



Service documents



02-2018

## SERVICE MANUAL

The latest version of service manual is available at:  
[www.dudek.eu/en/service-and-inspections/](http://www.dudek.eu/en/service-and-inspections/)

## TECHNICAL INSPECTIONS

Full Inspection is recommended every 24 months or every 150 hours whatever comes first, if not advised otherwise by the inspecting person due to paraglider's condition.

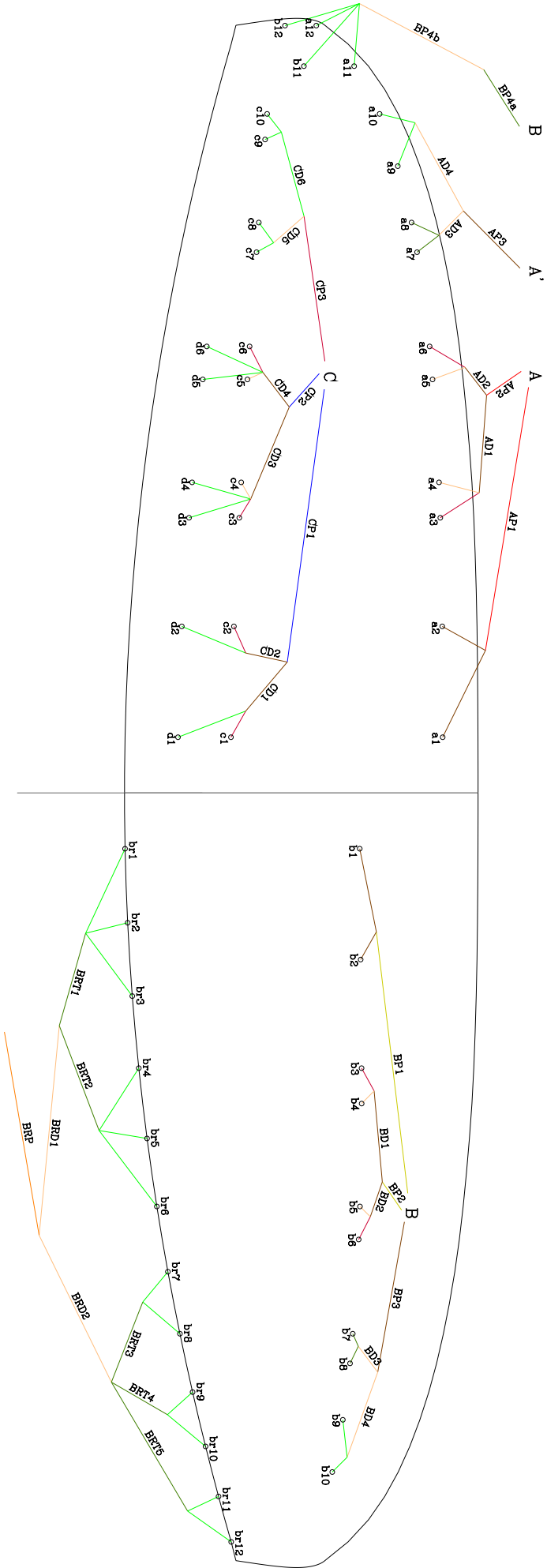
In case of paragliders used commercially (e.g. in schools or tandem flying) a Full Inspection is recommended every 12 months after first 24 months from purchase date or every 100 hours airtime (whatever comes first).

A paraglider can be officially inspected only by the manufacturer or a dealer (authorised to do so).

