

Manual

ATMUS³

LTF / EN B




sol[®]
PARAGLIDERS

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WELCOME TO THE SOL TEAM

You have just acquired a high-quality product, manufactured under one of the most demanding industry standards worldwide. We are certain that this equipment will allow you to learn, increase and amplify your knowledge and technique during your flights.

We hope your paraglider Atmus 3 will provide you with many nice flights and that you're experiencing moments that will last forever in your memory. This way our philosophy will proof right: security, performance, easy handling and innovation.

Please, read this manual carefully. All necessary information you'll need for your new equipment is right here.

In case of questions or doubts regarding your paraglider or in case you simply are interested in our new products - we are at your dispose.

Thank you very much for choosing SOL PARAGLIDERS.

Symbols



Warnings and important notes - pay attention and read carefully



Additional information



Notes regarding environment protection

IMPORTANT NOTES

- As owner of a Sol Paraglider you are responsible for all possible risks existing by using this equipment. The inappropriate and/or abusive use of your equipment increases this risks.
- It's not possible to transfer this responsibility of risks, using this equipment, to the producer, distributor or seller.
- A regular training, whenever possible, especially on the ground, is indispensable and necessary. A poor handling and control of the glider, especially on the ground, is one of the most frequent causes of accidents.
- Always be prepared to improve your skills. Attending special workshops will improve your skills and maintain your knowledge about materials and techniques, which always are developing, up to date.
- Only use a certified paraglider, harness with protector and reserve and use them within the described and certified limits. Remember, if you fly a paraglider outside the certified norms your insurance will not pay the damage. It is in your responsibility as a pilot to know what your insurance covers.
- Sol Paragliders is flying and testing every single paraglider produced, to assure our clients full quality and function of every glider. We recommend that every new or reviewed paraglider will be tested on the ground and flew from the training hill by his pilot.
- Never take off without helmet, hand-gloves and boots.
- Check all your equipment before each flight. Never take off with an inappropriate or damaged equipment.
- As pilot you only are allowed to use a paraglider in accordance to your skills and in accordance to the instruction level required in each country.
- Before each flight check your physical and mental state. Are you fit to fly?
- Before take off choose the right Paraglider and environment, check the weather conditions, if you have any doubt - don't fly.
- Never fly during rain, snow, strong wind, turbulent conditions or if thunderstorm clouds are in the sky.
- If you are always flying with conscious - you'll be able to fly for many years your glider.



ATMUS 3 - THE PROJECT

The Atmus 3 is a new project to succeed one of the most successful gliders in its class consolidating the concept of B wings with a genuine gain in glide and stability.

Thanks to an intense development paired with continuous technology upgrades, the Atmus 3 has an intuitive response, is easy to handle and thus addresses to pilots who are evolving in the sport and those who enjoy an equipment with an excellent performance meshed with high passive safety.

Recommendation

This glider is not designed for flight school!

Certification

The Atmus 3 has a LTF / EN B certification. The certification details are available on: www.solparagliders.com.br.

Special characteristics

Comfort - Security - Performance - Easy handling - Long life

Accessories

Along with your paraglider you receive:



REF - 4373



REF - 4379



REF - 4330



REF - 4047



REF - 4311



REF - 22153



REF - AC017



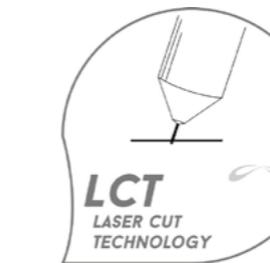
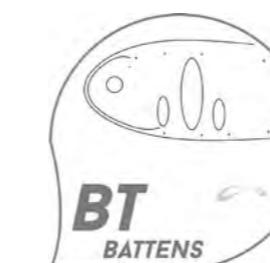
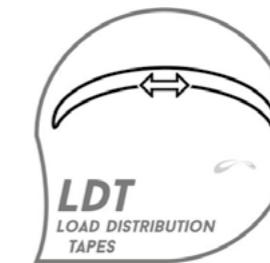
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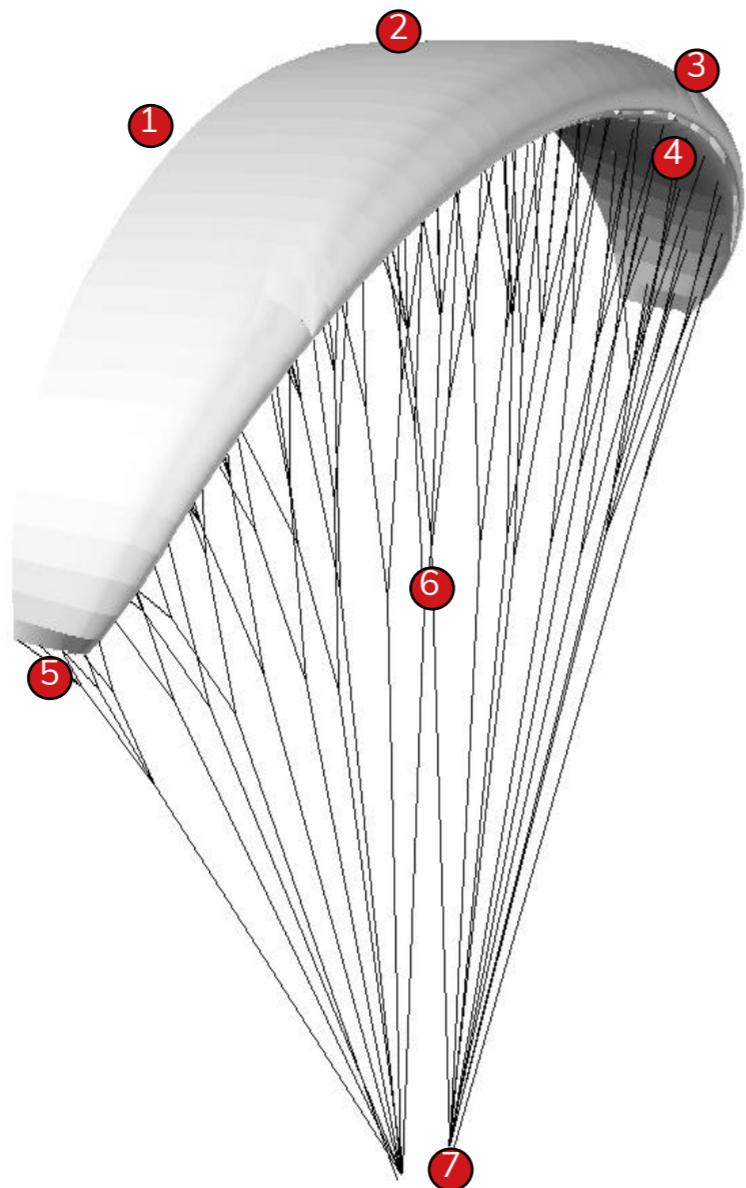


Technology



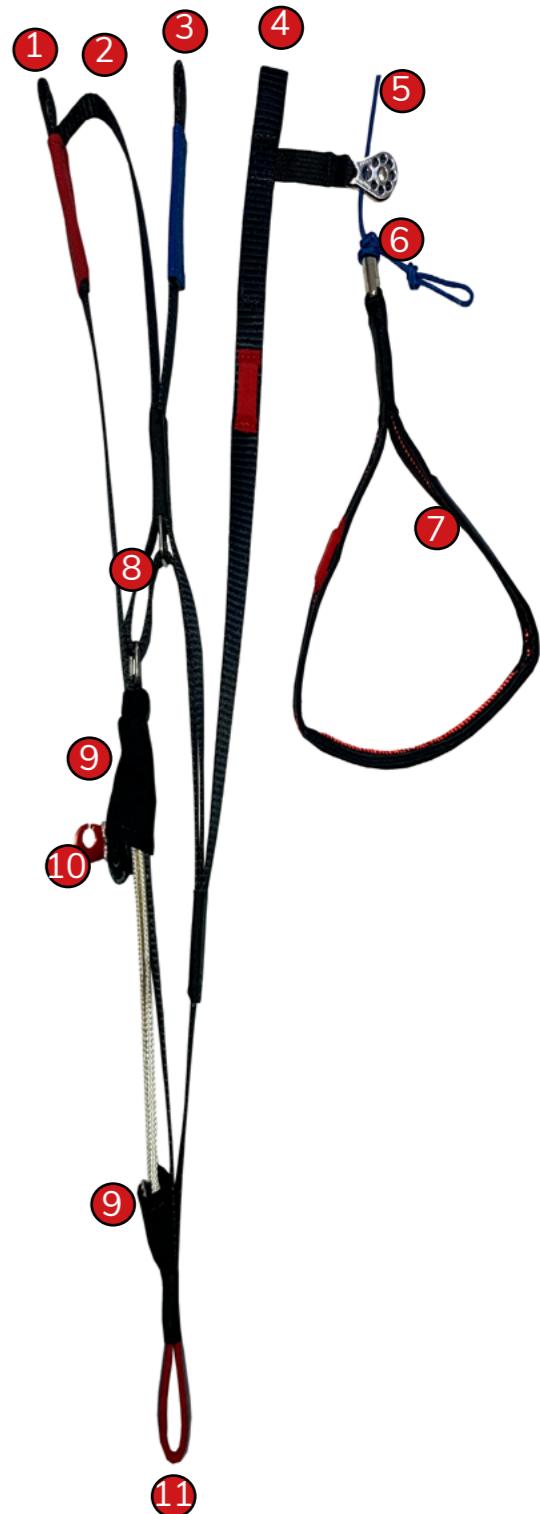
Overview paraglider

1. Trailing edge
2. Top
3. Leading edge
4. Bottom
5. Stabilo
6. Lines
7. Risers



Overview risers

1. Riser A
2. Riser A'
3. Riser B
4. Riser C
5. Brake lines
6. Toggle connection
7. Toggle
8. Speed system
9. Accelerator
10. Accelerator connection
11. Connection to harness



