

# **DAVINCI** **GLIDERS**

# **TANGO**



REV. 3

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## Congratulations!

Congratulations!  
Thank you for choosing the TANGO

The TANGO has been designed for who are willing to progress in the sport safely, chasing their first XC flights but who are also comfortable with the technical control of this type of glider.  
The TANGO is an easy and fun paraglider with excellent glide and a very efficient speed system designed as a EN-C class glider.

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 TANGO, advice how to use it best and how to care for it to ensure it has a long life, We hope that the TANGO 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

TANGO			XS	S	M	L
CELLS	NUMBER		66	66	66	66
	CLOSED		12	12	12	12
FLAT	AREA	m <sup>2</sup>	21.0	22.9	24.8	26.8
	SPAN	m	11.5	12.0	12.5	13.0
	ASPECT RATIO		6.3	6.3	6.3	6.3
PROJECTED	AREA	m <sup>2</sup>	18.0	19.7	21.3	23.0
	SPAN	m	9.43	9.85	10.25	10.66
	ASPECT RATIO		4.93	4.93	4.93	4.93
FLATTENING		%	14	14	14	14
CHORD	MAX	m	2.21	2.31	2.41	2.50
	MIN	m	0.50	0.52	0.55	0.57
	AVER	m	1.83	1.91	1.98	2.06
LINES	HEIGHT	m	7.11	7.42	7.73	8.03
	MAIN		3/4/3			
RISERS	NUMBER	3	A,A'/B/C			
	TRIMS		NO	NO	NO	NO
	ACCELERATOR		165	165	165	165
WEIGHT RANGE	MIN-MAX	KG	60-85	70-95	85-105	95-120
CERTIFICATION	EN-926-1/2 LTF		EN-C	EN-C	EN-C	EN-C
GLIDER WEIGHT		KG	3.8	4.1	4.5	4.8

## 2. Materials DATA

CANOPY	FABRIC CODE	SUPPLIER
UPPER SURFACE	20D MF(WR) E3W	DOMINICO TEXTILE CO PORCHER IND
BOTTOM SURFACE	E3H	PORCHER IND
PROFILES	30D MF(NON WR)	DOMINICO TEXTILE CO

SUSPENSION LINES	FABRIC CODE	SUPPLIER
UPPER CASCADES	8000U 70/50/30	EDELRID
MIDDLE CASCADES	8000U 130/90/70	EDELRID
MAIN	8000U 280/230/190	EDELRID
UPPER STABLE	9200-30	EDELRID
MAIN STABLE	8000U 130	EDELRID
UPPER BRAKE	8000U 50	EDELRID
MIDDLE BRAKE	8000U 90/70	EDELRID
MAIN BREAK	A10N-200	EDELRID

RISERS	FABRIC CODE	SUPPLIER
MATERIAL	12mm zero stretch polyester	GUTH&WOLF GMBH
PULLEYS	Ronstan ball bearing	Ronstan

### 3. Introduction and Pilot Target

The TANGO is an EN-C high performance glider. It has been designed for high skilled pilots for the ultimate XC flight in comfort.

The TANGO is an easy and fun paraglider with excellent glide and a very efficient speed system designed as a EN-C class glider. Long brake travel and excellent passive safety, as well as the good stability make the good ideal for progression.

TANGO will be the most comfortable glider designed for the pilot who wants XC. The Smart nose system is applied to TANGO.

Tango has special riser system and Smart Nose System designed by unique idea of Davinci Gliders. We hope you will enjoy a safe and enjoyable flight with the high quality and durable fabrics and materials in optimal designing technology.

-LTF and EN certification

The TANGO is certified during official testing as LTF /EN-C.

The glider has been type-tested for "one-seated" use only.