## TECHNICAL DATA

Optic 2 Light	22	24	26	28	30
Certification	EN B	EN B	EN B	EN B	EN B
	LTF B	LTF B	LTF B	LTF B	LTF B
Number of cells	51	51	51	51	51
Surface area (flat) [m <sup>2</sup> ]	22,00	24,00	26,00	28,20	30,40
Surface area (projected) [m <sup>2</sup> ]	18,81	20,52	22,23	24,12	26,00
Span (flat) [m]	11,00	11,49	11,96	12,45	12,93
Span (projected) [m]	8,79	9,18	9,56	9,95	10,33
Aspect Ratio (flat)	5,50				
Aspect Ratio (projected)	4,10				
Sink rate [m/s]	min = 1,0 + - 0,1m/s				
Speed [km/h]	trim = 37; max = 51 + - 2km/h				
Max. cord [mm]	2488,00	2599,00	2705,00	2817,00	2925,00
Min. cord [mm]	629,00	657,00	683,00	712,00	739,00
Distance pilot to wing [m]	6,82	7,13	7,42	7,72	8,02
Total line length [m]	229,40	240,00	250,17	260,91	271,24
Total take-off weight - PG [kg]	60-75	70-90	85-105	100-120	115-140
Maximum symmetric control travel at maximum weight in flight [cm]	>55	>60	>65	>65	>65
Distance between risers [cm]	40,00	44,00	46,00	46,00	46,00
Weight [kg]	3,64	3,86	4,11	4,40	4,65
Lines	Technora: 90 & 190; A-8000U: 050 & 070 & 090 & 130 & 190 & 230				
Fabric	Porcher 38 g/m <sup>2</sup> & Dominico tex 34 g/m <sup>2</sup>				
	Porcher Hard 40 g/m <sup>2</sup>				
	SR Scrim, SR Laminate 180 g/m <sup>2</sup>				
Risers	PASAMON - Bydgoszcz, Poland				

# Lining scheme



## Length of the lines

### Optic 2 Light - 22

The tables / Tables / Tabele:

The individual lengths and type of line

La longueur et le type de chaque ligne

Długości i rodzaj poszczególnych linek

	a	b	c	d	br
1	2006	1868	635	757	1615
2	1973	1834	629	746	1357
3	593	546	669	780	1238
4	546	499	616	726	1256
5	522	471	647	741	1189
6	552	506	678	755	1273
7	500	471	419		676
8	440	417	350		577
9	650	615	359		569
10	639	616	346		557
11	872	836			463
12	722	755			480

	AD	BD	CD	DD	BRT
1	1433	1382	1253		1219
2	1434	1392	1226		1097
3	928	902	1244		1392
4	635	634	1183		1336
5			1007		1409
6			879		

	AP	BP	CP	DP	BRD
1	4267	4295	4429		1940
2	4261	4241	4379		2078
3	4709	4688	4748		
4b		4082			
4a		800			

**BRP** 2350

The total lengths

Longueur des suspentes

Sumaryczna długość linek

	a	b	c	d	br
1	6746	6639	6760	6893	7149
2	6708	6608	6730	6852	6894
3	6735	6621	6734	6859	6774
4	6691	6581	6687	6806	6672
5	6671	6559	6657	6755	6604
6	6699	6593	6685	6770	6687
7	6600	6537	6635		6520
8	6542	6482	6567		6426
9	6465	6418	6457		6363
10	6453	6418	6444		6350
11	6245	6208			6325
12	6094	6128			6347

Technora A 8000U-050: XXXX

Technora A 8000U-070: XXXX

Technora A 8000U-090: XXXX

Technora A 8000U-130: XXXX

Technora A 8000U-190: XXXX

Technora A 8000U-230: XXXX

Technora TSL 90: XXXX

Technora TSL 190: XXXX

Total suspension lines length, measured from the lower surface of the canopy to the inside edge of the maillon (tolerancy +/- 10 mm)

## Length of the lines

### Optic 2 Light - 24

The tables / Tables / Tabele:

The individual lengths and type of line

La longueur et le type de chaque ligne

Długości i rodzaj poszczególnych linek

	a	b	c	d	br
1	2093	1953	665	791	1686
2	2061	1919	658	779	1418
3	619	572	700	816	1294
4	571	523	646	759	1311
5	544	494	678	775	1241
6	576	531	710	790	1330
7	522	493	437		705
8	459	436	365		602
9	678	645	374		594
10	668	642	361		582
11	910	875			483
12	755	792			502

