

# Point

ENG

User manual

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## **Congratulations!**

Thank you for choosing the **Point**.

The **Point** has been designed for newcomers and accuracy competition pilots who want to be a winner.

This manual will help you to get all information about your glider. We strongly recommend that you read this manual carefully in order to be aware of any general limitations, performance characteristics, take off and flight characteristics, landing procedures, dealing with emergency situations and general maintenance.

This is information about the design of the **Point**, advice how to use it best and how to care for it to ensure it has a long life, We hope that the **Point** will give you a lot of satisfactory flying times.

**-DAVINCI GLIDERS TEAM-**

### **WARNING!**

**THIS IS NOT TRAINING MANUAL. ATTEMPTING TO FLY THIS OR ANY OTHER PARAGLIDER WITHOUT PROPER INSTRUCTION FROM A CERTIFIED PROFESSIONAL INSTRUCTOR IS EXTREMELY DANGEROUS TO YOURSELF AND BYSTANDERS.**

DAVINCI GLIDERS are carefully manufactured and inspected at the factory. Please use the glider only as described in this manual.

Do not make any modifications to the glider.

As with any sport - without taking the necessary safety precautions, paragliding can be dangerous.

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## 1. Technical DATA

Point			XXS	XS	S	SM	M	ML	L
CELLS	NUMBER		38						
	CLOSED		8						
FLAT	AREA	m <sup>2</sup>	21.2	23.0	25	26	27	28.1	29.8
	SPAN	m	10.1	10.5	11.0	11.2	11.4	11.6	12.0
	ASPECT RATIO		4.8						
PROJECTED	AREA	m <sup>2</sup>	18.1	19.7	21.4	22.3	23.1	24.1	25.5
	SPAN	m	8.06	8.40	8.76	8.93	9.1	9.3	9.6
	ASPECT RATIO		3.58						
FLATTENING		%	14.3						
CORD	MAX	m	2.58	2.70	2.81	2.86	2.92	2.98	3.06
	AVER	m	2.05	2.19	2.28	2.32	2.37	2.42	2.49
LINES	HEIGHT	m	6.4	6.8	7.1	7.3	7.4	7.6	7.8
	MAIN		3/4/3						
RISERS	NUMBER	3	A,A'/B/C						
	TRIMS		Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ACCELERATOR		100	100	100	100	100	100	100
WEIGHT RANGE	MIN-MAX	KG	50-75	60-85	75-95	80-100	85-105	90-110	100-120
CERTIFICATION	EN-926-1/2 LTF	KG	EN-A	EN-A	EN-A	EN-A	EN-A	EN-A	EN-A
GLIDER WEIGHT		KG	4.0	4.2	4.8	4.6	4.8	5.0	5.1

## 2. MATERIALS DATA

CANOPY	FABRIC CODE	SUPPLIER
UPPER SURFACE	30D MF(WR) 41g 20D MF(WR) 34g	DOMINICO TEXTILE CO
BOTTOM SURFACE	20D MF(WR) 34g	DOMINICO TEXTILE CO
PROFILES	30D FM(Non WR) 40g	DOMINICO TEXTILE CO
DIAGONALS	30D FM(Non WR) 40g	DOMINICO TEXTILE CO

SUSPENSION LINES	FABRIC CODE	SUPPLIER
UPPER CASCADES	8000U-070	EDELRID
MIDDLE CASCADES	PPSL160, 120	LIROS
MAIN	PPSL 275, 200, 160	LIROS
UPPER STABLE	8000U-070	LIROS
MAIN STABLE	PPSL160	LIROS
UPPER BRAKE	DSL-70	LIROS
MIDDLE BRAKE	PPSL-120	LIROS
MAIN BREAK	10N-200	EDELRID

RISERS	FABRIC CODE	SUPPLIER
MATERIAL	WEBBING 20MM	GUTH&WOLF GMBH
PULLEYS	RIELY	LW RILEY PTY LTD

### 3. Introduction and Pilot Target

The **Point** is an easy-going certified EN/LTF-A glider which is suitable for training and accuracy competition. The main focus of design is on safety and maximum forgiveness in handling, but with an eye to handling and performance. The **Point** is not only suitable for beginner pilots but also accuracy competitor looking for a glider with maximum safety and stability at the competition. Long brake travel and excellent passive safety, as well as the good stability make the good ideal for progression.

#### **-LTF and EN certification**

The **Point** is certified during official testing as LTF /EN-A. The glider has been type-tested for “one-seated” use only.

#### **-Suitability for the skilled pilot who attend the accuracy competition.**

The **Point** has been designed for the accuracy competition. So it has very nice decent performance when you use the brake line. It has also very nice handling and turned intuitively.