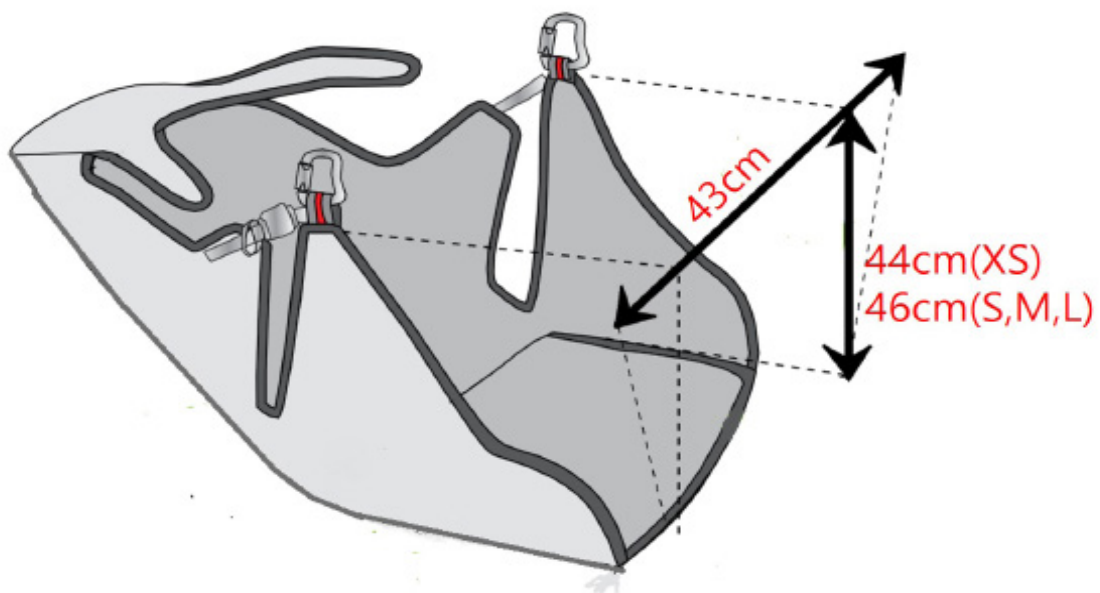
-For the TANGO it has minimum of 65cm symmetrical travel length at maximum total-load.

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.

The TANGO does not have the trimmer system.

### 4. Harness

The TANGO is certified for harnesses in Group GH(without rigid cross-bracing). The suspensiion points of the chosen harness should ideally have a caraviner distance of approximately 43cm and a height of 46cm (TANGO XS 44cm).

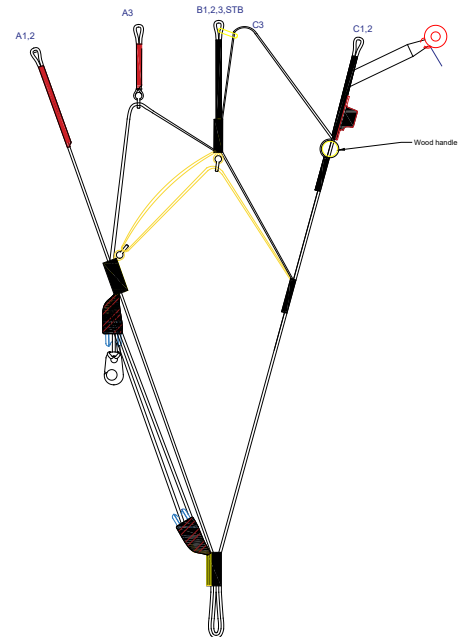


## 5. Risers

TANGO has 3 risers. The A riser has a red cover to easy identification. There is another line with red mailon. There is A3 and is for the big ears.

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

	Standard [mm]	Accelerated [mm]	Travel length [mm]
A	470	305	165
A3	470	388	82
B	470	360	110
C	470	470	0
C3	470	415	55



## 6. Lines

They come in different diameters of Kevlar and Dyneema lines. They must to be inspected every 100 hours or 12months 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 15-20 km of extra speed.

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. 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 TANGO 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 points 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.

## 9. Take-Off

TANGO has easy inflation behaviour at the forward/reverse launch because of its profile system. To get the right wing shape for the take-off, pull the brake until the canopy shows at the perfect banana shape on the flat ground. While inflating the TANGO, 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

### 9.1 Tow launch

The TANGO 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.



## 10. In flight characteristics

TANGO 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 TANGO your first turns should be gradual and progressive. To make efficient and coordinated turns with the TANGO 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!

## 11. Deflations

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

### 11.1 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.

### 11.2 Frontal collapse

TANGO 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.

### 11.3 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.

### 11.4 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.

### 11.5 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.

### 11.6 B stall

The TANGO has a very clean stable B stall. To enter the B stall, the pilot has to pull the first 20cm slowly until the 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.