The total lengths

Longueur des suspentes

Sumaryczna długość linek

	a	b	c	d	br
1	7044	6946	7085	7219	7484
2	7010	6914	7053	7181	7215
3	7035	6931	7063	7191	7090
4	6993	6888	7016	7135	6985
5	6971	6871	6985	7086	6913
6	6998	6903	7014	7103	7001
7	6885	6826	6946		6831
8	6823	6771	6880		6730
9	6740	6698	6759		6663
10	6730	6695	6746		6652
11	6507	6474			6633
12	6351	6389			6649

	AD	BD	CD	DD	BRT
1	1496	1449	1305		1272
2	1499	1461	1279		1147
3	968	946	1308		1453
4	663	661	1244		1395
5			1052		1473
6			916		

Technora A 8000U-050: XXXX

Technora A 8000U-070: XXXX

Technora A 8000U-090: XXXX

Technora A 8000U-130: XXXX

Technora A 8000U-190: XXXX

Technora A 8000U-230: XXXX

Technora TSL 90: XXXX

Technora TSL 190: XXXX

	AP	BP	CP	DP	BRD
1	4481	4524	4673		2024
2	4474	4463	4617		2173
3	4927	4920	4991		
4b		4305			
4a		800			

BRP 2470

Total suspension lines length, measured from the lower surface of the canopy to the inside edge of the maillon (tolerancy +/- 10 mm)

## Length of the lines

### Optic 2 Light - 26

The tables / Tables / Tabele:

The individual lengths and type of line

La longueur et le type de chaque ligne

Długości i rodzaj poszczególnych linek

	a	b	c	d	br
1	2177	2031	691	823	1755
2	2145	1998	684	810	1476
3	644	595	728	849	1348
4	594	544	672	790	1363
5	566	514	705	806	1292
6	599	552	739	822	1385
7	543	513	454		734
8	477	453	379		627
9	706	671	389		618
10	695	668	375		606
11	947	911			502
12	785	823			522

The total lengths

Longueur des suspentes

Sumaryczna długość linek

	a	b	c	d	br
1	7349	7236	7379	7511	7817
2	7319	7202	7343	7473	7539
3	7352	7227	7360	7486	7409
4	7308	7179	7306	7429	7300
5	7278	7162	7282	7378	7228
6	7310	7203	7306	7395	7321
7	7196	7124	7244		7139
8	7135	7071	7170		7031
9	7040	6987	7043		6966
10	7030	6982	7029		6955
11	6776	6739			6930
12	6613	6653			6951

	AD	BD	CD	DD	BRT
1	1556	1506	1356		1322
2	1559	1520	1331		1194
3	1012	989	1360		1511
4	690	688	1294		1452
5			1095		1534
6			953		

Technora A 8000U-050: XXXX

Technora A 8000U-070: XXXX

Technora A 8000U-090: XXXX

Technora A 8000U-130: XXXX

Technora A 8000U-190: XXXX

Technora A 8000U-230: XXXX

Technora TSL 90: XXXX

Technora TSL 190: XXXX

	AP	BP	CP	DP	BRD
1	4701	4731	4880		2105
2	4701	4675	4825		2263
3	5173	5156	5224		
4b		4539			
4a		800			

BRP 2605

Total suspension lines length, measured from the lower surface of the canopy to the inside edge of the maillon (tolerancy +/- 10 mm)

## Length of the lines

### Optic 2 Light - 28

The tables / Tables / Tabele:

The individual lengths and type of line

La longueur et le type de chaque ligne

Długości i rodzaj poszczególnych linek

	a	b	c	d	br
1	2265	2113	723	857	1827
2	2233	2080	715	844	1537
3	670	619	761	884	1405
4	618	567	703	823	1418
5	589	534	735	839	1345
6	623	574	771	855	1442
7	565	534	473		763
8	496	471	395		653
9	735	699	405		642
10	723	695	390		631
11	986	946			522
12	816	853			544