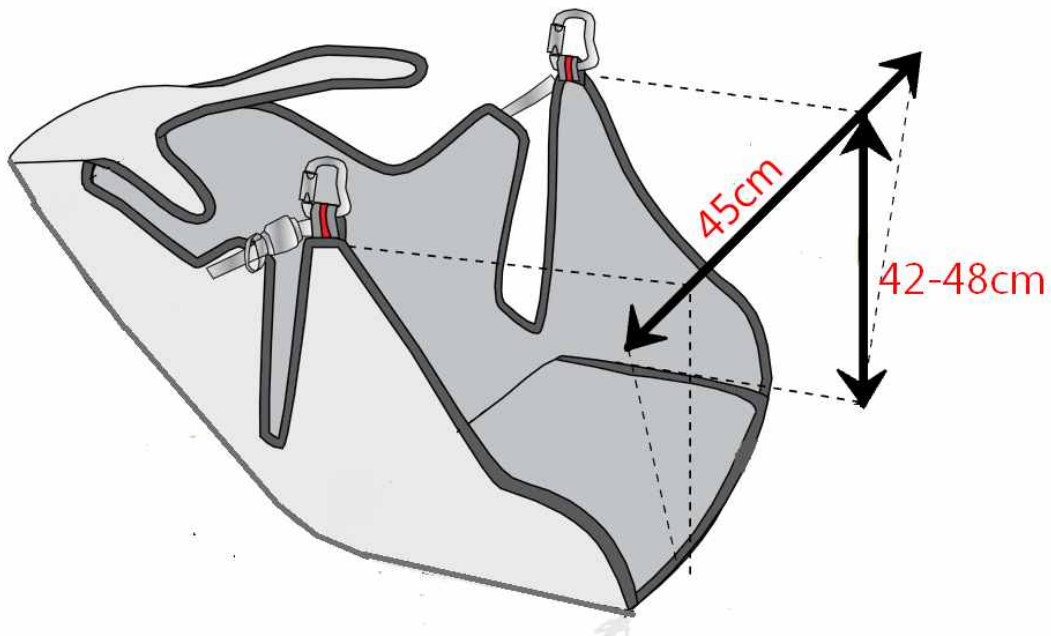
#### **-For the Point it has minimum of 65cm symmetrical travel length at maximum total-load.**

It would be dangerous to use the brake travel according to those numbers, because it is not practicable to measure the brake travel during flight, and in turbulences the stall might occur with less brake travel. If you want to use the whole brake travel

of your glider safely, it is necessary to do many intended spins and full stalls to get a feeling for the stall behaviour.

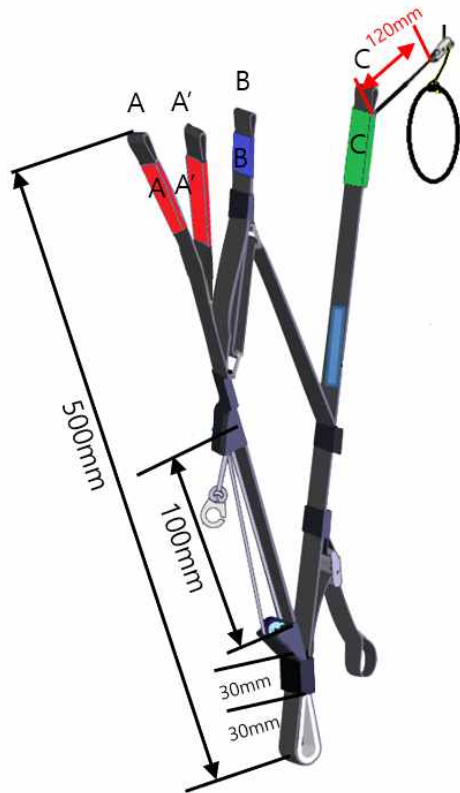
#### 4. Harness

The **Point** is certified for harnesses in Group GH(without rigid cross-bracing). The suspension **points** of the chosen harness should ideally have a carabiner distance of approximately 45cm and a height of 40 to 48cm.



## 5. Risers

Point has 3 risers. The A riser has a red cover to easy identification. There is another line with red mailon. There is A' and is for the big ears. Also there are trimmer system and it can adjust the glider speed.



<The Difference not more than  $\pm 5$  mm >

	Standard [mm]	Accelerated [mm]	Open Trim [mm]		Closed Trim [mm]	
			Accelerated 0%	Accelerated 100%	Accelerated 0%	Accelerated 100%
			<b>A,A'</b>	500	405	500
<b>B</b>	500	435	512	440	490	430
<b>C</b>	500	500	530	530	480	480



## 6. Lines

They come in different diameters of Kevlar and Dyneema with sheathed cover. They must to be inspected every 100 hours or 24months maximum.

In case of Brake lines, it was cut a little longer, so every pilot can adjust it according to his personal taste.

But you must always leave 10cm before the brakes line starts acting in order to avoid trailing edge deformation when the wing is fully accelerated. In case the brake handle comes loose during flight or any brake lines is cut you can use the C riser softly for directional control instead of brake line.

## 7. Accelerator system

The accelerator has being limited in travel up to a safety **point**, however you can gain 8-12 km of extra speed. The speed system length is 10cm.

You have to adjust the harness to the speed system so you can use all the speed travel.

To do so you have to be seated in the ground meanwhile you are in your harness and adjust the lines by pulling up the risers with tension. Another person help to do this is recommended. Make sure also that the speed bar is not pulling down the risers when you are not using it.

Once all the gear is rigged you have to test the whole

speed travel in calm air.

The use of the speed system reduces the angle of attack and the canopy may be more sensitive to collapses therefore do not use near the ground or in turbulent air and in case you are hit by turbulence remove your feet off the speed bar as quickly as possible. Always far away from the ground when using the speed bar.

## **8. Trimmers**

The POINT is supplied with a trim riser set. The 'neutral' or standard position is when the trimmers are pulled middle of the webbing which has been marked and A/B/C riser lengths are equal. We recommend performing landing and take-off with the trimmers closed and neutral position. The close trimmer length is 2cm

To increase glider speed you can use the speed system, release the trimmers, or do both. The travel open trimmer length is 3cm.

It is not necessary to release the trimmers before accelerating. Using the speed system has exactly the same effect as releasing the trimmers so it is safe and possible to fly with the trimmers in the neutral position whilst using the full range of the speed system.

## 9. Pre-flight check

To know yourself with the glider it is a good idea to perform practice inflations and ground handling in advance.