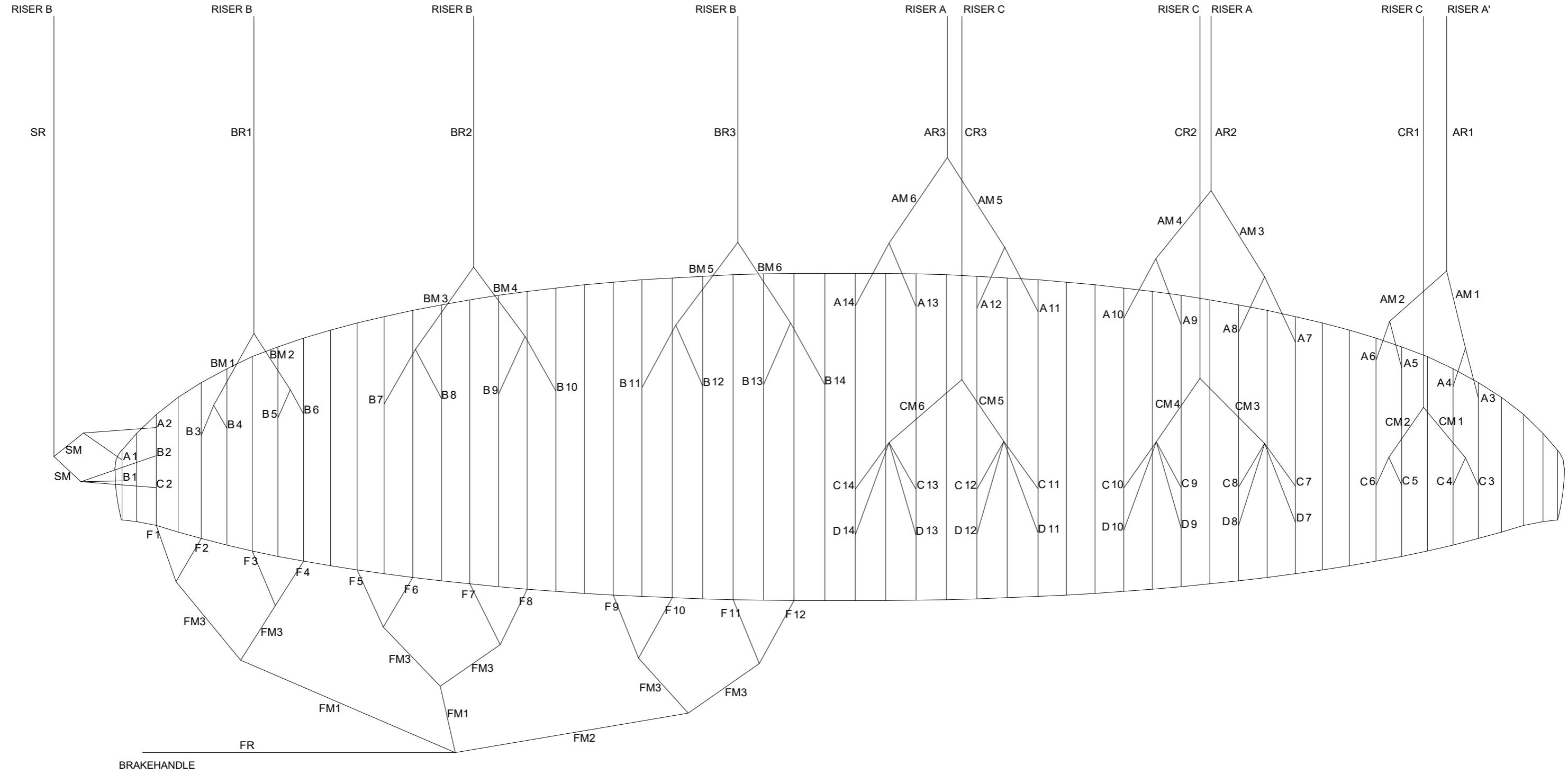
Line plan

The suspension point design was developed for an ideal weight distribution and long life. During all consideration and calculation, security always is our first goal.. The used material mix for the lines of the Atmus 3 forms an ideal combination: long life with little deformation and aerodynamic drag.



Never and under no circumstances the line length can be altered!

ATMUS³



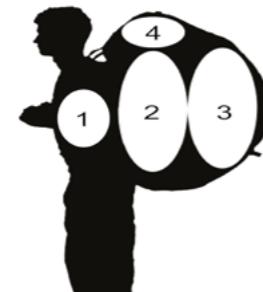
ATMUS³

THE PARAGLIDER - INFORMATION

Take off weight

Each paraglider seize is dedicated to a certain weight range, from a minimum take off weight to a maximum. The take off weight is the sum of the weight of:

1. the pilot
2. the paraglider
3. the harness with reserve
4. all flight accessories



It's not recommended to fly outside the weight range.

If your take off weight is between two weight ranges we suggest the following procedure:

- For a more accurate and dynamic handling or if you usually fly in the mountains and/or turbulent conditions, you should choose to fly in the upper weight range.
- For a better sink rate and if you usually fly above flat land and in light weather conditions, you should choose to fly in the lower weight range.



Tow release take off

The Atmus 3 can be used for towed flight. The used equipment must be certified, the team handling the equipment must be licensed and you must have done a workshop learning this take off. Always use the special tow connection. The take off only should be done if the canopy is filled completely and steady above the pilots head.



Flight with engine

The Atmus 3 was not designed and is not certified for engine flight. SOL Paragliders doesn't recommend this type of flight.



Tandem flight

The Atmus 3 was not designed and is not certified for tandem flight. SOL Paragliders doesn't recommend this type of flight.

PREPARING FOR FLIGHT

Laying out the glider

- Choose an easy training elevation with less inclination for the first flight, without obstacles and a day with easy weather conditions.
- Open your canopy and lay him down in shape of a horseshoe.
- Check fabric and lines, if there is any damage or fatigue caused by wear.
- Check if all quick links are closed.
- Identify, separate and organize all risers A, A', B, C and the brake lines.



It is extremely important that there are no entanglements and/or bunched lines present.

Harness

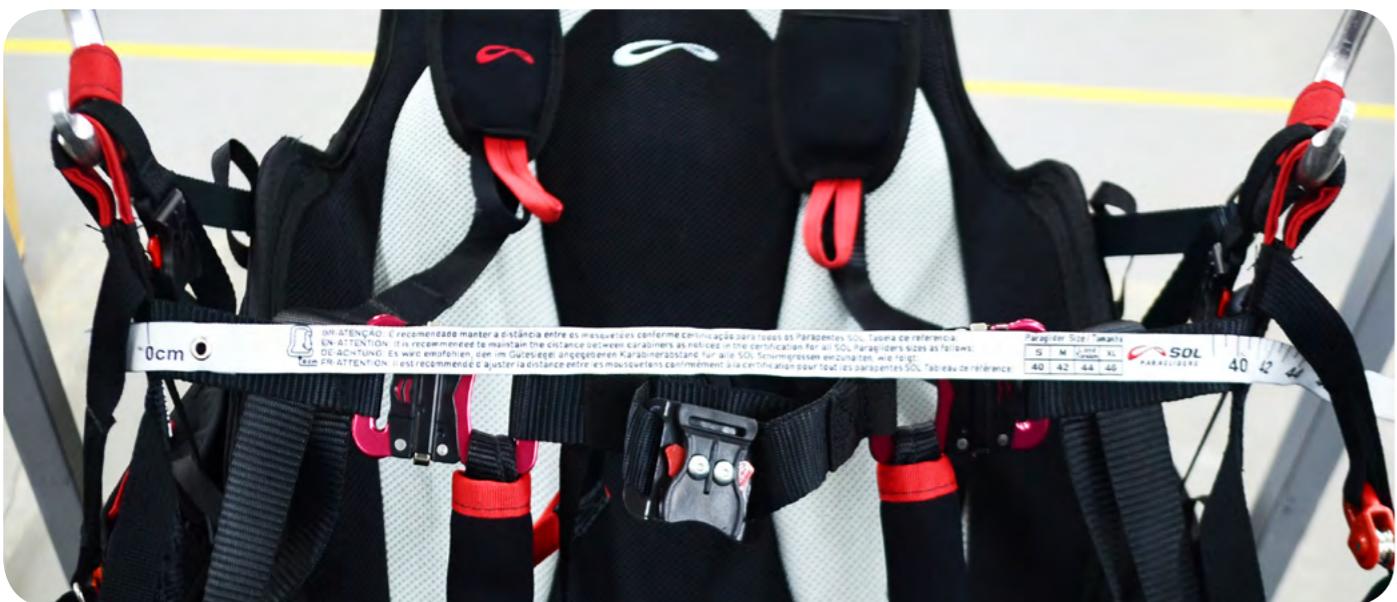
The Atmus 3 was tested within the standard of LTF with a harness of type GH. We can recommend for the Atmus 3 all harness of type ABS, tested with a carabiner connection height between 42 and 48 cm, measured form the seat and depending on the seize. Attention: the suspension height will influence the "normal" brake position. Always use a harness with back protection.

The distance between the carabiners should be correct. Together with your glider comes an "Easy Check" measure tape which might help you to check the distance exactly.



If the distance is not within the range, the glider could have extreme, dangerous or abnormal reaction in flight.





Riser lengths

Riser lengths actually measured shall not differ more than ± 5 mm from the lengths laid down in the user's manual.

PARAGLIDER SOL								
SIZE	XXS	XS	S	M	L	XL	XXL	TANDEM
MEASURE	38 CM	38 CM	40 CM	42 CM	44 CM	46 CM	48 CM	44 CM

Connecting paraglider and harness

Without twisting the risers connect them with the carabiners of the harness. Check if they are connected and positioned in the right way without any twist. The (A) riser must be in front in flight direction.



Check if the carabiners are really locked and closed!

Accelerator

Most of modern harness have pulleys for assembling the Foot Speed System. The line must be firmly attached to the stirrup. The other end of the line is fed through the harness' pulleys and comes out vertically, and must be firmly attached to the clip of the quick look. In order to adjust the Speed System, we suggest that you connect the harness and the risers, suspended from the ground. Ask a friend to pull the risers (A) upwards. At this time, adjust the length right to the bar in such way to be easily reachable with your feet in flight and by stretching the legs, make sure to allow for a clear path to maximize the accelerator usage.

Risers not accelerated

A = 52 cm

A' = 52 cm

B = 52 cm

C = 52 cm

Risers accelerated

A = 40 cm

A' = 42 cm

B = 44 cm

C = 52 cm



Measure without quick links



Measure without quick links.



FLIGHT

Take Off Check List

- Helmet closed?
- Carabiners locked and closed?
- Harness all looks closed?
- Carabiner distance OK?
- Risers A in hands?
- Brake lines free, toggles in hand?
- Pilot stays in the midst of the canopy?
- Take off area free?
- Paraglider and pilot lined up against the wind?
- Air space in take off direction free?

Forward Take off

When ready to takeoff, the pilot must have risers A and the toggles in hand. The arms must be extended to the side, as if they are extensions of risers A. A decisive run allows a quick and stable inflation. After the initial inflation momentum, the pilot must keep the tension forward on risers A, not pulling them downwards, until the canopy is above his head. At this point, the brakes must be carefully activated and the pilot must be prepared for possible directional changes. A move to underneath the center of the paraglider is the best method for corrections, provided there is room for it. The pilot glances at last upwards to ensure the canopy is properly located above, completely unobstructed and inflated. Only at this point, the pilot decides whether or not to takeoff.



Reverse Take off

The preparation is the same as to forward take off. But this time you have to turn towards the canopy. During the turn lift the hand which is turning away from the glider with the risers above your head. Now you can inflate the glider with the red A risers. Push the risers up and let them go when the canopy is over your head. If necessary use the brakes gently. Turn out and begin the start run. Attention: check to turn out to the right side. Example you turned with your left side to the glider you have to turn out with your left side to the glider. Otherwise you will have made a 360 degree turn and all your risers are twisted.

In case of strong wind it could be necessary to make some steps towards the canopy during inflation. This take off method can be used even with little wind.



Thermals and Soaring

In turbulent conditions, the paraglider must be flown with the brakes softly applied, resulting in greater canopy stability. The pendulum effect back and forth must be avoided! The canopy must remain on top of the pilot. For this purpose, the speed must be increased by releasing the brakes upon entering a thermal (depending on its intensity) or braking on exit. This is part of the basic technique on "active flying".