## 11.7 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 break 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.

# 12. Descent Techniques

## 12.1 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.

## 12.2 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 TANGO may take one more turn after releasing the brake.

## 13. 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.

## 14. Packing your TANGO

Spread the TANGO completely out on the ground. Separate the lines to the each side. The TANGO 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 TANGO 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)

## 15. 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.

## 16. 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 TANGO 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

## 17. Warrantee

The producer guarantees the correctness of the declared characteristics and the paraglider's normal performance for One year 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 one 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.

## 18. 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 office. We will undertake to recycle the glider.

# Checked line sheet(with riser)

DAVINCI GLIDERS / TANGO

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

## XSmall size

	A	B	C	D	Brake
1	7037	7000	7078	7157	7342
2	7011	6974	7050	7131	7111
3	6980	6942	7017	7096	6965
4	6986	6948	7023	7100	6891
5	6930	6893	6964	7037	6806
6	6906	6869	6938	7011	6672
7	6867	6831	6894	6961	6684
8	6869	6834	6893	6957	6783
9	6839	6809	6873		6670
10	6781	6758	6821		6683
11	6679	6667	6721		6709
12	6670	6660	6710		6864
13	6607	6606	6648		
14	6610	6609	6646		
15(stable)	6430	6440	6521		
16(stable)	6406	6433	6509		

## Small size

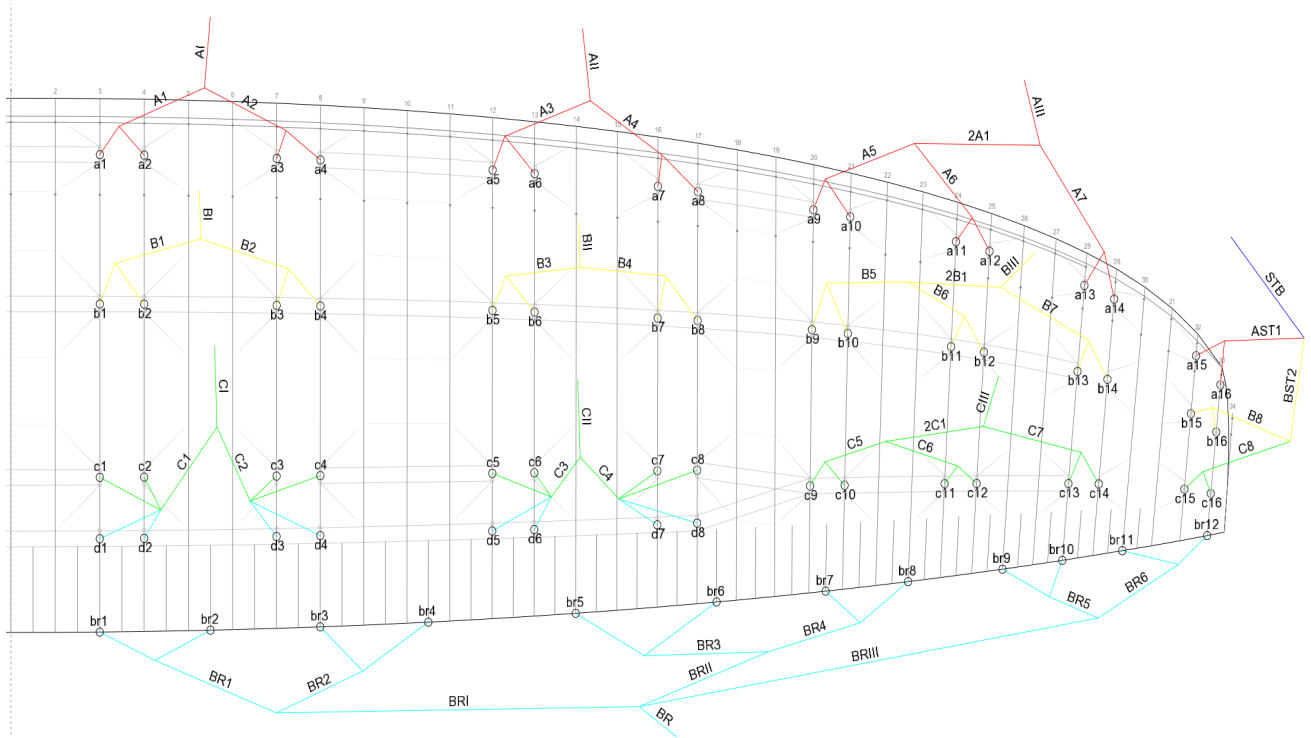
	A	B	C	D	Brake
1	7343	7305	7386	7469	7657
2	7317	7279	7358	7442	7417
3	7286	7247	7324	7406	7265
4	7292	7253	7331	7411	7190
5	7234	7196	7271	7348	7102
6	7209	7172	7245	7320	6963
7	7170	7133	7200	7269	6976
8	7172	7136	7199	7266	7078
9	7139	7110	7178		6963
10	7079	7056	7123		6977
11	6971	6961	7018		7005
12	6962	6954	7007		7165
13	6899	6898	6942		
14	6901	6901	6939		
15(stable)	6714	6724	6808		
16(stable)	6689	6717	6796		