You should have no difficulties flying the **Point** for the first time in suitable conditions, but as with all new equipment.

When you have the new glider, the below **points** should be inspected.

- Check the lines are clear and not twisted.
- Connection **point** between the glider and harness.
- All harness buckles are closed.
- The Karabiners are fully closed and not damaged.
- The sewing, condition of the lines and connection of the lines are right
- Internal damage to ribs and diagonal ribs.
- Damage to the top and bottom panels and seams between panels.

## 10. Take-Off

**Point** has easy inflation behaviour at the forward/reverse launch because of its super light glider weight. While inflating the **Point**, you should hold both of the A risers on your hands. Smoothly and gradually inflate the wing. It does not need excessive energy and you feel the lift force very fast. It does not tend to over-shooting characteristics and provides a

leisurely launch time with you.

## 10.1 Tow launch

The **Point** is easy to launch using a winch and it has no any special skills. To practice this launching technique special training is needed and you have to know the procedures and dangers, which are specific for winching. We do not recommend using any special towing device which accelerates the glider during the winch launch.

## 11. In flight characteristics

**Point** has the best stable glide performance in a normal position with no any brakes.

In strong thermals and turbulence, we recommend to gently pull both brakes without acceleration to increase stability. The brakes provide feedback about the surrounding air, which is needed for active flying.

To familiarize yourself with the **Point** your first turns should be gradual and progressive.

To make efficient and coordinated turns with the **Point** first look in the direction you want to go and check that the airspace is clear. Your first input for directional change should be weight-shift, followed by the smooth application of the brake until the desired bank angle is achieved. To regulate the speed and radius of the turn, coordinate your weight shift and

use the outer brake.

In the unlikely event that a brake line releases from the brake handle or breaks, the glider is manoeuvrable using the C-risers. By pulling gently on the C-risers it is possible to steer the glider and land safely.

Alternative Steering:

In the unlikely event, that a brake line releases from the brake handle, or breaks, or the brake-lines are tangled up, the glider is manoeuvrable using the rear-risers. By pulling gently on the rear-risers, it is possible to steer the glider and land safely. Don't pull the rear-risers too much, to avoid a deep stall!

## 12. Deflations

In spite of the **Point** has great stability of the flight, strong turbulence or piloting error may cause a portion of the wing suddenly to be a deflation.

### 12.1 Asymmetric collapse

Asymmetric collapse usually happens when the pilot has not foreseen this possible reaction of the wing.

Asymmetric collapses should be controlled by weight shifting away from the collapse and applying enough brake to control your direction. And you should use the brake to re-inflate the glider.

## 12.2 Frontal collapse

**Point** does not come out the symmetrical front collapse by itself. It has high internal pressure with its well designed profile. However a symmetric collapse may occur in strong turbulent condition, but it could be fast recovered, if you apply the brake down to 15 to 20cm. Release the brake lines, you may recover to the normal flight.

## 12.3 Full stall

Full stall can occur when you fully pull the both brakes enough long time. This means that the wing loses its forward momentum. To recover to the normal flight you must release both brakes. After this usually comes a front dive with a possible front deflation. An asymmetric recovery (one control released faster than the other) from a full-stall can cause a big dynamic collapse. The full-stall is a hazardous manoeuvre and as such outside the scope of this manual. You should practice and learn this manoeuvre only on a SIV course under professional instructor.

## 12.4 Deep stall

It is possible for gliders to enter a state of deep stall. This can be caused by several situations including; a very slow release from a B-line stall; flying the glider when wet; very old glider; or after a front/symmetric

deflation.

When you meet this situation you should fully raise up the both brakes and push the A-risers forwards or use the speed bar symmetrically to regain normal flight.

### 12.5 Asymmetrical stall

It can take place when you pull one of the brakes too hard, or while spiraling at a small speed in turbulence you increase the angle of attack. Rotation in the asymmetrical stall is called negative spiral. This is one of the most dangerous flying situations. In order to get out of asymmetrical stall, just release the brakes. There may follow side thrust forward with a following wing collapse.

### 12.6 B stall

The **Point** has a very clean stable B stall. To enter the B stall, the pilot has to pull the first 20cm slowly until the r glider loses forward speed and starts to descend at around 6 m/s vertically. Do not release the brake handles during B stall. If you pull too much B-line the glider may horseshoe and move around a lot. If this happens, release the B risers.

To exit the B-stall the B-risers should be released symmetrically and in one smooth, progressive motion. The glider will resume normal forward flight without

further input. Check you have forward flight again before using the brakes.

## 12.7 Cravat

In case a cravat should occur from an asymmetric collapse or other manoeuvres, it is important to keep your flying direction by applying some brake on the opposite side and weight shift.

You can also use strong deep pumps on the brake to the cravated side. If a pull of the brake line is unsuccessful, pulling the stable line which is the outermost line on the B-riser may work.

If you can not do it and the rotation is increasing, you must use the parachute.

## 13. Descent Techniques

### 13.1 Big ears

Sink rate can be decreased in a controlled way by folding both wing tips. While holding the brakes you should symmetrically pull the outermost A-risers.

In order to return to the normal flight, you should release the A-risers and pull the brake short times until wing tips regain pressure.

Spiraling is not permitted with big ears, because of the increased load on the remaining lines so that they can be physically deformed.



## 13.2 Spiral dive

The spiral dive is the most demanding descent technique and should be learned at enough height, preferably during an SIV course.

When you hold one sided brake down for a long time, the glider goes into a fast sharp turn and loses a lot of height. The sink rate could be more than 15 m/sec. To get out of the spiral dive you must release the inner brake and use the outside brake to manage your sink rate. Mind that **Point** may take one more turn after releasing the brake.