	AD	BD	CD	DD	BRT
1	1619	1567	1408		1375
2	1623	1583	1384		1246
3	1049	1024	1412		1571
4	717	715	1346		1512
5			1139		1599
6			992		

	AP	BP	CP	DP	BRD
1	4908	4946	5077		2189
2	4914	4885	5028		2361
3	5396	5391	5445		
4b		4805			
4a		800			

**BRP** 2715

The total lengths

Longueur des suspentes

Sumaryczna długość linek

	a	b	c	d	br
1	7642	7529	7653	7799	8135
2	7609	7497	7624	7762	7842
3	7645	7517	7646	7779	7713
4	7599	7473	7592	7720	7601
5	7574	7453	7557	7667	7523
6	7603	7491	7590	7685	7623
7	7475	7414	7523		7438
8	7406	7352	7446		7328
9	7320	7276	7319		7258
10	7306	7270	7302		7247
11	7076	7035			7222
12	6904	6944			7244

Technora A 8000U-050: XXXX

Technora A 8000U-070: XXXX

Technora A 8000U-090: XXXX

Technora A 8000U-130: XXXX

Technora A 8000U-190: XXXX

Technora A 8000U-230: XXXX

Technora TSL 90: XXXX

Technora TSL 190: XXXX

Total suspension lines length, measured from the lower surface of the canopy to the inside edge of the maillon (tolerancy +/- 10 mm)

## Length of the lines

### Optic 2 Light - 30

The tables / Tables / Tabele:

The individual lengths and type of line

La longueur et le type de chaque ligne

Długości i rodzaj poszczególnych linek

	a	b	c	d	br
1	2350	2192	745	889	1896
2	2319	2160	738	875	1596
3	694	640	785	915	1459
4	641	587	725	853	1472
5	610	552	760	869	1396
6	646	594	797	886	1498
7	586	554	491		792
8	515	489	409		679
9	763	725	420		666
10	750	721	405		655
11	1024	982			542
12	847	886			564

	AD	BD	CD	DD	BRT
1	1677	1620	1465		1426
2	1684	1640	1441		1295
3	1089	1063	1456		1630
4	744	742	1390		1570
5			1182		1661
6			1030		

	AP	BP	CP	DP	BRD
1	5111	5156	5301		2271
2	5112	5101	5250		2453
3	5641	5625	5687		
4b		5042			
4a		800			

**BRP 2810**

The total lengths

Longueur des suspentes

Sumaryczna długość linek

	a	b	c	d	br
1	7934	7825	7960	8115	8445
2	7902	7794	7932	8078	8148
3	7936	7817	7936	8083	8008
4	7890	7769	7883	8020	7888
5	7867	7751	7851	7968	7814
6	7896	7793	7885	7986	7911
7	7786	7720	7830		7727
8	7717	7656	7750		7611
9	7622	7574	7620		7537
10	7608	7570	7605		7527
11	7364	7325			7507
12	7184	7225			7527