## Medium size

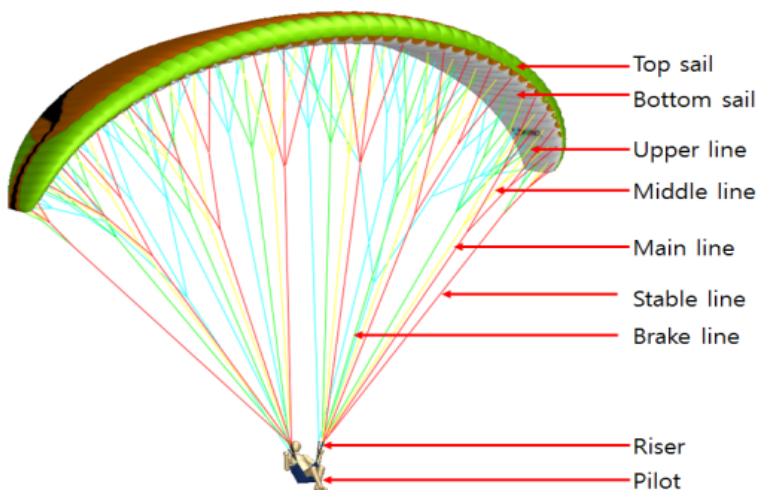
	A	B	C	D	Brake
1	7618	7580	7660	7741	7949
2	7592	7552	7631	7713	7702
3	7560	7520	7597	7677	7546
4	7567	7527	7604	7682	7470
5	7508	7468	7543	7617	7359
6	7482	7443	7515	7589	7215
7	7441	7403	7468	7535	7228
8	7444	7406	7468	7532	7335
9	7410	7380	7451		7216
10	7348	7324	7394		7230
11	7237	7225	7285		7259
12	7227	7218	7273		7438
13	7160	7159	7205		
14	7162	7161	7202		
15(stable)	6966	6977	7065		
16(stable)	6940	6969	7052		

## Large size

	A	B	C	D	Brake
1	7921	7881	7965	8049	8304
2	7893	7853	7935	8021	8049
3	7861	7820	7901	7984	7888
4	7869	7828	7909	7990	7812
5	7808	7768	7846	7923	7707
6	7781	7742	7817	7894	7558
7	7739	7700	7769	7838	7573
8	7741	7703	7768	7835	7683
9	7707	7676	7751		7560
10	7643	7618	7692		7574
11	7527	7516	7579		7604
12	7517	7508	7566		7779
13	7447	7447	7496		
14	7449	7449	7492		
15(stable)	7255	7257	7348		
16(stable)	7218	7248	7335		