## 14 Landing

We recommend to land with trimmers to the normal slow position. Don't use the sharp turns or radical maneuvers.

When you are 1-2m over the ground, you should face into wind and standing upright and ready to run. Finally you may pull the brakes smoothly for minimize vertical speed.

Don't hit the ground by your overtake the glider.

If you in windy condition, as soon as you touch the ground you have to turn around to face the glider and move towards it during full pulling break symmetrically.

## 15. Packing your Point

Spread the **Point** completely out on the ground. Separate the lines to the each side. The **Point** must be folded cell to cell to keep the plastic reinforcement at the leading edge lie flat on each other and don't get bent. Try to pack your **Point** as loosely as the rucksack allows, because every fold weakens the fabric.

Avoid packing the glider where it is wet or abrasive conditions(sand, asphalt pavement, concrete)

## 16. Maintenance and cleaning

Cleaning should be carried out with only pure water. If the glider comes in contact with salt water, clean thoroughly with fresh water. Do not use solvents of any kind, as this may remove the protective coatings and destroy the fabric.

## 17. Caring tips

- Do not expose your glider to the sun any longer than necessary
- Keep it away from water and other liquids
- Do not let the front edge hit the ground
- Keep your glider away from fire
- Do not put anything heavy on your glider, do not pack it in a rucksack too tightly.
- Regularly inspect the canopy, lines, risers and

harness. If you find any defects, contact your dealer or the manufacturer. Do not attempt to repair the paraglider by yourselves.

- If you detect a damaged line, inform the dealer or manufacturer about the line number according to the line plan
- Keep your **Point** in a bag in a dry well-ventilated place under neutral temperature and humidity conditions
- If you do not use the glider, then once a month you should unpack it, ventilate it well, and then pack it back in the bag

## 18. Warrantee

The producer guarantees the correctness of the declared characteristics and the paraglider's normal performance for two years after the purchase date. The producer conducts special, and after warranty repairs and maintenance at the owners' request for an extra price.

We recommend to inspect your paraglider (including checking suspension line strength, line geometry, riser geometry and permeability of the canopy material) one time at two years, or every 100 hours of flying time (whichever comes first); Those inspection must be made by manufacturer, importer, distributor, dealer or other authorised persons. The checking must be

proven by a stamp on the certification sticker on the glider as well in the manual book.

There are not necessary the spare items except the rubber ring to fix the main lines on the riser triangle carabiner. The rubber rings will be offered by us in the repair kit offering with glider. You can exchange it by yourself when it has been disappeared or wears off. After you exchange the rubber ring, you must check again the triangle carabiner on the riser has been locked well before you fly.

If you run out of the rubber rings, you can request it to the local dealer.

## **19. Respecting nature and environment**

Finally, we would ask each pilot to take care of nature and our environment. Respect nature and the environment at all times but most particularly at take-off and landing places. Respect others and paraglider in harmony with nature.

Do not leave marked tracks and do not leave rubbish behind. Do not make unnecessary noise and respect sensitive biological areas.

The materials used on a paraglider should be recycled. Please send old Davinci gliders back to us Davinci Gliders offices. We will undertake to recycle the glider.

### Check Line sheet(with riser)

The measured values at the lower surface of the tailing edge, all depth and spacing of the articulation **Point** were determined under tensile load of 50N. The length difference is not more than  $\pm 10$  mm.

### XXS size

	A	B	C	D	Brake
1	6497	6443	6491	6553	6651
2	6457	6394	6406	6467	6465
3	6510	6438	6421	6472	6354
4	6465	6388	6385	6435	6313
5	6461	6379	6406	6451	6204
6	6443	6353	6351	6388	6107
7	6431	6342	6321	6355	6085
8	6410	6324	6306	6336	6152
9	6387	6305	6306	6333	6003
10	6358	6278	6282	6302	5919
11	6310	6236	6231	6250	5823
12	6188	6134	6148	6167	
13	6108	6059	6095	6110	
14	5924	5818	5928		
15			5855		

### XS size

	A	B	C	D	Brake
1	6782	6733	6781	6876	7090
2	6741	6683	6692	6787	6897
3	6796	6729	6709	6794	6783
4	6750	6678	6672	6755	6741
5	6746	6669	6694	6773	6611
6	6728	6644	6636	6706	6511
7	6716	6632	6606	6672	6489
8	6694	6613	6590	6653	6559
9	6670	6593	6591	6650	6472
10	6638	6564	6566	6617	6383
11	6587	6521	6512	6562	6283
12	6459	6415	6425	6477	
13	6376	6337	6370	6417	
14	6184	6074	6210		
15					

### Small size

	A	B	C	D	Brake
1	7065	7004	7060	7129	7258
2	7024	6953	6969	7037	7058
3	7082	7001	6987	7045	6940
4	7035	6949	6949	7006	6897
5	7031	6941	6972	7024	6782
6	7012	6914	6912	6955	6678
7	6999	6902	6881	6920	6656
8	6977	6882	6865	6901	6730
9	6952	6862	6866	6898	6543
10	6918	6831	6838	6861	6451
11	6865	6786	6782	6804	6362
12	6732	6676	6691	6716	
13	6646	6595	6634	6653	
14	6423	6331	6451		
15			6372		