During soaring, a minimum height of 50m over ground is highly recommended, for safety reasons. Knowing and respecting flight regulations is extremely important, especially when airspace within close proximities of mountains is shared among several pilots, where last minute anti-collision maneuvers are not executable.

Turns

The Atmus 3 is very sensitive, responding instantly to turn commands. Leveled turns can be achieved with the shifting of weight on the risers with minimum altitude loss. A combination of weight shifting and breaking technique is the most efficient way of executing turns in any situation. The given brake utilized determines the radius of turns. By activating the brakes on the outside edge of the turns, as well as applying maximum weight shifting on the risers, the efficiency and resistance to collapse in turbulences (at the edge of thermals) is increased.

In case it becomes necessary to perform turns in a constrained space we recommend to release the outside brake in the given turn and pull a little more the brake on the inside of the turn.

The paraglider glides best when no brakes are applied.



By pulling either brake too strongly or suddenly, there is a danger of creating a negative spiral!

Accelerated flight

It is recommended to use the accelerator when flying against the wind or in zones with descending air. Due to a decreased angle of attack, the canopy may collapse easier than when set at the normal position. The pilot must remember that the higher the speed, the more dynamic the collapse response or symmetric closing will be.



- Exercise the use of the accelerator during calm conditions.
- Be cautious flying accelerated in difficult and turbulent conditions.
- Remember: The higher the speed the higher the descent rate.
- Check always on all accelerator parts for good function and signs of wear.

Active flying

For best performance during your flight, it is important to be always sensitive to what your canopy is trying to communicate. The key elements of active flying are: controlling the canopy advancement and the canopy pressure. If you apply gently the brakes (about +- 15cm) you are getting a good feedback about the canopy pressure, which can alter easily in turbulent air. You can feel it very well on the brakes. The general idea: keep the pressure constant.

Avoid flying excessively with the brakes on, cause you might brake to the point of stopping the canopy from flying. Always consider your aerodynamic speed. Your movements can be symmetric or asymmetric and both or one brake can be applied. This corrections control your flight and reduce the risk of collapses. We suggest that you practice on the ground. Canopy advancement and pressure loss can be simulated well on the ground.



Landing

Always choose a secure and clean landing side with lots of space, great distance to natural obstacles and is not under the influence of turbulent air.

- The final approach stage must be done in straight line upwind.
- With less than 30m above ground avoid steer turns, they may result in dangerous pendulous movements and the pilot could crash to the ground with high velocity.
- Before landing get up in your harness with the weight against the chest strap, especially in turbulent conditions.
- Fly with hands up, without brakes, until more or less 1m over ground. In turbulent conditions fly active until the end. Then apply slowly and progressively the brakes to reduce velocity until you can almost without speed land on the ground.
- Always adapt your landing on space, circumstances and wind.

- If the wind is strong and you feel it might be possible been dragged or uplifted after landing, pull symmetrically the B risers. This movement kills the glider fast and controlled and avoids a re-inflation or that the glider turns into a great sail. After killing the glider pull him back to you using the B risers.

FAST DESCENT MANEUVERS

The following maneuvers should be used only in emergency situations and need a special training fore safety use. If possible attend a workshop to learn and practice this maneuvers.

This maneuvers are used by cloud entrance and in case of approaching thunderstorms.



Remember: a good weather analysis before flight helps to avoid this maneuvers during flight.

Big ears

Push the line AR 1 on the riser A' down and to the outside. Keep the line until the glider ear is closed. Do it first on one side and than on the other.

The paraglider handling stays exact the same: using the brakes or shifting your weight. If you want to return to normal flight, let go of the lines AR 1. Normally the canopy opens on its own, but you can help pushing the brakes lightly.

Positive spiral

A positive spiral has a high sink rate. But the high acceleration, G-Force, impedes to fly this maneuver for a long time. The G-Force may cause that the pilot loses his consciousness and spirals until he crashes the ground. The same high energy is acting on the equipment and will shorten his endurance.

A positive spiral never should be exercised in turbulent conditions or strong lateral wind. Under strong wind conditions the pilot has to remember that the lateral drift could be enormous.

When the pilot activates just one brake, slowly and progressively, the paraglider inclines sideways in a sharp angle and enters in a steep and quick turn, which may become a positive spiral. During a spiral the rotation radius can be controlled by the force applied to the inside brake.

In order to come out of the spiral, the pilot must release the brake slowly and shift his weight lightly to the outside of the turn. A sudden exit may result in an exaggerated forward movement of the canopy, and cause a collapse. For this reason, on the last turn, the inside brake of a given turn must be softly applied again.

In case the canopy collapses during this process, the spiral must be counter-acted, as the active canopy area will be reduced.



- Never combine big ears with spirals. The canopy active area reduction plus the 'G' force may result in line and/or canopy damage.
- Leaving a fast spiral must be executed slowly and progressively.
- The maneuver requires high altitudes (at least 600 meter over ground) and is dangerous, due high descent ratio the pilot can lose the altitude reference.



B-Stall

This maneuver provokes a parachute flight and as a result the paraglider is almost unable to be directed.

To initiate the maneuver get the B risers closely to the quick links and push them symmetrically and slowly downwards until the canopy profile is deformed. The glider stops to fly forward and descents vertically.

To end the maneuver let go symmetrically and at the same time of the B risers. The glider stops to sing and starts to fly forward again

! In the event risers 'B' are pulled too quickly or too deeply, a horseshoe may occur towards the front. In order to regain normal flight, the pilot has to let go of the B risers and must apply the brakes lightly. In case the parachute flight continuous, use the method described below in "parachutal".

EXTREME FLIGHT SITUATIONS

Front-stall

Normally the paraglider opens on his own after a front-stall. In turbulent conditions it may happen that the canopy make a fast movement forward, in order to avoid another front-stall it is necessary to apply the brakes precisely.

Caution: If the brake lines are applied too much the glider could get into a full-stall.



Lateral closing

Active flying almost ever avoids lateral closing. If lateral closing happens, the canopy folds predictable and progressively from the tip to the center. This corresponds a collapse of 50% or more and results in a slight tendency for a turn. The glider can be held on course using the brake on the open side.

Normally the paraglider opens on his own. If the collapse happens during accelerated flight the canopy has a more dynamic reaction, but even than the turn can be controlled without problems.

To facilitate the closed side to fill the pilot has to pull down slowly (ca. 2 seconds) the brake on the closed side and let go again (pump). Shifting the weight to the open side helps to re-inflate the sail and increases security, cause the brake has to be used less and this avoids a full-stall.

Without action, the paraglider will begin a positive spiral. The pilot must lightly apply the brake on the external side to stop a spiral and at the same time shift his weight on the same side until the canopy is stabilized. Exactly at this stage of pendulum effect under the canopy, it is important that the pilot controls carefully the amount of force applied on the brakes, and often it is needed to decrease the force. Once a straight flight is achieved, the closed side can be re-inflated by the pumping action.



Parachutal

This paraglider does not have parachutal flight tendencies and recovers on its own from an intentional parachutal flight induced by braking commands. In case of a parachutal flight after an extreme situation loose the brakes and use the accelerator. Before using the brakes again make sure that the glider flies normally.

-  If the glider is wet or the regular inspections weren't made, the risk of a parachutal flight exists.

Full-stall

The Atmus 3 has a long way on the brakes before he enters a full-stall. A full-stall happens if the brakes are pulled symmetrically and excessively downwards. Normally the glider starts to fly backwards and deforms to a horseshoe, the opening on the front.

Before terminating the canopy must be stabilized. Afterwards both brake lines have to be loosened symmetrically and slowly, to avoid that the canopy kicks forward.

Negative spiral

The Atmus 3 has a long way on the brakes and difficulties to enter in a negative spiral. But if one of the brakes is extremely pulled downwards it can happen. The side with the brake pulled down enters in a stall, while the other side maintains open. In this case the brake must be loosened at once, before the glider turns 180°, in order to get the glider back to normal flight. Depending on the situation in which the brake is loosened, the canopy can react quite dynamic and kick forward provoking a collapse.



Line Over

If the tip of the wing is trapped in lines it could cause a positive spiral, which is difficult to control. To get out of this situation, first stabilize your wing and get him into normal flight. In other words control direction. Then pump on the side of the Line Over. During this procedure lean on the opposite side, otherwise there is a risk to turn or increase the spiral.

You also may try to pull the stabilo lines SR, the outer lines on the blue riser B, to free the canopy. Watch out for the brake to avoid a stall on the clean side.

If the Line Over is big and all the counter action does not help and the glider is not to manage, release the reserve, whilst you are having height enough.

Emergency flying

In case of a brake line crack or the brake line is trapped or anything else happened and doesn't allow to use the brakes, use the C risers and weight shifting to steer the glider. Land on the nearest possible side. This situation could happen in case of poor maintenance of the equipment or an extreme flight situation.



Attention: the steering commands on C risers are much shorter than on the brake lines.

PACKING YOUR PARAGLIDER

There are different ways who can help to extend the life of your paraglider. One way is to fold the glider right. It's most important to watch out for the reinforcements to maintain the take off characteristics and the performance. We are recommending the "Origami Method" and the use of a Origami-Pack Sack (see below). Together with your glider you get a traditional pack sack who also protects your glider. How to use it we describe after the "Origami Method".

Folding Bag



Step 1: Open the folding bag and pull the partially in. The outside will look like a cabbage. This way you're avoiding that the glider drags over the ground during folding.

Step 2: Begin with the center of the trailing edge. Put one profile over the other. Each side separate.





Step 4: Fold the wing like an accordion from both sides and close the folding bag. Watch out for the lines and fabric closing the zipper.

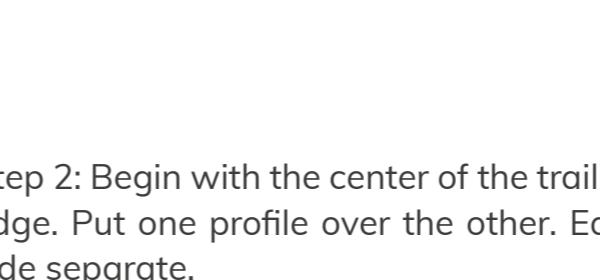


Step 5: At last fold the sack as shown in the photo. This method is very gentle to the more stiffer parts of the glider.

Traditional-Method



Step 3: Now do it in the same way with the leading edge profiles. Put the reinforcements of top and bottom in the right way, don't close the cell openings and push out the fabric.



Step 2: Begin with the center of the trailing edge. Put one profile over the other. Each side separate.



Step 1: Bundle up your glider in form of a cabbage. This way you're avoiding that the glider drags over the ground during folding.



Step 3: Now do it in the same way with the leading edge profiles. Put the reinforcements of top and bottom in the right way, don't close the cell openings and push out the fabric.

Step 4: Fold the wing like an accordion from both sides and put one side over the other.
Now all reinforcements are laying side-wise one above the other.



Step 5: Fold the sack as shown in the photo. This method is very gentle to the more stiffer parts of the glider.



Step 6: At last put the glider into the protection bag.

Storing

Most part of the glider fabric is Nylon. As all other synthetic materials it suffers and deteriorates under the influence of ultraviolet radiation (UV). It loses its stiffness and gets more porous. Whenever it is possible avoid to submit your glider to the sun light, it has a high UV rate, especially in heights. It is recommended to store your paraglider very well whilst it is not in use. It should be stored dry in a dry place, protected from UV rays, distant from chemical products. Avoid to store the glider in hot places like the trunk of a car.