Name	Manufacturer	Name	Manufacturer	Name	Manufacturer	Name	Manufacturer	Name	Manufacturer	Name	Manufacturer
a1	8000U-070	b1	8000U-070	c1	8000U-050	d1	8000U-050	AST1	8000U-070	br1	8000U-050
a2	8000U-070	b2	8000U-070	c2	8000U-050	d2	8000U-050	BST2	8000U-070	br2	8000U-050
a3	8000U-070	b3	8000U-070	c3	8000U-050	d3	8000U-050			br3	8000U-050
a4	8000U-070	b4	8000U-070	c4	8000U-050	d4	8000U-050	STB	8000U-130	br4	8000U-050
a5	8000U-070	b5	8000U-070	c5	8000U-050	d5	8000U-050			br5	8000U-050
a6	8000U-070	b6	8000U-070	c6	8000U-050	d6	8000U-050			br6	8000U-050
a7	8000U-070	b7	8000U-070	c7	8000U-050	d7	8000U-050			br7	8000U-050
a8	8000U-070	b8	8000U-070	c8	8000U-050	d8	8000U-050			br8	8000U-050
a9	8000U-050	b9	8000U-050	c9	8000U-050					br9	8000U-050
a10	8000U-050	b10	8000U-050	c10	8000U-050	2A1	8000U-130			br10	8000U-050
a11	8000U-050	b11	8000U-050	c11	8000U-050	2B1	8000U-130			br11	8000U-050
a12	8000U-050	b12	8000U-050	c12	8000U-050	2C1	8000U-130			br12	8000U-050
a13	8000U-050	b13	8000U-050	c13	8000U-050						
a14	8000U-050	b14	8000U-050	c14	8000U-050						
a15	9200-30	b15	9200-30	b15	9200-30					BR1	8000U-070
a16	9200-30	b16	9200-30	b16	9200-30					BR2	8000U-070
										BR3	8000U-070
A1	8000U-130	B1	8000U-130	C1	8000U-130					BR4	8000U-070
A2	8000U-130	B2	8000U-130	C2	8000U-130					BR5	8000U-070
A3	8000U-90	B3	8000U-90	C3	8000U-90					BR6	8000U-070
A4	8000U-90	B4	8000U-90	C4	8000U-90						
A5	8000U-70	B5	8000U-70	C5	8000U-70					BR1	8000U-90
A6	8000U-70	B6	8000U-70	C6	8000U-70					BRII	8000U-90
A7	8000U-70	B7	8000U-70	C7	8000U-70					BRIII	8000U-90
		B8	8000U-70	C8	8000U-70						
										BR	A10N-200
Ai	8000U-280	Bi	8000U-230	CI	8000U-230						
AII	8000U-230	BII	8000U-230	CII	8000U-230						
AIII	8000U-120	BIII	8000U-120	CIII	8000U-120						







Serial Number	
Date of Production	
Dealer	
Date of sales	
Check and repair information	

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

Report No. : **PG\_1676.2020** Sample name: **Tango XS** Date measure: **22.04.2020**  
Manufacturer: **Davinci Product** S/N: **KTF-XS11230-GRBL** Responsible: **Claude Thurnheer**

### Total line length including risers [mm]

	A			B			C			D			E			
	Manu <sup>(2)</sup>	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	
Center	1	7037	7041	4	7000	6995	-5	7078	7074	-4	7157	7146	-11			64
	2	7011	7014	3	6974	6969	-5	7050	7045	-5	7131	7119	-12			64
	3	6980	6984	4	6942	6936	-6	7017	7010	-7	7096	7087	-10			64
	4	6986	6992	6	6948	6946	-2	7023	7019	-4	7100	7089	-11			64
	5	6930	6934	4	6893	6894	1	6964	6963	-1	7037	7029	-8			65
	6	6906	6911	5	6869	6869	0	6938	6936	-2	7011	7004	-8			65
	7	6867	6872	5	6831	6832	1	6894	6892	-2	6961	6953	-8			
	8	6869	6872	3	6834	6833	-1	6893	6890	-3	6957	6946	-11			
	9	6839	6832	-7	6809	6801	-8	6873	6864	-9						
	10	6781	6778	-4	6758	6751	-7	6821	6816	-5						
	11	6679	6675	-4	6667	6661	-6	6721	6716	-5						
	12	6670	6664	-6	6660	6654	-6	6710	6705	-5						
	13	6607	6599	-8	6606	6600	-6	6648	6643	-5						
Wing	14	6610	6604	-6	6609	6602	-7	6646	6639	-7						
tip	15															
	16															
	17															
	18															

Number Cell:  
Weight of the glider [kg]

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

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

Total length	Risers	Std	Acc	Trim	Total length	Risers	Std	Acc
(incl. Carabiner or connect)	A	499	333	n/a	(no carabiner or connect)	A	471	305
	A'	497	359	n/a		A'	469	331
	B	497	386	n/a		B	469	358
	C'	496	439	n/a		C'	468	411
	C'	499	498	n/a		C'	471	470
	Acc	166	*[mm]			Acc	166	*[mm]
	Trimmer	n/a	[mm]			Trimmer	n/a	[mm]