### SM size

	A	B	C	D	Brake
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

### Medium size

	A	B	C	D	Brake
1	7349	7280	7331	7401	7540
2	7297	7220	7233	7302	7328
3	7349	7262	7244	7304	7206
4	7298	7208	7207	7266	7164
5	7294	7200	7233	7286	7048
6	7274	7173	7172	7217	6941
7	7261	7161	7140	7181	6919
8	7238	7141	7123	7161	6997
9	7213	7120	7124	7159	6807
10	7176	7087	7094	7119	6712
11	7121	7040	7037	7061	6605
12	6983	6927	6942	6969	
13	6893	6843	6883	6905	
14	6663	6568	6693		
15			6611		

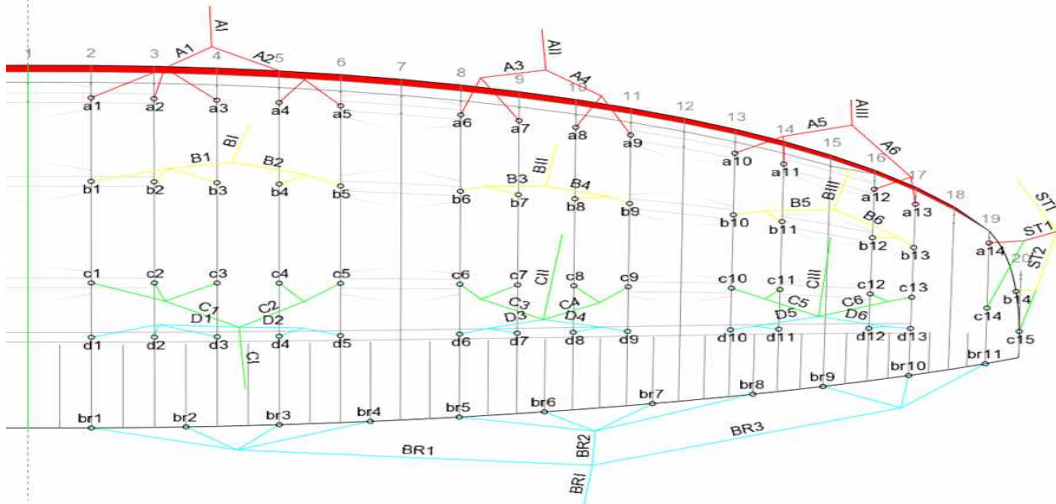
### ML size

	A	B	C	D	Brake
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

### Large size

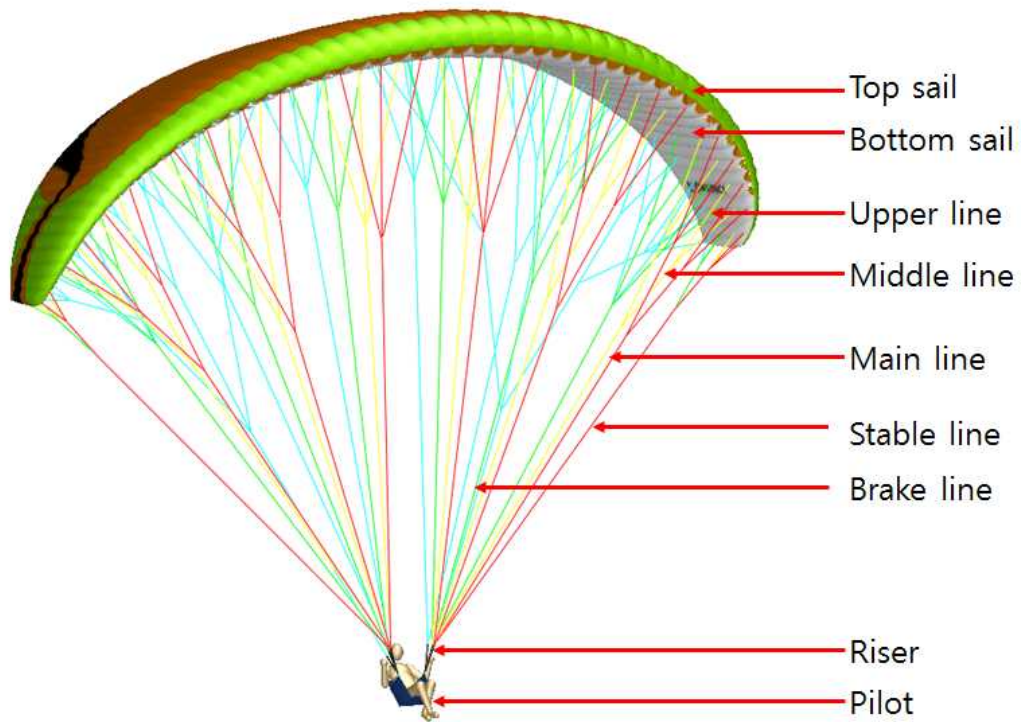
	A	B	C	D	Brake
1	7733	7656	7717	7796	7943
2	7689	7602	7620	7697	7727
3	7753	7656	7640	7707	7600
4	7703	7600	7601	7665	7554
5	7700	7592	7627	7686	7433
6	7680	7564	7563	7612	7321
7	7667	7552	7530	7575	7298
8	7643	7532	7513	7554	7380
9	7616	7510	7514	7551	7212
10	7575	7473	7481	7504	7111
11	7517	7424	7421	7442	6999
12	7372	7304	7321	7346	
13	7277	7215	7258	7277	
14	7047	6927	7058		
15			6971		