Back Pack

We recommend that you store your equipment in the back pack. That way it is easy to transport and protect. Your back pack was designed to be useful and comfortable. Do it this way:



Step 1: Open your back pack and put your glider in.



Step 2: Your harness put above the glider and close the zipper.



Step 3: Store your helmet and accessories between the glider and the harness or in the upper part of the back pack.

Step 4: Close all parts and pockets of the back pack.



TIPS FOR CARE

- Over-stressing of individual lines, more than normal load in flight, should be avoided. An excessive deformation is irreversible and can't be undone. For the same reason avoid stepping on the lines, bending or folding them, especially the main lines.
- Always open the glider on clean ground, otherwise dirt could penetrate the fabric, shorten the lines or damage the canopy. Lines should not be entangled to objects during the phase of inflation, otherwise they could be deformed or damaged. Never step on the canopy, especially not on hard ground.
- Take offs and landings under strong wind conditions could force the glider to crash uncontrolled with high velocity on the ground, the crash could damage fabric and sewings.
- In case of a Line Over the brake lines could wear off or a main line could be cut by a brake line or crack by friction.
- Handling the paraglider on a earthy ground under strong wind conditions accelerates the aging process of your equipment.
- After a water or tree landing the paraglider must be sent for inspection to an authorized dealer's workshop.
- It must be avoided that sand, stones or snow enter in the cells, otherwise the weight on the trailing edge could brake the glider and cause a full-stall. Besides, the sharped edges could damage the sail's fabric.
- After the landing be careful, avoid crashing the leading edge on the ground. Otherwise the material and sewings of the cell openings could be damaged.
- In case the paraglider gets in contact with salty water, he must be washed with sweet water and dry in the shadow. Never use tools to accelerate the drying process. Salty water could reduce the line resistance and increase the porosity of the fabric, even washed out with sweet water.
- After any kind of accident: the equipment must be sent for inspection to an authorized dealer's workshop or to the manufacturer.
- Keep up to the required inspection data, to assure that your equipment is always save for use and within the certification requirements.

INSPECTION

Your paraglider has strictly to follow the required inspection intervals. The first inspection check is mandatory completing 24 months or 100 flights, whichever comes first.

After the first inspection any wing must be checked yearly or at each 100 flights, whichever comes first. In any of these inspections may occur that a shorter period for the next inspection will be defined (f. ex. 6 months or 50 flights).

Without performing the mandatory inspections, the paraglider loses its certification and the warranty becomes null and void.

After any kind of accident or a long period without use: sent the paraglider for inspection to an authorized dealer's workshop or to the manufacturer. It's for your own good.

Minor repairs (see below) you could do by yourself, but all other repairs must only be made by an authorized dealer's workshop or the manufacturer.

REPAIRS

Repairs must only be made by an authorized dealer's workshop or to the manufacturer. In case of minor repairs you are receiving with your glider a basic repair kit. It contains adhesive labels in case of minor tears and quick link sealing.

FABRIC TEARS

Small tears up to 10 cm away from the line suspension points may be fixed by yourself. Beyond that the maintenance must be made by an authorized dealer's workshop or the manufacturer.

- Clean the spot where the adhesive label will be applied with a humid cloth.
- The adhesive label has to be at least 2,5 cm larger than the tear.
- Round the edges, otherwise the adhesive label could loosen after the application.
- Apply on both sides of the tear.

LINE CRACK

In case of a line crack we recommend to contact your dealer, an authorized dealer's workshop or the manufacturer. After the repair test the glider on the ground and check if everything is alright.

QUICK LINK SEALING

Along with your kit you're get sealing for the quick links. Don't leave your risers without them, because they avoid the movement of the screw nut, making it impossible to open.

WARRANTY

Every paraglider manufactured by SOL Paragliders has a Warranty of 3 Years or 300 Hours of Flight, whichever comes first. Our technology, through the utilization of quality materials and the adoption of new manufacturing processes, allows us to offer you, our client this added bonus.

1. This warranty refers to materials and possible processing defects of the paraglider. The conditions below have to be considered carefully.
2. This warranty is valid for all paragliders from SOL with LTF/EN certification, rated for leisure use only. This warranty does not include paragliders used professionally (school, competitions, aerobatics, etc).
3. Due to the extreme use, competition and acro paragliders and gliders used professionally are not included in the SOL 3 years (300 flight hours) warranty. All paragliders used for competition or acro have a 1 year warrant for production errors.

WARRANTY TERMS

1. A warranty registration has to be filled out correctly within 30 days after the purchase (you can find the registration here: www.solparagliders.com.br/registro.php).
2. All flights must be logged providing information on date, place and length of flight.
3. The equipment must be kept and used in accordance with the instructions provided in this manual. All the storage, folding, cleaning and care instructions must be carefully taken.
4. Maintenance and inspections can only be performed by the manufacturer or authorized dealers workshops and must be properly documented.
5. Your paraglider has strictly to follow the required inspection intervals. The first inspection check is mandatory completing 24 months or 100 flights, whichever comes first. After the first inspection any wing must be checked yearly or at each 100 flights, whichever comes first. In any of these inspections may occur that a shorter period for the next inspection will be defined (f. ex. 6 months or 50 flights). Without performing the mandatory inspections, the paraglider loses its certification and the warranty becomes null and void.
6. The owner is responsible for all shipping expenses to and from the manufacturer.



7. In order to make a plea for repair or equipment exchange, which shall be decided and performed only by SOL Paragliders, the owner must send the paraglider to the manufacturer with the following documents:

- A copy of all inspection data and the log book (flight data)
- A copy of the warranty [registration from SOL Paragliders](#)

TIS WARRANTY DOES NOT COVER

1. Any alterations on original fabric colors, lines and risers.
2. Any damage caused by chemical products, sand, friction, cleaning products or salt water.
3. Any damage caused as a result of errors during operation of the harness, incidents or emergency situations.
4. Any damage caused by inadequate operation of the paraglider.
5. A paraglider that may have been subjected of any alteration from the original design and without proper permission from SOL Paragliders.
6. Damages caused by inappropriate transport, storage or settings of the paraglider.
7. Damages caused by the use of not compatible components with the paraglider.
8. Damages caused by the use of inappropriate packaging for the transport.
9. Products without original identification label and serial number.
10. Handling the paraglider otherwise than to the instructions given in the owner's manual.



ENVIRONMENT AND RECYCLING

Please be aware of our environment: don't toss your garbage into nature, respect the animals. Remember: nature is our gliders engine.

If your paraglider gets out of use remember it cannot be recycled. Please give it to your dealer or your flying-school, they should know how to handle it.

OPERATION LIMITS

In conformity of LTF standard:

Temperatures between -30 degree till +70 degree of Celsius during the storage shouldn't influence the use and security.

Temperatures between -30 degree till +50 degree of Celsius and a variation of humidity between 25% and 100% during the use shouldn't influence the use and security.

Remember: Your product is a high quality product and was made out of carefully chosen materials. Store your equipment carefully and keep up the maintenance. The operating temperature limit is below -30° C.

FINAL WORDS

Safety is the major theme of our sport. In order to fly safely, pilots must train, study, practice and be alert to the dangers around us. In order to achieve excellent safety levels, we must fly regularly as much as possible, don't go beyond our limitations and avoid exposing ourselves to unnecessary dangers. Learning to fly is a slow process and takes years, so don't pressure yourself. If conditions are not favorable, keep your equipment stored away.

Don't overestimate your skills and be honest with yourself. Every year we see many accidents which in most cases could be prevented with a minor adjustment.

We are a part of the community in which we live: friends, family and even people we don't necessarily know worry about us. Our obligation towards this community is to keep ourselves healthy and that at each landing we will be one landing happier than before. We fly so that we can feel more alive.

We wish you good and safe flights with your new paraglider.

SOL Paragliders Team !!



TECHNICAL DATA

Weight, measure and data

Model	XXS	XS	S	M	L	XL	XXL	
Cells	55	55	55	55	55	55	55	
Real Surface	20,44	22,32	24,28	25,81	27,54	29,82	32,37	m ²
Real Span	10,48	10,96	11,43	11,78	12,17	12,66	13,19	m
Real A/R	5,38	5,38	5,38	5,38	5,38	5,38	5,38	
Projected Surface	17,90	19,54	21,26	22,60	24,11	26,11	28,35	m ²
Projected Span	8,59	8,97	9,36	9,65	9,96	10,37	10,80	m
Projected A/R	4,12	4,12	4,12	4,12	4,12	4,12	4,12	
Line diameter	Liros Dyneema PPSLS 1.05 - 1.2 - 1.58 / Cousin Vectran 0.6 - 0.9 - 1.0 / Cousin Technora 2.1							mm
Height	691	720	748	770	794	824	856	cm
Profile max.	244	255	266	274	283	295	307	cm
Profile min.	52	54	57	59	60	63	66	cm
Paraglider weight	4,7	5,1	5,6	5,8	6,1	6,6	7,1	kg
Take off weight	55-70	65-80	75-90	85-100	95-110	105-125	120-140	Kg
Certification	Load	Load	EN / LTF B	Load				
Brake line length under max. load	65	68	71	73	75	78	82	cm
Accelerator	13	13	13	13	13	13	13	cm
Risers	3 + 1	3 + 1	3 + 1	3 + 1	3 + 1	3 + 1	3 + 1	
Trimmer	0	0	0	0	0	0	0	
Other connected or adjustable parts	0	0	0	0	0	0	0	



Weight can vary between 150g depending on the batch of materials and weather conditions.