No. of risers **3**  
Tolerance [mm] **5**

Carabiner [mm] **28**  
Tolerance [mm] **2**

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

### Acc system configuration



Another trim configuration  
If yes (description):

Instrument validity	date
Laser distance meter	07.09.2023
Line measurements system	07.09.2023

Uncertainty of instrument [mm] **3**

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

<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 expected

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, S/N=Serial number

<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 Measurements of flight test Paraglider <sup>(1)</sup>

Report No. : **PG\_1677.2020** Sample name: **Tango S** Date measure: **22.04.2020**  
Manufacturer: **Davinci Product** S/N: **KTG-S11240-BRW** Responsible: **Claude Thurnheer**

### Total line length including risers [mm]

	A			B			C			D			E			
	Manu <sup>(2)</sup>	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	
Center	1	7343	7341	-2	7305	7301	-4	7386	7383	-3	7469	7459	-10			67
	2	7317	7317	-1	7279	7276	-3	7358	7354	-4	7442	7431	-11			66
	3	7286	7287	1	7247	7248	1	7324	7321	-3	7406	7397	-9			67
	4	7292	7297	5	7253	7254	1	7331	7326	-5	7411	7400	-11			67
	5	7234	7238	4	7196	7199	3	7271	7269	-2	7348	7340	-8			68
	6	7209	7215	6	7172	7171	-1	7245	7244	-1	7320	7311	-9			67
	7	7170	7174	4	7133	7133	0	7200	7198	-2	7269	7259	-10			
	8	7172	7177	5	7136	7137	1	7199	7196	-3	7266	7255	-11			
	9	7139	7130	-9	7110	7101	-9	7178	7171	-7						
	10	7079	7073	-6	7056	7049	-7	7123	7118	-5						
	11	6971	6965	-6	6961	6955	-6	7018	7012	-6						
	12	6962	6955	-7	6954	6947	-7	7007	7001	-6						
	13	6899	6892	-7	6898	6892	-6	6942	6939	-3						
Wing	14	6901	6895	-6	6901	6893	-8	6939	6932	-7						
tip	15															
	16															
	17															
	18															

Number Cell:  
Weight of the glider [kg]

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

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

Total length	Risers	Std	Acc	Trim	Total length	Risers	Std	Acc
(incl. Carabiner or connect)	A	497	331	n/a	(no carabiner or connect)	A	469	303
	A'	497	357	n/a		A'	469	329
	B	498	386	n/a		B	470	358
	C'	497	440	n/a		C	469	412
	C	500	500	n/a		D	472	472
	Acc	166	*[mm]			Acc	166	*[mm]
	Trimmer	n/a	[mm]			Trimmer	n/a	[mm]

No. of risers **3**  
Tolerance [mm] **5**

Carabiner [mm] **28**  
Tolerance [mm] **2**

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

### Acc system configuration



Another trim configuration  
If yes (description):

Instrument validity	date
Laser distance meter	07.09.2023
Line measurements system	07.09.2023

Uncertainty of instrument [mm] **3**

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

<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 expected 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, S/N=Serial number

<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 Measurements of flight test Paraglider <sup>(1)</sup>

Report No. : **PG\_1623.2020** Sample name: **Tango M** Date measure: **10.02.2020**  
Manufacturer: **Davinci** S/N: **KTG-M11050-BRW** Responsible: **Claude Thurnheer**

### Total line length including risers [mm]

	A			B			C			D			E			
	Manu <sup>(2)</sup>	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	
Center	1	7618	7613	-5	7580	7573	-8	7660	7654	-6	7741	7734	-7			69
	2	7592	7587	-5	7552	7544	-8	7631	7627	-4	7713	7710	-4			69
	3	7560	7558	-2	7520	7511	-9	7597	7593	-4	7677	7671	-6			69
	4	7567	7567	0	7527	7520	-7	7604	7599	-5	7682	7678	-4			69
	5	7508	7507	-1	7468	7465	-3	7543	7541	-2	7617	7615	-2			70
	6	7482	7483	1	7443	7438	-5	7515	7512	-3	7589	7590	1			70
	7	7441	7442	1	7403	7398	-5	7468	7464	-4	7535	7532	-3			
	8	7444	7445	1	7406	7403	-3	7468	7466	-2	7532	7530	-2			
	9	7410	7398	-12	7380	7367	-14	7451	7437	-14						
	10	7348	7335	-13	7324	7312	-12	7394	7380	-14						
	11	7237	7224	-13	7225	7212	-14	7285	7272	-13						
	12	7227	7216	-11	7218	7206	-12	7273	7260	-14						
	13	7160	7158	-2	7159	7155	-4	7205	7207	2						
Wing	14	7162	7160	-2	7161	7159	-2	7202	7202	0						
tip	15															
	16															
	17															
	18															