Name	Manufacturer	Name	Manufacturer	Name	Manufacturer	Name	Manufacturer	Name	Manufacturer	Name	Manufacturer
a1	8000U-070	b1	8000U-070	c1	8000U-070	d1	8000U-070	st1	PPSL120	br1	DSL70
a2	8000U-070	b2	8000U-070	c2	8000U-070	d2	8000U-070	st2	PPSL120	br2	DSL70
a3	8000U-070	b3	8000U-070	c3	8000U-070	d3	8000U-070			br3	DSL70
a4	8000U-070	b4	8000U-070	c4	8000U-070	d4	8000U-070			br4	DSL70
a5	8000U-070	b5	8000U-070	c5	8000U-070	d5	8000U-070	ST1	PPSL160	br5	DSL70
a6	8000U-070	b6	8000U-070	c6	8000U-070	d6	8000U-070			br6	DSL70
a7	8000U-070	b7	8000U-070	c7	8000U-070	d7	8000U-070			br7	DSL70
a8	8000U-070	b8	8000U-070	c8	8000U-070	d8	8000U-070			br8	DSL70
a9	8000U-070	b9	8000U-070	c9	8000U-070	d9	8000U-070			br9	DSL70
a10	8000U-070	b10	8000U-070	c10	8000U-070	d10	8000U-070			br10	DSL70
a11	8000U-070	b11	8000U-070	c11	8000U-070	d11	8000U-070			br11	DSL70
a12	8000U-070	b12	8000U-070	c12	8000U-070	d12	8000U-070				
a13	8000U-070	b13	8000U-070	c13	8000U-070	d12	8000U-070				
a14	8000U-070	b14	8000U-070	c14	8000U-070						
				c15	8000U-070						
A1	PPSL160	B1	PPSL160	C1	PPSL120	D1	PPSL120				
A2	PPSL160	B2	PPSL160	C2	PPSL120	D2	PPSL120				
A3	PPSL120	B3	PPSL120	C3	PPSL120	D3	PPSL120			BR1	PPSL120
A4	PPSL120	B4	PPSL120	C4	PPSL120	D4	PPSL120			BR2	PPSL120
A5	PPSL120	B5	PPSL120	C5	PPSL120	D5	PPSL120			BR3	PPSL120
A6	PPSL120	B6	PPSL120	C6	PPSL120	D6	PPSL120				
										BR1	10N-200
A1	PPSL275	B1	PPSL275	C1	PPSL200						
A11	PPSL275	B11	PPSL275	C11	PPSL200						
A111	PPSL200	B111	PPSL200	C111	PPSL160						

## Overview



## Point

Serial Number	
Date of Production	
Dealer	
Date of sales	
<b>Check and repair information</b>	

# Line and Riser Measurements of flight test Paraglider <sup>(1)</sup>

Report No. : **PG\_1618.2019** Sample name: **Point S / close trimmer** Date measure: **28.01.2020** Place: **Villeneuve**  
 Manufacturer: **Davinci** S/N: **AT-S10850-PRW** Responsible: **Claude Thurnheer** Linked: **ISO 91.20**

## Total line length including risers [mm]

Main brake line with diff color than A,B,C main line?  Yes

Center	A			B			C			D			E			Stab			Brake			+strap	
	Manu <sup>(2)</sup>	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Sample	
1	7065	7077	12	7004	7003	-1	7060	7055	-5	7129	7121	-8				6331	6323	-8	7258	7259	1		
2	7024	7035	11	6953	6949	-4	6969	6960	-9	7037	7023	-14				6372	6375	3	7058	7062	4		
3	7082	7093	11	7001	6997	-4	6987	6981	-6	7045	7032	-13							6940	6944	4		
4	7035	7041	6	6949	6943	-6	6949	6937	-12	7006	6992	-14							6897	6903	6		
5	7031	7040	9	6941	6936	-6	6972	6961	-11	7024	7015	-9							6782	6785	3		
6	7012	7027	15	6914	6912	-2	6912	6904	-8	6955	6945	-10							6678	6681	3		
7	6999	7013	14	6902	6909	7	6881	6875	-6	6920	6910	-10							6656	6659	3		
8	6977	6990	13	6882	6878	-4	6865	6856	-9	6901	6890	-11							6730	6734	4		
9	6952	6963	11	6862	6858	-4	6866	6857	-9	6898	6887	-11							6543	6548	5		
10	6918	6919	1	6831	6831	0	6838	6837	-1	6861	6859	-2							6451	6455	4		
11	6865	6866	1	6786	6785	-1	6782	6778	-5	6804	6802	-2							6362	6374	12		
12	6732	6730	-2	6676	6677	1	6691	6687	-4	6716	6711	-5											
13	6646	6644	-2	6595	6595	0	6634	6632	-2	6653	6650	-3											
14	6423	6408	-15				6451	6454	3														
15																							
16																							
17																							
18																							

Stab line to riser:

Number Cell:

Weight of the glider [kg]:

Tolerance [mm] <sup>(4)</sup>:

## Riser measurement - total length (inner edge) [mm] <sup>(3)</sup>

Total length (incl. Carabiner or connect)	Risers	Std	Acc	Trim	Total length (no carabiner or connect)	Risers	Std	Acc
	A	530	423	n/a		A	500	393
A'	530	424	n/a	A'	500	394		
B	519	443	n/a	B	489	413		
C	503	503	n/a	C	473	473		
D			n/a	D				
Acc	107	*[mm]		Acc	107	*[mm]		
Trimmer	n/a	[mm]		Trimmer	n/a	[mm]		

No. of risers   
 Tolerance [mm]   
 Carabiner [mm]   
 Tolerance [mm]

\*Travel range (distance between A and rear riser)

## Acc system configuration max travel



Another trim configuration   
 If yes (description):

## Test Atmosphere AGL

Pressure [hPa]   
 Humidity [%]   
 Temperature [°C]

Plausibility check :  
 [mm] 500   
 [mm] 10000

Remark:

Instrument validity date  
 Laser distance meter   
 Line measurements system

Uncertainty of instrument [mm]

Present inspection's scope only extends to the conformity of a given sample, on a given date and in a given place – as mentioned here above. The validation of this report is given by the signature of the test manager on inspection certificate 71.8.1

<sup>(1)</sup>Total length measured from the underside of the glider to the inner edge of the risers with a tension of 50 [N]. Measured values do not include the uncertainty/The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The measured values lies within the assigned range of values with a probability of 95%. <sup>(2)</sup> Manu=Values from manufacturer, Sample=Measured by inspector.