Parts and materials

Top	WTX 40 PU + Silicon 40 gr/sm
Bottom	WTX 40 PU + Silicon 40 gr/sm
Profiles/Diagonal tapes	Pro-Nyl High Tenacity Nylon rip-stop Hard finish 36 gr/sm
Reinforcements	Nylon Maxfio 2,5 mm
Reinforcements inside/outside	Cetim Polyester 25mm
Loops	FRL0027 Polyester 10 X 1.0 mm white
Sewing thread on canopy	Graal Polyester filament continuous 60 white
Sewing thread on risers	Nylbond Polyester filament continuous 30 - 40 Black
Lines	Liros Dyneema PPSLS 125 - 180 - 260 / Cousin Vectran 12100 - 12240 - 16330 / Cousin Technora 988
Quick Links	Ansung Precision 15 mm. 800 kg
Risers	Polyester Venus 15 mm. 1.600 kg
Pulleys	Nylon Sol 12 mm / ISR 16 mm ball bearing
Magnet clip	Ímanes de Alnico 15 mm - ISR
Accelerator clip	Aluminum - ISR



For more information, contact one of our resellers
<https://www.solparagliders.com.br/revendedores.php>

Lines

Model	PPSLS 125	PPSLS 180	PPSLS 260	12100	12240	16330	988
Manufacturer	Liros GER	Liros GER	Liros GER	Cousin FRA	Cousin FRA	Cousin FRA	Cousin FRA
Number resistance test	LI 870.2020	LI 869.2020	LI 868.2020	LI 877.2020	LI 876.2020	LI 875.2020	LI 879.2020
Diameter	1,05 mm	1,25 mm	1,58 mm	0,6 mm	0,9 mm	1,0	2,1 mm
Material	Dyneema	Dyneema	Dyneema	Vectran	Vectran	Vectran	Technora
Rope coating	Polyester	Polyester	Polyester	No	No	No	Polyester
Resistance after bending	102 daN	146,1 daN	165,3 daN	26 daN	63,2 daN	86,5 daN	142,9 daN



Line lengths

Atmus 3 XXS

	A	B	C	D	F
1	6198	6203			6360
2	6340	6308	6329		6371
3	6493	6466	6479		6403
4	6514	6488	6508		6466
5	6587	6557	6586		6508
6	6637	6603	6636		6492
7	6744	6702	6738	6807	6535
8	6723	6676	6719	6799	6638
9	6743	6692	6740	6827	6776
10	6811	6756	6807	6896	6835
11	6848	6790	6846	6941	6968
12	6820	6759	6818	6920	7165
13	6845	6782	6843	6946	
14	6921	6859	6918	7017	

Measuring incl. risers and carabiners with 5 daN load
Brake line measuring without riser



Atmus 3 S

	A	B	C	D	F
1	6733	6739			6936
2	6885	6852	6877		6950
3	7049	7021	7039		6982
4	7073	7044	7073		7048
5	7148	7118	7151		7097
6	7204	7166	7206		7077
7	7320	7270	7320		7127
8	7294	7239	7298	7393	7236
9	7315	7252	7315	7384	7377
10	7383	7322	7388	7412	7435
11	7423	7360	7426	7486	7571
12	7389	7320	7394	7505	7776
13	7415	7342	7416	7529	
14	7492	7423	7496	7608	

Measuring incl. risers and carabiners with 5 daN load
Brake line measuring without riser



Atmus 3 XS

	A	B	C	D	F
1	6461	6466			6644
2	6608	6576	6598		6657
3	6768	6741	6756		6691
4	6790	6764	6786		6758
5	6866	6835	6867		6802
6	6918	6883	6918		6784
7	7029	6985	7025	7097	6828
8	7006	6957	7004	7088	6935
9	7027	6973	7025	7116	7077
10	7097	7039	7093	7188	7137
11	7134	7074	7133	7234	7273
12	7105	7040	7103	7210	7477
13	7130	7064	7128	7237	
14	7208	7144	7206	7310	

Measuring incl. risers and carabiners with 5 daN load
Brake line measuring without riser



Atmus 3 M

	A	B	C	D	F
1	6936	6939			7156
2	7094	7056	7082		7168
3	7259	7226	7241		7205
4	7279	7249	7274		7276
5	7362	7326	7360		7321
6	7415	7375	7412		7303
7	7532	7482	7530	7609	7345
8	7505	7449	7505	7598	7454
9	7528	7466	7527	7626	7608
10	7600	7535	7597	7700	7667
11	7635	7569	7639	7744	7799
12	7604	7529	7607	7719	8009
13	7628	7552	7627	7743	
14	7711	7635	7708	7821	

Measuring incl. risers and carabiners with 5 daN load
Brake line measuring without riser



Atmus 3 L

	A	B	C	D	F
1	7149	7160			7379
2	7311	7278	7310		7396
3	7484	7457	7480		7438
4	7506	7481	7509		7508
5	7592	7558	7601		7562
6	7648	7611	7652		7539
7	7770	7716	7773	7854	7586
8	7736	7685	7747	7844	7698
9	7762	7700	7767	7868	7851
10	7839	7771	7842	7948	7910
11	7875	7807	7886	7997	8054
12	7837	7767	7847	7969	8268
13	7867	7790	7872	7991	
14	7950	7876	7954	8071	



Measuring incl. risers and carabiners with 5 daN load
Brake line measuring without riser

Atmus 3 XXL

	A	B	C	D	F
1	7702	7712			7974
2	7878	7842	7874		8000
3	8071	8041	8066		8050
4	8097	8068	8102		8134
5	8187	8152	8197		8187
6	8249	8209	8257		8165
7	8378	8327	8381	8470	8215
8	8348	8291	8354	8457	8339
9	8372	8308	8376	8488	8500
10	8453	8385	8456	8571	8563
11	8495	8423	8499	8622	8717
12	8457	8380	8460	8591	8951
13	8485	8406	8488	8620	
14	8577	8499	8579	8706	



Measuring incl. risers and carabiners with 5 daN load
Brake line measuring without riser

Atmus 3 XL

	A	B	C	D	F
1	7428	7435			7682
2	7592	7558	7586		7700
3	7777	7751	7773		7742
4	7803	7778	7809		7822
5	7886	7855	7896		7873
6	7946	7909	7956		7847
7	8067	8018	8076	8163	7894
8	8039	7982	8050	8145	8012
9	8060	7996	8071	8175	8164
10	8135	8073	8144	8256	8223
11	8178	8107	8186	8300	8369
12	8142	8067	8148	8271	8591
13	8165	8086	8173	8301	
14	8251	8173	8261	8381	



Measuring incl. risers and carabiners with 5 daN load
Brake line measuring without riser



Line lengths individually

Atmus 3 XXS

Name	Line reference	Diameter / mm	Length / mm	Number of lines
A1	COUSIN / VECTRAN	0,6	1040	2
A2	COUSIN / VECTRAN	0,6	1181	2
A3	COUSIN / VECTRAN	0,9	430	2
A4	COUSIN / VECTRAN	0,9	452	2
A5	COUSIN / VECTRAN	0,9	389	2
A6	COUSIN / VECTRAN	0,9	439	2
A7	COUSIN / VECTRAN	1.0	1131	2
A8	COUSIN / VECTRAN	1.0	1109	2
A9	COUSIN / VECTRAN	1.0	1130	2
A10	COUSIN / VECTRAN	1.0	1196	2
A11	COUSIN / VECTRAN	1.0	1232	2
A12	COUSIN / VECTRAN	1.0	1204	2
A13	COUSIN / VECTRAN	1.0	1229	2
A14	COUSIN / VECTRAN	1.0	1304	2
AM1	LIROS PPSLS	1,05	1065	2
AM2	LIROS PPSLS	1,05	1200	2
AM3	LIROS PPSLS	1,2	1110	2
AM4	LIROS PPSLS	1,2	1110	2
AM5	LIROS PPSLS	1,2	1110	2
AM6	LIROS PPSLS	1,2	1110	2
AR1	LIROS PPSLS	1,2	4480	2
AR2	LIROS PPSLS	1,58	3980	2
AR3	LIROS PPSLS	1,58	3980	2
B1	COUSIN / VECTRAN	0,6	1045	2
B2	COUSIN / VECTRAN	0,6	1150	2
B3	COUSIN / VECTRAN	0,9	404	2
B4	COUSIN / VECTRAN	0,9	426	2
B5	COUSIN / VECTRAN	0,9	360	2
B6	COUSIN / VECTRAN	0,9	405	2
B7	COUSIN / VECTRAN	1.0	1089	2
B8	COUSIN / VECTRAN	1.0	1063	2
B9	COUSIN / VECTRAN	1.0	1078	2
B10	COUSIN / VECTRAN	1.0	1142	2
B11	COUSIN / VECTRAN	1.0	1175	2
B12	COUSIN / VECTRAN	1.0	1143	2
B13	COUSIN / VECTRAN	1.0	1166	2
B14	COUSIN / VECTRAN	1.0	1242	2
BM1	LIROS PPSLS	1,05	1065	2
BM2	LIROS PPSLS	1,05	1200	2
BM3	LIROS PPSLS	1,2	1110	2
BM4	LIROS PPSLS	1,2	1110	2
BM5	LIROS PPSLS	1,2	1110	2
BM6	LIROS PPSLS	1,2	1110	2
SM	COUSIN / VECTRAN	0,9	320	4
SR	LIROS PPSLS	1,05	4325	2
BR1	LIROS PPSLS	1,2	4480	2
BR2	LIROS PPSLS	1,58	3980	2
BR3	LIROS PPSLS	1,58	3980	2

Atmus 3 XXS

Name	Line reference	Diameter / mm	Length / mm	Number of lines
C2	COUSIN / VECTRAN	0,6	1170	2
C3	COUSIN / VECTRAN	0,9	420	2
C4	COUSIN / VECTRAN	0,9	449	2
C5	COUSIN / VECTRAN	0,9	392	2
C6	COUSIN / VECTRAN	0,9	441	2
C7	COUSIN / VECTRAN	0,9	1133	2
C8	COUSIN / VECTRAN	0,9	1113	2
C9	COUSIN / VECTRAN	0,9	1133	2
C10	COUSIN / VECTRAN	0,9	1199	2
C11	COUSIN / VECTRAN	0,9	1237	2
C12	COUSIN / VECTRAN	0,9	1209	2
C13	COUSIN / VECTRAN	0,9	1233	2
C14	COUSIN / VECTRAN	0,9	1308	2
CM1	LIROS PPSLS	125	1,05	1065
CM2	LIROS PPSLS	125	1,05	1200
CM3	LIROS PPSLS	125	1,05	1110
CM4	LIROS PPSLS	125	1,05	1110
CM5	LIROS PPSLS	125	1,05	1110
CM6	LIROS PPSLS	125	1,05	1110
CR1	LIROS PPSLS	180	1,2	4480
CR2	LIROS PPSLS	180	1,2	3980
CR3	LIROS PPSLS	180	1,2	3980
D7	COUSIN / VECTRAN	0,6	1201	2
D8	COUSIN / VECTRAN	0,6	1193	2
D9	COUSIN / VECTRAN	0,6	1220	2
D10	COUSIN / VECTRAN	0,6	1289	2
D11	COUSIN / VECTRAN	0,6	1333	2
D12	COUSIN / VECTRAN	0,6	1311	2
D13	COUSIN / VECTRAN	0,6	1336	2
D14	COUSIN / VECTRAN	0,6	1406	2
F1	COUSIN / VECTRAN	0,6	718	2
F2	COUSIN / VECTRAN	0,6	727	2
F3	COUSIN / VECTRAN	0,6	756	2
F4	COUSIN / VECTRAN	0,6	816	2
F5	COUSIN / VECTRAN	0,6	857	2
F6	COUSIN / VECTRAN	0,6	841	2
F7	COUSIN / VECTRAN	0,6	883	2
F8	COUSIN / VECTRAN	0,6	986	2
F9	COUSIN / VECTRAN	0,6	943	2
F10	COUSIN / VECTRAN	0,6	1002	2
F11	COUSIN / VECTRAN	0,6	1130	2
F12	COUSIN / VECTRAN	0,6	1323	2
FM3	COUSIN / VECTRAN	0,6	935	12
FM2	COUSIN / VECTRAN	0,9	2405	2
FM1	COUSIN / VECTRAN	0,9	2225	4
FR	COUSIN / TECHNORA	988	2,1	2520