Technora A 8000U-050: **XXXX**

Technora A 8000U-070: **XXXX**

Technora A 8000U-090: **XXXX**

Technora A 8000U-130: **XXXX**

Technora A 8000U-190: **XXXX**

Technora A 8000U-230: **XXXX**

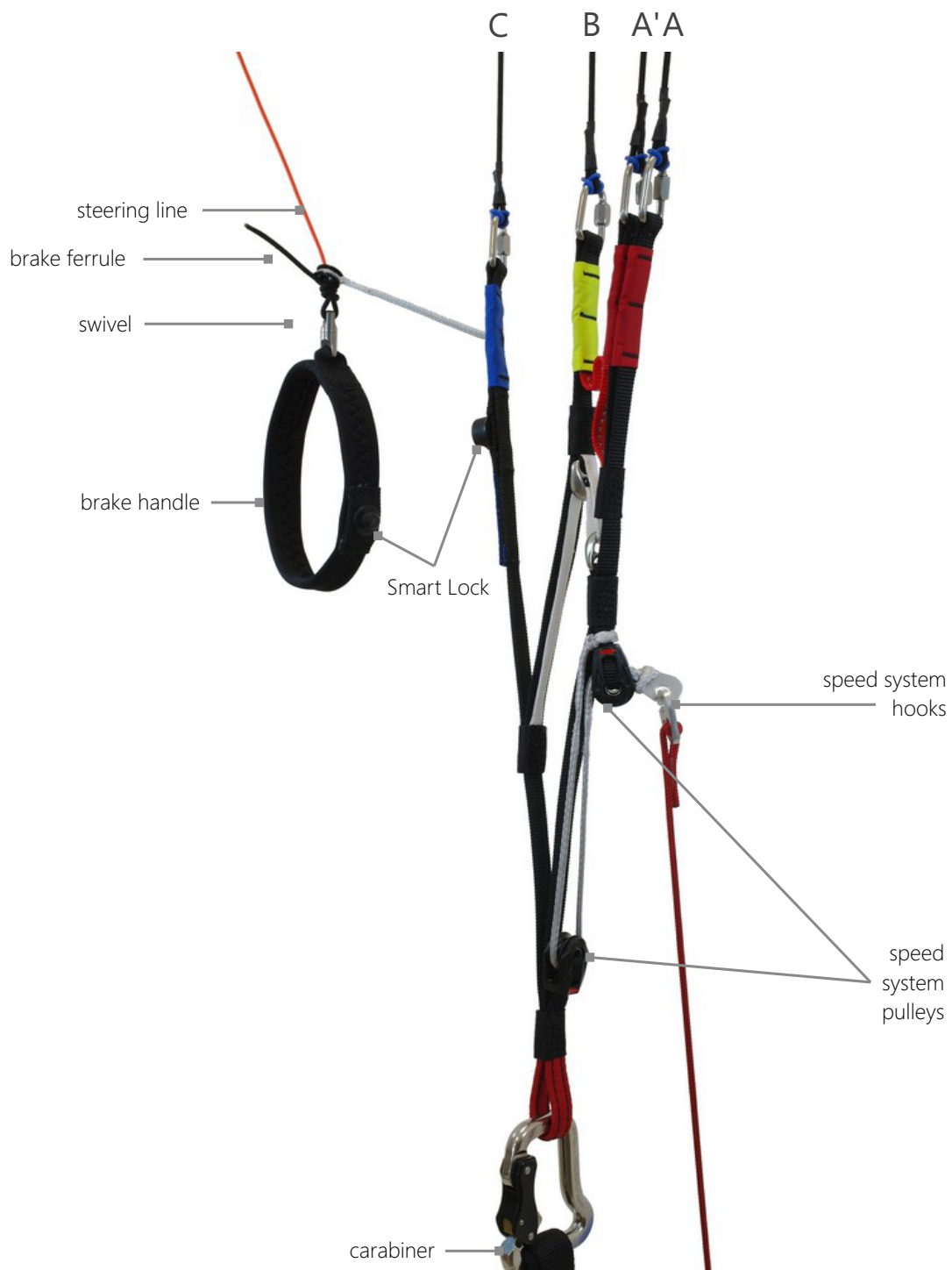
Technora TSL 90: **XXXX**

Technora TSL 190: **XXXX**

Total suspension lines length, measured from the lower surface of the canopy to the inside edge of the maillon (tolerancy +/- 10 mm)



## Optic 2 Light risers



---

### Other informations:

- number of risers: 3 (with A riser split into A and A')
- trimmers: no

# Speed system influence on the aerofoil

## Neutral risers position

Slowest speed,  
minimum sink.  
Launch configuration.



### Neutral risers' length:

A - 510  
A' - 510  
B - 510  
C - 510

## Full speed

Increased speed,  
increased sink.



### Speed system

size 22, 24, 26, 28 :

A - 390  
A' - 390  
B - 430  
C - 510

### Speed system

size 30 :

A - 365  
A' - 365  
B - 415  
C - 510

\* lengths of the risers incl. maillons, length tolerance +/- 5mm