<sup>(3)</sup> Risers, Std=Trim speed, Acc=Accelerated, AND if trimmer: Open=trimmer open, Closed=trimmer closed, Trim=measured at this position. <sup>(4)</sup>Tolerance line and riser is +/-15 [mm]

**OPEN TRIMMER**

Riser measurement - total length (inner edge) [mm] <sup>(3)</sup>								
Total length (incl. Carabiner or connect)	Risers	Std	Acc	Trim	Total length (no carabiner or connect)	Risers	Std	Acc
		A	529	424		n/a		A
	A'	530	425	n/a		A'	500	395
	B	538	463	n/a		B	508	433
	C	552	552	n/a		C	522	522
	D			n/a		D		
	Acc	105	*[mm]			Acc	105	*[mm]
	Trimmer	n/a	[mm]			Trimmer	n/a	[mm]

# Line and Riser Measurements of flight test Paraglider <sup>(1)</sup>

Report No. : **PG\_1561.2019** Sample name: **Point M / close trimmer** Date measure: **28.01.2020** Place: **Villeneuve**  
 Manufacturer: **Davinci** S/N: **APT-M10701-RBW** Responsible: **Claude Thurnheer** Linked: **ISO 91.20**

## Total line length including risers [mm]

Main brake line with diff color than A,B,C main line?  Yes

	A			B			C			D			E			Stab			Brake			+strap
	Manu <sup>(2)</sup>	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Sample
Center 1	7349	7360	11	7280	7275	-5	7331	7332	1	7401	7397	-4				6568	6560	-8	7540	7551	11	
2	7297	7306	9	7220	7214	-6	7233	7233	0	7302	7299	-3				6611	6614	3	7328	7339	11	
3	7349	7357	8	7262	7256	-6	7244	7245	1	7304	7300	-5							7206	7221	15	
4	7298	7305	7	7208	7202	-6	7207	7206	-1	7266	7260	-6							7164	7179	15	
5	7294	7303	9	7200	7194	-6	7233	7231	-2	7286	7280	-6							7048	7043	-5	
6	7274	7285	11	7173	7169	-4	7172	7171	-1	7217	7215	-2							6941	6942	1	
7	7261	7271	10	7161	7155	-6	7140	7140	-1	7181	7180	-1							6919	6919	0	
8	7238	7249	11	7141	7138	-4	7123	7118	-5	7161	7157	-4							6997	6997	0	
9	7213	7225	12	7120	7115	-5	7124	7123	-1	7159	7157	-2							6807	6808	1	
10	7176	7189	13	7087	7088	1	7094	7086	-8	7119	7110	-9							6712	6716	4	
11	7121	7133	12	7040	7039	-1	7037	7028	-9	7061	7049	-12							6605	6604	-1	
12	6983	6993	10	6927	6929	2	6942	6932	-10	6969	6958	-11										
13	6893	6904	11	6843	6846	3	6883	6876	-8	6905	6897	-8										
Wing tip 14	6663	6648	-15				6693	6697	4													
15																						
16																						
17																						
18																						

Stab line to riser:

Number Cell:

Weight of the glider [kg]:

Tolerance [mm] <sup>(4)</sup>:

## Riser measurement - total length (inner edge) [mm] <sup>(3)</sup>

Total length (incl. Carabiner or connect)	Risers	Std	Acc	Trim	Total length (no carabiner or connect)	Risers	Std	Acc
	A	530	420	n/a		A	500	390
A'	533	422	n/a	A'	503	392		
B	520	444	n/a	B	490	414		
C	508	508	n/a	C	478	478		
D			n/a	D				
Acc	110	*[mm]		Acc	110	*[mm]		
Trimmer	n/a	[mm]		Trimmer	n/a	[mm]		

No. of risers

Tolerance [mm]

Carabiner [mm]

Tolerance [mm]

\*Travel range (distance between A and rear riser)

## Acc system configuration max travel



Another trim configuration

If yes (description):

## Test Atmosphere AGL

Pressure [hPa]	<input type="text" value="983.4"/>
Humidity [%]	<input type="text" value="48"/>
Temperature [°C]	<input type="text" value="21.8"/>

Plausibility check :

[mm]	500	<input type="text" value="500"/>
[mm]	10000	<input type="text" value="10002"/>

Remark:

## Instrument validity

date

Laser distance meter	<input type="text" value="07.09.2023"/>
Line measurements system	<input type="text" value="07.09.2023"/>

Uncertainty of instrument [mm]

Present inspection's scope only extends to the conformity of a given sample, on a given date and in a given place – as mentioned here above. The validation of this report is given by the signature of the test manager on inspection certificate 71.8.1

<sup>(1)</sup>Total length measured from the underside of the glider to the inner edge of the risers with a tension of 50 [N]. Measured values do not include the uncertainty/The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The measured values lies within the assigned range of values with a probability of 95%. <sup>(2)</sup> Manu=Values from manufacturer, Sample=Measured by inspector.