Atmus 3 XS

Name	Line reference	Diameter / mm	Length / mm	Number of lines
A1	COUSIN / VECTRAN	0,6	1088	2
A2	COUSIN / VECTRAN	0,6	1234	2
A3	COUSIN / VECTRAN	0,9	451	2
A4	COUSIN / VECTRAN	0,9	473	2
A5	COUSIN / VECTRAN	0,9	408	2
A6	COUSIN / VECTRAN	0,9	460	2
A7	COUSIN / VECTRAN	1.0	1181	2
A8	COUSIN / VECTRAN	1.0	1157	2
A9	COUSIN / VECTRAN	1.0	1178	2
A10	COUSIN / VECTRAN	1.0	1247	2
A11	COUSIN / VECTRAN	1.0	1283	2
A12	COUSIN / VECTRAN	1.0	1253	2
A13	COUSIN / VECTRAN	1.0	1278	2
A14	COUSIN / VECTRAN	1.0	1356	2
AM1	LIROS PPSLS	1,05	1115	2
AM2	LIROS PPSLS	1,05	1255	2
AM3	LIROS PPSLS	1,2	1160	2
AM4	LIROS PPSLS	1,2	1160	2
AM5	LIROS PPSLS	1,2	1160	2
AM6	LIROS PPSLS	1,2	1160	2
AR1	LIROS PPSLS	1,2	4685	2
AR2	LIROS PPSLS	1,58	4165	2
AR3	LIROS PPSLS	1,58	4165	2
B1	COUSIN / VECTRAN	0,6	1093	2
B2	COUSIN / VECTRAN	0,6	1202	2
B3	COUSIN / VECTRAN	0,9	424	2
B4	COUSIN / VECTRAN	0,9	447	2
B5	COUSIN / VECTRAN	0,9	378	2
B6	COUSIN / VECTRAN	0,9	425	2
B7	COUSIN / VECTRAN	1.0	1137	2
B8	COUSIN / VECTRAN	1.0	1109	2
B9	COUSIN / VECTRAN	1.0	1124	2
B10	COUSIN / VECTRAN	1.0	1190	2
B11	COUSIN / VECTRAN	1.0	1223	2
B12	COUSIN / VECTRAN	1.0	1189	2
B13	COUSIN / VECTRAN	1.0	1212	2
B14	COUSIN / VECTRAN	1.0	1291	2
BM1	LIROS PPSLS	1,05	1115	2
BM2	LIROS PPSLS	1,05	1255	2
BM3	LIROS PPSLS	1,2	1160	2
BM4	LIROS PPSLS	1,2	1160	2
BM5	LIROS PPSLS	1,2	1160	2
BM6	LIROS PPSLS	1,2	1160	2
SM	COUSIN / VECTRAN	0,9	335	4
SR	LIROS PPSLS	1,05	4525	2
BR1	LIROS PPSLS	1,2	4685	2
BR2	LIROS PPSLS	1,58	4165	2
BR3	LIROS PPSLS	1,58	4165	2

Atmus 3 XS

Name	Line reference	Diameter / mm	Length / mm	Number of lines
C2	COUSIN / VECTRAN	0,6	1225	2
C3	COUSIN / VECTRAN	0,9	442	2
C4	COUSIN / VECTRAN	0,9	472	2
C5	COUSIN / VECTRAN	0,9	412	2
C6	COUSIN / VECTRAN	0,9	463	2
C7	COUSIN / VECTRAN	0,9	1184	2
C8	COUSIN / VECTRAN	0,9	1163	2
C9	COUSIN / VECTRAN	0,9	1183	2
C10	COUSIN / VECTRAN	0,9	1251	2
C11	COUSIN / VECTRAN	0,9	1290	2
C12	COUSIN / VECTRAN	0,9	1259	2
C13	COUSIN / VECTRAN	0,9	1284	2
C14	COUSIN / VECTRAN	0,9	1361	2
CM1	LIROS PPSLS	125	1,05	1115
CM2	LIROS PPSLS	125	1,05	1255
CM3	LIROS PPSLS	125	1,05	1160
CM4	LIROS PPSLS	125	1,05	1160
CM5	LIROS PPSLS	125	1,05	1160
CM6	LIROS PPSLS	125	1,05	1160
CR1	LIROS PPSLS	180	1,2	4685
CR2	LIROS PPSLS	180	1,2	4165
CR3	LIROS PPSLS	180	1,2	4165
D7	COUSIN / VECTRAN	0,6	1256	2
D8	COUSIN / VECTRAN	0,6	1246	2
D9	COUSIN / VECTRAN	0,6	1274	2
D10	COUSIN / VECTRAN	0,6	1345	2
D11	COUSIN / VECTRAN	0,6	1390	2
D12	COUSIN / VECTRAN	0,6	1366	2
D13	COUSIN / VECTRAN	0,6	1392	2
D14	COUSIN / VECTRAN	0,6	1464	2
F1	COUSIN / VECTRAN	0,6	752	2
F2	COUSIN / VECTRAN	0,6	763	2
F3	COUSIN / VECTRAN	0,6	795	2
F4	COUSIN / VECTRAN	0,6	858	2
F5	COUSIN / VECTRAN	0,6	901	2
F6	COUSIN / VECTRAN	0,6	883	2
F7	COUSIN / VECTRAN	0,6	926	2
F8	COUSIN / VECTRAN	0,6	1033	2
F9	COUSIN / VECTRAN	0,6	989	2
F10	COUSIN / VECTRAN	0,6	1048	2
F11	COUSIN / VECTRAN	0,6	1180	2
F12	COUSIN / VECTRAN	0,6	1379	2
FM3	COUSIN / VECTRAN	0,6	975	12
FM2	COUSIN / VECTRAN	0,9	2510	2
FM1	COUSIN / VECTRAN	0,9	2325	4
FR	COUSIN / TECHNORA	2,1	2630	2



Atmus 3 S

Name	Line reference	Diameter / mm	Length / mm	Number of lines
A1	COUSIN / VECTRAN	0,6	1130	2
A2	COUSIN / VECTRAN	0,6	1283	2
A3	COUSIN / VECTRAN	0,9	461	2
A4	COUSIN / VECTRAN	0,9	484	2
A5	COUSIN / VECTRAN	0,9	417	2
A6	COUSIN / VECTRAN	0,9	471	2
A7	COUSIN / VECTRAN	1.0	1235	2
A8	COUSIN / VECTRAN	1.0	1210	2
A9	COUSIN / VECTRAN	1.0	1231	2
A10	COUSIN / VECTRAN	1.0	1302	2
A11	COUSIN / VECTRAN	1.0	1340	2
A12	COUSIN / VECTRAN	1.0	1307	2
A13	COUSIN / VECTRAN	1.0	1332	2
A14	COUSIN / VECTRAN	1.0	1413	2
AM1	LIROS PPSLS	1,05	1165	2
AM2	LIROS PPSLS	1,05	1310	2
AM3	LIROS PPSLS	1,2	1210	2
AM4	LIROS PPSLS	1,2	1210	2
AM5	LIROS PPSLS	1,2	1210	2
AM6	LIROS PPSLS	1,2	1210	2
AR1	LIROS PPSLS	1,2	4900	2
AR2	LIROS PPSLS	1,58	4345	2
AR3	LIROS PPSLS	1,58	4345	2
B1	COUSIN / VECTRAN	0,6	1137	2
B2	COUSIN / VECTRAN	0,6	1250	2
B3	COUSIN / VECTRAN	0,9	434	2
B4	COUSIN / VECTRAN	0,9	458	2
B5	COUSIN / VECTRAN	0,9	386	2
B6	COUSIN / VECTRAN	0,9	435	2
B7	COUSIN / VECTRAN	1.0	1190	2
B8	COUSIN / VECTRAN	1.0	1160	2
B9	COUSIN / VECTRAN	1.0	1175	2
B10	COUSIN / VECTRAN	1.0	1243	2
B11	COUSIN / VECTRAN	1.0	1277	2
B12	COUSIN / VECTRAN	1.0	1241	2
B13	COUSIN / VECTRAN	1.0	1264	2
B14	COUSIN / VECTRAN	1.0	1345	2
BM1	LIROS PPSLS	1,05	1165	2
BM2	LIROS PPSLS	1,05	1310	2
BM3	LIROS PPSLS	1,2	1210	2
BM4	LIROS PPSLS	1,2	1210	2
BM5	LIROS PPSLS	1,2	1210	2
BM6	LIROS PPSLS	1,2	1210	2
SM	COUSIN / VECTRAN	0,9	350	4
SR	LIROS PPSLS	1,05	4730	2
BR1	LIROS PPSLS	1,2	4900	2
BR2	LIROS PPSLS	1,58	4345	2
BR3	LIROS PPSLS	1,58	4345	2

Atmus 3 S

Name	Line reference	Diameter / mm	Length / mm	Number of lines
C2	COUSIN / VECTRAN	0,6	1275	2
C3	COUSIN / VECTRAN	0,9	454	2
C4	COUSIN / VECTRAN	0,9	485	2
C5	COUSIN / VECTRAN	0,9	423	2
C6	COUSIN / VECTRAN	0,9	476	2
C7	COUSIN / VECTRAN	0,9	1240	2
C8	COUSIN / VECTRAN	0,9	1217	2
C9	COUSIN / VECTRAN	0,9	1237	2
C10	COUSIN / VECTRAN	0,9	1308	2
C11	COUSIN / VECTRAN	0,9	1347	2
C12	COUSIN / VECTRAN	0,9	1314	2
C13	COUSIN / VECTRAN	0,9	1339	2
C14	COUSIN / VECTRAN	0,9	1419	2
CM1	LIROS PPSLS	125	1,05	1165
CM2	LIROS PPSLS	125	1,05	1310
CM3	LIROS PPSLS	125	1,05	1210
CM4	LIROS PPSLS	125	1,05	1210
CM5	LIROS PPSLS	125	1,05	1210
CM6	LIROS PPSLS	125	1,05	1210
CR1	LIROS PPSLS	180	1,2	4900
CR2	LIROS PPSLS	180	1,2	4345
CR3	LIROS PPSLS	180	1,2	4345
D7	COUSIN / VECTRAN	0,6	1315	2
D8	COUSIN / VECTRAN	0,6	1305	2
D9	COUSIN / VECTRAN	0,6	1333	2
D10	COUSIN / VECTRAN	0,6	1406	2
D11	COUSIN / VECTRAN	0,6	1452	2
D12	COUSIN / VECTRAN	0,6	1426	2
D13	COUSIN / VECTRAN	0,6	1452	2
D14	COUSIN / VECTRAN	0,6	1527	2
F1	COUSIN / VECTRAN	0,6	788	2
F2	COUSIN / VECTRAN	0,6	802	2
F3	COUSIN / VECTRAN	0,6	837	2
F4	COUSIN / VECTRAN	0,6	904	2
F5	COUSIN / VECTRAN	0,6	949	2
F6	COUSIN / VECTRAN	0,6	930	2
F7	COUSIN / VECTRAN	0,6	974	2
F8	COUSIN / VECTRAN	0,6	1084	2
F9	COUSIN / VECTRAN	0,6	1034	2
F10	COUSIN / VECTRAN	0,6	1093	2
F11	COUSIN / VECTRAN	0,6	1229	2
F12	COUSIN / VECTRAN	0,6	1434	2
FM3	COUSIN / VECTRAN	0,6	1020	12
FM2	COUSIN / VECTRAN	0,9	2620	2
FM1	COUSIN / VECTRAN	0,9	2425	4
FR	COUSIN / TECHNORA	2,1	2730	2



