	1778	d7	MATRIX	80	YELLOW	1876	br4	TNL	80	RED	1089
a5	PPSL	120	YELLOW	846	b5	PPSL	120	YELLOW	839	c6	PPSL	120	YELLOW	1753	d9	MATRIX	80	YELLOW	1756	br5	TNL	80	RED	1023
a6	PPSL	120	YELLOW	795	b6	PPSL	120	YELLOW	792	c7	PPSL	120	YELLOW	1784	d11	MATRIX	80	YELLOW	1599	br6	TNL	80	RED	915
a7	PPSL	120	YELLOW	773	b7	PPSL	120	YELLOW	761	c9	PPSL	120	YELLOW	1670	d12	MATRIX	80	YELLOW	1518	br7	TNL	80	RED	996
a8	PPSL	120	YELLOW	821	b8	PPSL	120	YELLOW	814	c10	MATRIX	80	YELLOW	1572	d14	MATRIX	80	YELLOW	1477	br8	TNL	80	RED	1042
a9	PPSL	120	YELLOW	1700	b9	PPSL	120	YELLOW	1672	c11	MATRIX	80	YELLOW	1522						br9	TNL	80	RED	1230
a10	MATRIX	80	YELLOW	1610	b10	MATRIX	80	YELLOW	1589	c12	MATRIX	80	YELLOW	1454										
a11	MATRIX	80	YELLOW	1568	b11	MATRIX	80	YELLOW	1554	c13	MATRIX	80	YELLOW	1423										
a12	MATRIX	80	YELLOW	1555	b12	MATRIX	80	YELLOW	1512	c14	MATRIX	80	YELLOW	1430										
a13	MATRIX	80	YELLOW	1504	b13	MATRIX	80	YELLOW	1470	c15	MATRIX	80	YELLOW	2006										
a14	MATRIX	80	YELLOW	1491	b14	MATRIX	80	YELLOW	1469	c16	MATRIX	80	YELLOW	1978										
a15	MATRIX	80	YELLOW	1969	b15	MATRIX	80	YELLOW	1928															
a16	MATRIX	80	YELLOW	1879	b16	MATRIX	80	YELLOW	1863															
2A1	PPSL	200	YELLOW	1159	2B1	PPSL	200	BLUE	1154	2C1	PPSL	200	BLUE	1020						2BR1	TNL	140	RED	1442
2A2	PPSL	200	YELLOW	1133	2B2	PPSL	200	BLUE	1132	2C2	PPSL	120	BLUE	1011						2BR2	TNL	140	RED	913
2A3	PPSL	200	YELLOW	1092	2B3	PPSL	200	BLUE	1075						2BR3	TNL	140	RED	1113					
2A4	PPSL	200	YELLOW	1113	2B4	PPSL	200	BLUE	1111						2BR4	TNL	140	RED	995					
2A5	PPSL	200	YELLOW	1731	2B5	PPSL	200	BLUE	1680						3BR1	TNL	140	RED	2013					
2A6	PPSL	200	YELLOW	1655	2B6	PPSL	200	BLUE	1651						3BR2	TNL	140	RED	1723					
2ST1	PPSL	120	RED	625																				
2ST2	PPSL	120	RED	636																				
3A1	TNL	400	GREEN	5380	3B1	TNL	400	BLUE	5289	3C1	TNL	400	BLUE	5539						BRMAIN	TARAX	240	RED	4030
3A2	TNL	400	GREEN	5439	3B2	TNL	400	BLUE	5371	3C2	TNL	400	BLUE	5571										
3A3	TNL	400	GREEN	3467	3B3	TNL	400	BLUE	3964	3C3	TNL	280	BLUE	4746										
3A3'	TNL	400	GREEN	500	STAB	TNL	140	RED	4273											POINT AT:				3830

# LINE MEASUREMENTS

## BI ROLLER 2 - 30

LINES HEIGHT MM

	A	B	C	D	br
1	7382	7290	7376	7475	8045
2	7309	7219	7318	7424	7569
3	7296	7207	7326	7424	7410
4	7342	7255	7326	7417	7447
5	7340	7255	7301	7480	7297
6	7291	7210	7329	7330	7193
7	7289	7213	7397	7245	7156
8	7333	7262	7304	7206	7198
9	7342	7278	7257		7308
10	7257	7200	7183		
11	7216	7166	7153		
12	7130	7096	7160		
13	7081	7057	6889		
14	7069	7054	6872		
15	6852	6814			
16	6776	6763			

RISERS LENGHT MM

A	A'	B	C	
380	380	380	380	STANDARD
380	380	425	490	ACCELERATED

## BI ROLLER 2 - 34

LINES HEIGHT MM

	A	B	C	D	br
1	7797	7700	7783	7888	8510
2	7722	7625	7722	7836	8009
3	7710	7614	7732	7839	7843
4	7760	7666	7735	7834	7884
5	7760	7666	7710	7903	7728
6	7709	7619	7741	7746	7620
7	7708	7624	7816	7656	7583
8	7756	7677	7718	7615	7629
9	7763	7695	7668		7750
10	7673	7612	7591		
11	7631	7577	7560		
12	7542	7506	7567		
13	7491	7464	7282		
14	7478	7463	7265		
15	7249	7209			
16	7170	7155			