Number Cell:  
Weight of the glider [kg]

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

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

Total length	Risers	Std	Acc	Trim	Total length	Risers	Std	Acc
(incl. Carabiner or connect)	A	496	329	n/a	(no carabiner or connect)	A	468	301
	A'	495	354	n/a		A'	467	326
	B	495	383	n/a		B	467	355
	B'	495	437	n/a		B'	467	409
	C	495	495	n/a		C	467	467
	Acc	167	*[mm]			Acc	167	*[mm]
	Trimmer	n/a	[mm]			Trimmer	n/a	[mm]

No. of risers **3**  
Tolerance [mm] **5**

Carabiner [mm] **28**  
Tolerance [mm] **2**

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

### Acc system configuration



Another trim configuration  
If yes (description):

Instrument validity	date
Laser distance meter	07.09.2023
Line measurements system	07.09.2023

Uncertainty of instrument [mm] **3**

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

<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 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, S/N=Serial number

<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 Measurements of flight test Paraglider <sup>(1)</sup>

Report No. : **PG\_1624.2020** Sample name: **Tango L** Date measure: **10.02.2020**  
Manufacturer: **Davinci** S/N: **KTG-L11040-GRBL** Responsible: **Claude Thurnheer**

### Total line length including risers [mm]

	A			B			C			D			E			
	Manu <sup>(2)</sup>	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	
Center	1	7921	7923	2	7881	7882	1	7965	7963	-2	8049	8049	-1			72
	2	7893	7894	1	7853	7851	-2	7935	7933	-2	8021	8021	0			72
	3	7861	7860	-1	7820	7817	-3	7901	7901	0	7984	7982	-2			72
	4	7869	7872	3	7828	7826	-2	7909	7908	-1	7990	7988	-2			72
	5	7808	7811	3	7768	7765	-3	7846	7841	-5	7923	7921	-2			73
	6	7781	7784	3	7742	7741	-1	7817	7816	-1	7894	7894	0			73
	7	7739	7746	7	7700	7698	-2	7769	7768	-1	7838	7838	0			
	8	7741	7745	4	7703	7703	0	7768	7766	-2	7835	7834	-1			
	9	7707	7701	-6	7676	7665	-11	7751	7741	-10						
	10	7643	7635	-8	7618	7608	-10	7692	7682	-10						
	11	7527	7519	-9	7516	7506	-10	7579	7569	-10						
	12	7517	7511	-6	7508	7496	-12	7566	7557	-9						
	13	7447	7459	12	7447	7449	2	7496	7500	4						
Wing	14	7449	7463	14	7449	7451	2	7492	7496	4						
tip	15															
	16															
	17															
	18															

Number Cell:  
Weight of the glider [kg]

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

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

Total length	Risers	Std	Acc	Trim	Total length	Risers	Std	Acc
(incl. Carabiner or connect)	A	497	325	n/a	(no carabiner or connect)	A	469	297
	A'	498	355	n/a		A'	470	327
	B	497	381	n/a		B	469	353
	B'	497	436	n/a		B'	469	408
	C	499	499	n/a		C	471	471
	Acc	172	*[mm]			Acc	172	*[mm]
	Trimmer	n/a	[mm]			Trimmer	n/a	[mm]

No. of risers **3**  
Tolerance [mm] **5**

Carabiner [mm] **28**  
Tolerance [mm] **2**

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

### Acc system configuration



Another trim configuration  
If yes (description):

Instrument validity	date
Laser distance meter	07.09.2023
Line measurements system	07.09.2023

Uncertainty of instrument [mm] **3**

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

<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 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, S/N=Serial number

<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