Atmus 3 M

Name	Line reference	Diameter / mm	Length / mm	Number of lines
A1	COUSIN / VECTRAN	0,6	1166	2
A2	COUSIN / VECTRAN	0,6	1323	2
A3	COUSIN / VECTRAN	0,9	482	2
A4	COUSIN / VECTRAN	0,9	505	2
A5	COUSIN / VECTRAN	0,9	436	2
A6	COUSIN / VECTRAN	0,9	491	2
A7	COUSIN / VECTRAN	1.0	1273	2
A8	COUSIN / VECTRAN	1.0	1247	2
A9	COUSIN / VECTRAN	1.0	1268	2
A10	COUSIN / VECTRAN	1.0	1341	2
A11	COUSIN / VECTRAN	1.0	1379	2
A12	COUSIN / VECTRAN	1.0	1345	2
A13	COUSIN / VECTRAN	1.0	1371	2
A14	COUSIN / VECTRAN	1.0	1453	2
AM1	LIROS PPSLS	1,05	1200	2
AM2	LIROS PPSLS	1,05	1350	2
AM3	LIROS PPSLS	1,2	1250	2
AM4	LIROS PPSLS	1,2	1250	2
AM5	LIROS PPSLS	1,2	1250	2
AM6	LIROS PPSLS	1,2	1250	2
AR1	LIROS PPSLS	1,2	5050	2
AR2	LIROS PPSLS	1,58	4480	2
AR3	LIROS PPSLS	1,58	4480	2
B1	COUSIN / VECTRAN	0,6	1173	2
B2	COUSIN / VECTRAN	0,6	1290	2
B3	COUSIN / VECTRAN	0,9	454	2
B4	COUSIN / VECTRAN	0,9	478	2
B5	COUSIN / VECTRAN	0,9	404	2
B6	COUSIN / VECTRAN	0,9	454	2
B7	COUSIN / VECTRAN	1.0	1227	2
B8	COUSIN / VECTRAN	1.0	1195	2
B9	COUSIN / VECTRAN	1.0	1211	2
B10	COUSIN / VECTRAN	1.0	1280	2
B11	COUSIN / VECTRAN	1.0	1314	2
B12	COUSIN / VECTRAN	1.0	1276	2
B13	COUSIN / VECTRAN	1.0	1300	2
B14	COUSIN / VECTRAN	1.0	1384	2
BM1	LIROS PPSLS	1,05	1200	2
BM2	LIROS PPSLS	1,05	1350	2
BM3	LIROS PPSLS	1,2	1250	2
BM4	LIROS PPSLS	1,2	1250	2
BM5	LIROS PPSLS	1,2	1250	2
BM6	LIROS PPSLS	1,2	1250	2
SM	COUSIN / VECTRAN	0,9	360	4
SR	LIROS PPSLS	1,05	4880	2
BR1	LIROS PPSLS	1,2	5050	2
BR2	LIROS PPSLS	1,58	4480	2
BR3	LIROS PPSLS	1,58	4480	2

Atmus 3 M

Name	Line reference	Diameter / mm	Length / mm	Number of lines
C2	COUSIN / VECTRAN	0,6	1316	2
C3	COUSIN / VECTRAN	0,9	476	2
C4	COUSIN / VECTRAN	0,9	508	2
C5	COUSIN / VECTRAN	0,9	443	2
C6	COUSIN / VECTRAN	0,9	497	2
C7	COUSIN / VECTRAN	0,9	1279	2
C8	COUSIN / VECTRAN	0,9	1255	2
C9	COUSIN / VECTRAN	0,9	1276	2
C10	COUSIN / VECTRAN	0,9	1347	2
C11	COUSIN / VECTRAN	0,9	1387	2
C12	COUSIN / VECTRAN	0,9	1353	2
C13	COUSIN / VECTRAN	0,9	1378	2
C14	COUSIN / VECTRAN	0,9	1460	2
CM1	LIROS PPSLS	125	1,05	1200
CM2	LIROS PPSLS	125	1,05	1350
CM3	LIROS PPSLS	125	1,05	1250
CM4	LIROS PPSLS	125	1,05	1250
CM5	LIROS PPSLS	125	1,05	1250
CM6	LIROS PPSLS	125	1,05	1250
CR1	LIROS PPSLS	180	1,2	5050
CR2	LIROS PPSLS	180	1,2	4480
CR3	LIROS PPSLS	180	1,2	4480
D7	COUSIN / VECTRAN	0,6	1357	2
D8	COUSIN / VECTRAN	0,6	1346	2
D9	COUSIN / VECTRAN	0,6	1374	2
D10	COUSIN / VECTRAN	0,6	1449	2
D11	COUSIN / VECTRAN	0,6	1495	2
D12	COUSIN / VECTRAN	0,6	1469	2
D13	COUSIN / VECTRAN	0,6	1495	2
D14	COUSIN / VECTRAN	0,6	1572	2
F1	COUSIN / VECTRAN	0,6	815	2
F2	COUSIN / VECTRAN	0,6	830	2
F3	COUSIN / VECTRAN	0,6	868	2
F4	COUSIN / VECTRAN	0,6	937	2
F5	COUSIN / VECTRAN	0,6	984	2
F6	COUSIN / VECTRAN	0,6	964	2
F7	COUSIN / VECTRAN	0,6	1009	2
F8	COUSIN / VECTRAN	0,6	1121	2
F9	COUSIN / VECTRAN	0,6	1069	2
F10	COUSIN / VECTRAN	0,6	1129	2
F11	COUSIN / VECTRAN	0,6	1267	2
F12	COUSIN / VECTRAN	0,6	1477	2
FM3	COUSIN / VECTRAN	0,6	1050	12
FM2	COUSIN / VECTRAN	0,9	2700	2
FM1	COUSIN / VECTRAN	0,9	2500	4
FR	COUSIN / TECHNORA	2,1	2810	2



Atmus 3 L

Name	Line reference	Diameter / mm	Length / mm	Number of lines
A1	COUSIN / VECTRAN	0,6	1212	2
A2	COUSIN / VECTRAN	0,6	1374	2
A3	COUSIN / VECTRAN	0,9	503	2
A4	COUSIN / VECTRAN	0,9	527	2
A5	COUSIN / VECTRAN	0,9	455	2
A6	COUSIN / VECTRAN	0,9	512	2
A7	COUSIN / VECTRAN	1.0	1318	2
A8	COUSIN / VECTRAN	1.0	1290	2
A9	COUSIN / VECTRAN	1.0	1312	2
A10	COUSIN / VECTRAN	1.0	1387	2
A11	COUSIN / VECTRAN	1.0	1425	2
A12	COUSIN / VECTRAN	1.0	1390	2
A13	COUSIN / VECTRAN	1.0	1415	2
A14	COUSIN / VECTRAN	1.0	1500	2
AM1	LIROS PPSLS	125	1,05	1240
AM2	LIROS PPSLS	125	1,05	1395
AM3	LIROS PPSLS	180	1,2	1290
AM4	LIROS PPSLS	180	1,2	1290
AM5	LIROS PPSLS	180	1,2	1290
AM6	LIROS PPSLS	180	1,2	1290
AR1	LIROS PPSLS	180	1,2	5215
AR2	LIROS PPSLS	260	1,58	4630
AR3	LIROS PPSLS	260	1,58	4630
B1	COUSIN / VECTRAN	12100	0,6	1220
B2	COUSIN / VECTRAN	12100	0,6	1341
B3	COUSIN / VECTRAN	12240	0,9	475
B4	COUSIN / VECTRAN	12240	0,9	500
B5	COUSIN / VECTRAN	12240	0,9	422
B6	COUSIN / VECTRAN	12240	0,9	475
B7	COUSIN / VECTRAN	16330	1.0	1270
B8	COUSIN / VECTRAN	16330	1.0	1237
B9	COUSIN / VECTRAN	16330	1.0	1252
B10	COUSIN / VECTRAN	16330	1.0	1324
B11	COUSIN / VECTRAN	16330	1.0	1358
B12	COUSIN / VECTRAN	16330	1.0	1318
B13	COUSIN / VECTRAN	16330	1.0	1342
B14	COUSIN / VECTRAN	16330	1.0	1428
BM1	LIROS PPSLS	125	1,05	1240
BM2	LIROS PPSLS	125	1,05	1395
BM3	LIROS PPSLS	180	1,2	1290
BM4	LIROS PPSLS	180	1,2	1290
BM5	LIROS PPSLS	180	1,2	1290
BM6	LIROS PPSLS	180	1,2	1290
SM	COUSIN / VECTRAN	16330	0,9	370
SR	LIROS PPSLS	125	1,05	5040
BR1	LIROS PPSLS	180	1,2	5215
BR2	LIROS PPSLS	260	1,58	4630
BR3	LIROS PPSLS	260	1,58	4630

Atmus 3 L

Name	Line reference	Diameter / mm	Length / mm	Number of lines
C2	COUSIN / VECTRAN	12100	0,6	1368
C3	COUSIN / VECTRAN	12240	0,9	498
C4	COUSIN / VECTRAN	12240	0,9	531
C5	COUSIN / VECTRAN	12240	0,9	464
C6	COUSIN / VECTRAN	12240	0,9	520
C7	COUSIN / VECTRAN	12240	0,9	1325
C8	COUSIN / VECTRAN	12240	0,9	1299
C9	COUSIN / VECTRAN	12240	0,9	1320
C10	COUSIN / VECTRAN	12240	0,9	1394
C11	COUSIN / VECTRAN	12240	0,9	1434
C12	COUSIN / VECTRAN	12240	0,9	1398
C13	COUSIN / VECTRAN	12240	0,9	1423
C14	COUSIN / VECTRAN	12240	0,9	1507
CM1	LIROS PPSLS	125	1,05	1240
CM2	LIROS PPSLS	125	1,05	1395
CM3	LIROS PPSLS	125	1,05	1290
CM4	LIROS PPSLS	125	1,05	1290
CM5	LIROS PPSLS	125	1,05	1290
CM6	LIROS PPSLS	125	1,05	1290
CR1	LIROS PPSLS	180	1,2	5215
CR2	LIROS PPSLS	180	1,2	4630
CR3	LIROS PPSLS	180	1,2	4630
D7	COUSIN / VECTRAN	12100	0,6	1406
D8	COUSIN / VECTRAN	12100	0,6	1393
D9	COUSIN / VECTRAN	12100	0,6	1422
D10	COUSIN / VECTRAN	12100	0,6	1499
D11	COUSIN / VECTRAN	12100	0,6	1546
D12	COUSIN / VECTRAN	12100	0,6	1518
D13	COUSIN / VECTRAN	12100	0,6	1544
D14	COUSIN / VECTRAN	12100	0,6	1623
F1	COUSIN / VECTRAN	12100	0,6	851
F2	COUSIN / VECTRAN	12100	0,6	869
F3	COUSIN / VECTRAN	12100	0,6	909
F4	COUSIN / VECTRAN	12100	0,6	981
F5	COUSIN / VECTRAN	12100	0,6	1030
F6	COUSIN / VECTRAN	12100	0,6	1009
F7	COUSIN / VECTRAN	12100	0,6	1055
F8	COUSIN / VECTRAN	12100	0,6	1170
F9	COUSIN / VECTRAN	12100	0,6	1111
F10	COUSIN / VECTRAN	12100	0,6	1171
F11	COUSIN / VECTRAN	12100	0,6	1312
F12	COUSIN / VECTRAN	12100	0,6	1527
FM3	COUSIN / VECTRAN	12100	0,6	1085
FM2	COUSIN / VECTRAN	12240	0,9	2790
FM1	COUSIN / VECTRAN	12240	0,9	2580
FR	COUSIN / TECHNORA	988	2,1	2890