<sup>(3)</sup> Risers, Std=Trim speed, Acc=Accelerated, AND if trimmer: Open=trimmer open, Closed=trimmer closed, Trim=measured at this position. <sup>(4)</sup>Tolerance line and riser is +/-15 [mm]

**OPEN TRIMMER**

**Riser measurement - total length (inner edge) [mm] <sup>(3)</sup>**

**Total length** (incl. Carabiner or connect)

Risers	Std	Acc	Trim
A	530	421	n/a
A'	532	423	n/a
B	538	460	n/a
C	562	562	n/a
D			n/a
Acc	109	*[mm]	
Trimmer	n/a	[mm]	

**Total length** (no carabiner or connect)

Risers	Std	Acc
A	500	391
A'	502	393
B	508	430
C	532	532
D		
Acc	109	*[mm]
Trimmer	n/a	[mm]

# Line and Riser Measurements of flight test Paraglider <sup>(1)</sup>

Report No. : **PG\_1652.2020** Sample name: **Point L close trimmer** Date measure: **06.02.2020** Place: **Villeneuve**  
 Manufacturer: **Davinci** S/N: **APT-L11030-LBL** Responsible: **Claude Thurnheer** Linked: **ISO 91.20**

## Total line length including risers [mm]

Main brake line with diff color than A,B,C main line?  Yes

	A			B			C			D			E			Stab			Brake			+strap	
	Manu <sup>(2)</sup>	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Sample	
Center 1	7733	7746	13	7656	7667	11	7717	7713	-5	7796	7791	-5				6927	6930	3	7943	7933	-10		
2	7689	7699	10	7602	7608	6	7620	7617	-3	7697	7691	-6				6971	6982	11	7727	7720	-7		
3	7753	7762	9	7656	7662	6	7640	7637	-4	7707	7698	-9							7600	7592	-8		
4	7703	7707	4	7600	7605	5	7601	7601	-1	7665	7658	-7							7554	7548	-6		
5	7700	7705	5	7592	7599	7	7627	7624	-3	7686	7679	-7							7433	7428	-5		
6	7680	7686	6	7564	7569	5	7563	7559	-4	7612	7606	-6							7321	7317	-4		
7	7667	7673	6	7552	7554	2	7530	7526	-4	7575	7568	-7								7298	7293	-6	
8	7643	7651	8	7532	7534	2	7513	7508	-5	7554	7548	-6								7380	7373	-7	
9	7616	7624	8	7510	7513	3	7514	7507	-7	7551	7546	-5								7212	7207	-5	
10	7575	7578	3	7473	7481	8	7481	7467	-14	7504	7494	-10								7111	7104	-7	
11	7517	7521	4	7424	7431	7	7421	7407	-14	7442	7431	-11								6999	6990	-9	
12	7372	7375	3	7304	7310	6	7321	7308	-13	7346	7336	-10											
13	7277	7280	3	7215	7221	6	7258	7244	-14	7277	7265	-13											
Wing tip 14	7047	7045	-2				7058	7068	10														
15																							
16																							
17																							
18																							

Stab line to riser:

Number Cell:

Weight of the glider [kg]:

Tolerance [mm] <sup>(4)</sup>:

## Riser measurement - total length (inner edge) [mm] <sup>(3)</sup>

Total length (incl. Carabiner or connect)	Risers	Std	Acc	Trim	Total length (no carabiner or connect)	Risers	Std	Acc
	A	536	432	n/a		A	506	402
A'	536	433	n/a	A'	506	403		
B	528	459	n/a	B	498	429		
C	516	516	n/a	C	486	486		
D			n/a	D				
Acc	103	*[mm]		Acc	103	*[mm]		
Trimmer	n/a	[mm]		Trimmer	n/a	[mm]		

No. of risers   
 Tolerance [mm]

Carabiner [mm]   
 Tolerance [mm]

\*Travel range (distance between A and rear riser)

## Acc system configuration max travel



Another trim configuration   
 If yes (description):

## Test Atmosphere AGL

Pressure [hPa]   
 Humidity [%]   
 Temperature [°C]

Plausibility check :  
 [mm] 500   
 [mm] 1000   
 Remark:

Instrument validity date  
 Laser distance meter   
 Line measurements system

Uncertainty of instrument [mm]

Present inspection's scope only extends to the conformity of a given sample, on a given date and in a given place – as mentioned here above. The validation of this report is given by the signature of the test manager on inspection certificate 71.8.1

<sup>(1)</sup>Total length measured from the underside of the glider to the inner edge of the risers with a tension of 50 [N]. Measured values do not include the uncertainty/The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The measured values lies within the assigned range of values with a probability of 95%. <sup>(2)</sup> Manu=Values from manufacturer, Sample=Measured by inspector.

<sup>(3)</sup> Risers, Std=Trim speed, Acc=Accelerated, AND if trimmer: Open=trimmer open, Closed=trimmer closed, Trim=measured at this position. <sup>(4)</sup>Tolerance line and riser is +/-15 [mm]



**OPEN TRIMMER**

<b>Riser measurement - total length (inner edge) [mm] <sup>(3)</sup></b>				
Open				
<b>Total length</b> (incl. Carabiner or connect)	Risers	Std	Acc	Trim
	A	536	432	n/a
	A'	536	433	n/a
	B	546	461	n/a
	C	567	566	n/a
	D			n/a
	Acc	103	*[mm]	
	Trimmer	n/a	[mm]	

Open				
<b>Total length</b> (no carabiner or connect)	Risers	Std	Acc	
	A	506	402	
	A'	506	403	
	B	516	431	
	C	537	536	
	D			
	Acc	103	*[mm]	
	Trimmer	n/a	[mm]	