RISERS LENGHT MM

A	A'	B	C	
380	380	380	380	STANDARD
380	380	425	490	ACCELERATED

# SUSPENSION

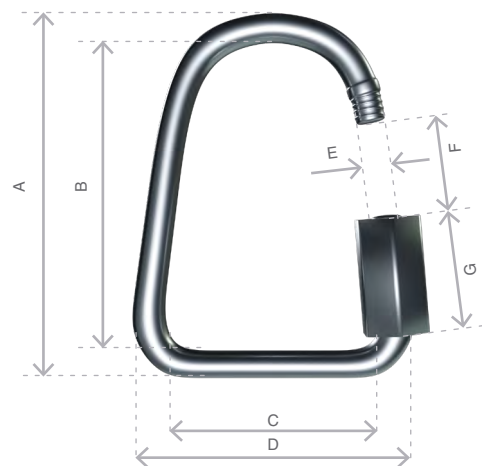
MATERIAL CODE		TNL	TNL	TNL	TNL	PPSL	PPSL	MATRIX	TARAX
STRENGTH CODE		140	220	280	400	120	200	80	240
DIAMETER m/m	∅	1,4	1,6	1,8	2,3	1,15	1,42	0,9	1,9
CORE MATERIAL		Technora	Technora	Technora	Technora	Dyneema	Dyneema	Dyneema	Dyneema
SLEEVE MATERIAL		Polyester	Polyester	Polyester	Polyester	Polyester	Polyester	Polyester	Polyester
WEIGHT G/M	TOTAL	1,2	1,6	2,7	4	1	1,6	0,7	2,3
BREAKING STRENGTH daN	MINIMUM	140	220	280	460	120	200	80	240
	MAXIMUM	160	250	320	470	159	241		
STRENGTH AFTER 5.000 BENDING CYCLES	TEST EN	76,1	114,2	134,7	160,1	135	191		
ELONGATION AT	5 daN en %	0,2	0,2	0,2	0,05			0,1-0,4	0,1-0,3
	10 daN en %	0,3	0,3	0,3	0,1	0,2	0,24		0,2-0,4
	15 daN en %	0,5	0,5	0,4	0,2				0,2-0,6
	20 daN en %	0,6	0,6	0,4	0,2				0,3-0,7
	25 daN en %	0,8	0,7	0,5	0,3			0,8-1	0,4-0,8
	30 daN en %	1,5	1,2	0,9	0,6	0,6	0,55		
	75 daN en %	2,3	1,8	1,3	0,8			2,5-2,8	0,9-1,2
	100 daN en %	2,7	2,2	1,7	1,1				1,1-1,5
	125 daN en %	3,2	2,7	2	1,4				
	150 daN en %		3	2,3	1,7				1,5-2,1
	175 daN en %		3,3	2,7	2				
	200 daN en %		3,8	2,8	2,2				2-2,8
ELONGATION MAX. BREAKING STRENGTH %		3,4	4	4,1	4,6	2			

# MAILLON & PULLEY

## DESCRIPTION

MAILLON	DELTA
CODE	3.5
MATERIAL	STAINLESS STEEL
SIZE	3 m/m
WEIGHT	5 G/PIECE
QUANTITY	8 PIECES
INSERTS	4 GREEN / 4 BLACK

## TECHNICAL SPECIFICATIONS



DIMENSIONS	m/m
A	37
B	29
C	14
D	22
E	4
F	5
G	12
LOAD	KG
WORKING LIMIT	110
BREAKING	550

MATERIAL AISI 304 STAINLESS STEEL

STANDARD

CLOSING APPLIED BY MANUAL & ENTIRE SCREWING OF THE NUT  
TO GUARANTEE THE HIGHEST SAFETY (NO THREAD SHOULD BE OBVIOUS)

SYSTEMATIC CONTROL OF MAILLON QUICK-LINKS BEFORE EVERY FLIGHT

## THREAD

### WING MAKING

NAME	SERAFIL
N° OF REFERENCE	60
MATERIAL	POLYESTER
TYPE OF FINISH	SILK
LINEAR DENSITY	NM 61 / 3 (DTEX 163 * 3)
BREAKING STRENGTH	3.000 CN
ELONGATION	17,00%

### PROPIETIES SERAFIL

SOLIDITY ARTIFICIAL LIGTH	ISO 105 B02 > 5 - 6
SOLIDITY SWEAT	ISO 105 E04 > 4
SOLIDITY WASHING	ISO 105 C04 > 3
SOLIDITY GRAZE IN DRY	ISO 105 X12 > 4
SOLIDITY WASHING IN DRY	ISO 105 D01 > 3 - 4
TREATMENT WATER REPELLENT	WR

### RISERS MAKING

NAME	COATS BONDED C.F.P.
N° OF REFERENCE	V138
MATERIAL	POLYESTER
TYPE OF FINISH	SILK
BREAKING STRENGTH	9,5 KG
ELONGATION	19%

## RISERS

### RISERS

N° OF REFERENCE	G-R 22
MATERIAL	POLYESTER
WIDTH	22 M/M
THICKNESS	1,52 M/M
BREAKING STRENGTH	1100 DAN
ELONGATION	MAX. 15%
WEIGHT	25 G/M
COLOR	BLACK

### COLOR INDICATOR

N° OF REFERENCE	IC-G 1-2
MATERIAL	POLYESTER
WIDTH	70 M/M
THICKNESS	0,80 M/M
BREAKING STRENGTH	130 DN
ELONGATION	35 %
WEIGHT	32 G * L.M.
COLOR	GREEN

### LOOPS

N° OF REFERENCE	LKI - 10
MATERIAL	NYLON
WIDTH	10 M/M
BREAKING STRENGTH	84 KG
ELONGATION	30 %
WEIGHT	5,5 G/M
COLOR	WHITE



**Niviuk Paragliders**

C/ Del Ter 6 - nave D

17165 La Celler de Ter - Girona - Spain

+34 972 422 878 | [info@niviuk.com](mailto:info@niviuk.com)

[www.niviuk.com](http://www.niviuk.com)