Atmus 3 XL

Name	Line reference	Diameter / mm	Length / mm	Number of lines
A1	COUSIN / VECTRAN	0,6	1268	2
A2	COUSIN / VECTRAN	0,6	1436	2
A3	COUSIN / VECTRAN	0,9	518	2
A4	COUSIN / VECTRAN	0,9	543	2
A5	COUSIN / VECTRAN	0,9	468	2
A6	COUSIN / VECTRAN	0,9	528	2
A7	COUSIN / VECTRAN	1.0	1380	2
A8	COUSIN / VECTRAN	1.0	1351	2
A9	COUSIN / VECTRAN	1.0	1373	2
A10	COUSIN / VECTRAN	1.0	1450	2
A11	COUSIN / VECTRAN	1.0	1490	2
A12	COUSIN / VECTRAN	1.0	1453	2
A13	COUSIN / VECTRAN	1.0	1479	2
A14	COUSIN / VECTRAN	1.0	1566	2
AM1	LIROS PPSLS	1,05	1290	2
AM2	LIROS PPSLS	1,05	1450	2
AM3	LIROS PPSLS	1,2	1340	2
AM4	LIROS PPSLS	1,2	1340	2
AM5	LIROS PPSLS	1,2	1340	2
AM6	LIROS PPSLS	1,2	1340	2
AR1	LIROS PPSLS	1,2	5440	2
AR2	LIROS PPSLS	1,58	4815	2
AR3	LIROS PPSLS	1,58	4815	2
B1	COUSIN / VECTRAN	0,6	1277	2
B2	COUSIN / VECTRAN	0,6	1402	2
B3	COUSIN / VECTRAN	0,9	489	2
B4	COUSIN / VECTRAN	0,9	515	2
B5	COUSIN / VECTRAN	0,9	435	2
B6	COUSIN / VECTRAN	0,9	489	2
B7	COUSIN / VECTRAN	1.0	1332	2
B8	COUSIN / VECTRAN	1.0	1297	2
B9	COUSIN / VECTRAN	1.0	1313	2
B10	COUSIN / VECTRAN	1.0	1386	2
B11	COUSIN / VECTRAN	1.0	1421	2
B12	COUSIN / VECTRAN	1.0	1379	2
B13	COUSIN / VECTRAN	1.0	1403	2
B14	COUSIN / VECTRAN	1.0	1491	2
BM1	LIROS PPSLS	1,05	1290	2
BM2	LIROS PPSLS	1,05	1450	2
BM3	LIROS PPSLS	1,2	1340	2
BM4	LIROS PPSLS	1,2	1340	2
BM5	LIROS PPSLS	1,2	1340	2
BM6	LIROS PPSLS	1,2	1340	2
SM	COUSIN / VECTRAN	0,9	385	4
SR	LIROS PPSLS	1,05	5245	2
BR1	LIROS PPSLS	1,2	5440	2
BR2	LIROS PPSLS	1,58	4815	2
BR3	LIROS PPSLS	1,58	4815	2

Atmus 3 XL

Name	Line reference	Diameter / mm	Length / mm	Number of lines
C2	COUSIN / VECTRAN	0,6	1431	2
C3	COUSIN / VECTRAN	0,9	514	2
C4	COUSIN / VECTRAN	0,9	548	2
C5	COUSIN / VECTRAN	0,9	479	2
C6	COUSIN / VECTRAN	0,9	537	2
C7	COUSIN / VECTRAN	0,9	1390	2
C8	COUSIN / VECTRAN	0,9	1363	2
C9	COUSIN / VECTRAN	0,9	1384	2
C10	COUSIN / VECTRAN	0,9	1459	2
C11	COUSIN / VECTRAN	0,9	1500	2
C12	COUSIN / VECTRAN	0,9	1462	2
C13	COUSIN / VECTRAN	0,9	1488	2
C14	COUSIN / VECTRAN	0,9	1575	2
CM1	LIROS PPSLS	125	1,05	1290
CM2	LIROS PPSLS	125	1,05	1450
CM3	LIROS PPSLS	125	1,05	1340
CM4	LIROS PPSLS	125	1,05	1340
CM5	LIROS PPSLS	125	1,05	1340
CM6	LIROS PPSLS	125	1,05	1340
CR1	LIROS PPSLS	180	1,2	5440
CR2	LIROS PPSLS	180	1,2	4815
CR3	LIROS PPSLS	180	1,2	4815
D7	COUSIN / VECTRAN	0,6	1474	2
D8	COUSIN / VECTRAN	0,6	1461	2
D9	COUSIN / VECTRAN	0,6	1491	2
D10	COUSIN / VECTRAN	0,6	1570	2
D11	COUSIN / VECTRAN	0,6	1617	2
D12	COUSIN / VECTRAN	0,6	1587	2
D13	COUSIN / VECTRAN	0,6	1614	2
D14	COUSIN / VECTRAN	0,6	1695	2
F1	COUSIN / VECTRAN	0,6	873	2
F2	COUSIN / VECTRAN	0,6	894	2
F3	COUSIN / VECTRAN	0,6	937	2
F4	COUSIN / VECTRAN	0,6	1013	2
F5	COUSIN / VECTRAN	0,6	1064	2
F6	COUSIN / VECTRAN	0,6	1041	2
F7	COUSIN / VECTRAN	0,6	1089	2
F8	COUSIN / VECTRAN	0,6	1208	2
F9	COUSIN / VECTRAN	0,6	1161	2
F10	COUSIN / VECTRAN	0,6	1222	2
F11	COUSIN / VECTRAN	0,6	1367	2
F12	COUSIN / VECTRAN	0,6	1588	2
FM3	COUSIN / VECTRAN	0,6	1130	12
FM2	COUSIN / VECTRAN	0,9	2900	2
FM1	COUSIN / VECTRAN	0,9	2700	4
FR	COUSIN / TECHNORA	2,1	3000	2



Atmus 3 XXL

Name	Line reference	Diameter / mm	Length / mm	Number of lines
A1	COUSIN / VECTRAN	0,6	1292	2
A2	COUSIN / VECTRAN	0,6	1468	2
A3	COUSIN / VECTRAN	0,9	528	2
A4	COUSIN / VECTRAN	0,9	554	2
A5	COUSIN / VECTRAN	0,9	479	2
A6	COUSIN / VECTRAN	0,9	541	2
A7	COUSIN / VECTRAN	1.0	1426	2
A8	COUSIN / VECTRAN	1.0	1396	2
A9	COUSIN / VECTRAN	1.0	1420	2
A10	COUSIN / VECTRAN	1.0	1501	2
A11	COUSIN / VECTRAN	1.0	1543	2
A12	COUSIN / VECTRAN	1.0	1505	2
A13	COUSIN / VECTRAN	1.0	1533	2
A14	COUSIN / VECTRAN	1.0	1625	2
AM1	LIROS PPSLS	1,05	1345	2
AM2	LIROS PPSLS	1,05	1510	2
AM3	LIROS PPSLS	1,2	1400	2
AM4	LIROS PPSLS	1,2	1400	2
AM5	LIROS PPSLS	1,2	1400	2
AM6	LIROS PPSLS	1,2	1400	2
AR1	LIROS PPSLS	1,2	5670	2
AR2	LIROS PPSLS	1,58	5020	2
AR3	LIROS PPSLS	1,58	5020	2
B1	COUSIN / VECTRAN	0,6	1302	2
B2	COUSIN / VECTRAN	0,6	1432	2
B3	COUSIN / VECTRAN	0,9	498	2
B4	COUSIN / VECTRAN	0,9	525	2
B5	COUSIN / VECTRAN	0,9	444	2
B6	COUSIN / VECTRAN	0,9	501	2
B7	COUSIN / VECTRAN	1.0	1375	2
B8	COUSIN / VECTRAN	1.0	1339	2
B9	COUSIN / VECTRAN	1.0	1356	2
B10	COUSIN / VECTRAN	1.0	1433	2
B11	COUSIN / VECTRAN	1.0	1471	2
B12	COUSIN / VECTRAN	1.0	1428	2
B13	COUSIN / VECTRAN	1.0	1454	2
B14	COUSIN / VECTRAN	1.0	1547	2
BM1	LIROS PPSLS	1,05	1345	2
BM2	LIROS PPSLS	1,05	1510	2
BM3	LIROS PPSLS	1,2	1400	2
BM4	LIROS PPSLS	1,2	1400	2
BM5	LIROS PPSLS	1,2	1400	2
BM6	LIROS PPSLS	1,2	1400	2
SM	COUSIN / VECTRAN	0,9	400	4
SR	LIROS PPSLS	1,05	5485	2
BR1	LIROS PPSLS	1,2	5670	2
BR2	LIROS PPSLS	1,58	5020	2
BR3	LIROS PPSLS	1,58	5020	2

Atmus 3 XXL

Name	Line reference	Diameter / mm	Length / mm	Number of lines
C2	COUSIN / VECTRAN	0,6	1464	2
C3	COUSIN / VECTRAN	0,9	526	2
C4	COUSIN / VECTRAN	0,9	562	2
C5	COUSIN / VECTRAN	0,9	492	2
C6	COUSIN / VECTRAN	0,9	552	2
C7	COUSIN / VECTRAN	0,9	1436	2
C8	COUSIN / VECTRAN	0,9	1409	2
C9	COUSIN / VECTRAN	0,9	1431	2
C10	COUSIN / VECTRAN	0,9	1511	2
C11	COUSIN / VECTRAN	0,9	1554	2
C12	COUSIN / VECTRAN	0,9	1515	2
C13	COUSIN / VECTRAN	0,9	1543	2
C14	COUSIN / VECTRAN	0,9	1634	2
CM1	LIROS PPSLS	125	1,05	1345
CM2	LIROS PPSLS	125	1,05	1510
CM3	LIROS PPSLS	125	1,05	1400
CM4	LIROS PPSLS	125	1,05	1400
CM5	LIROS PPSLS	125	1,05	1400
CM6	LIROS PPSLS	125	1,05	1400
CR1	LIROS PPSLS	180	1,2	5670
CR2	LIROS PPSLS	180	1,2	5020
CR3	LIROS PPSLS	180	1,2	5020
D7	COUSIN / VECTRAN	0,6	1525	2
D8	COUSIN / VECTRAN	0,6	1512	2
D9	COUSIN / VECTRAN	0,6	1543	2
D10	COUSIN / VECTRAN	0,6	1626	2
D11	COUSIN / VECTRAN	0,6	1677	2
D12	COUSIN / VECTRAN	0,6	1646	2
D13	COUSIN / VECTRAN	0,6	1675	2
D14	COUSIN / VECTRAN	0,6	1761	2
F1	COUSIN / VECTRAN	0,6	911	2
F2	COUSIN / VECTRAN	0,6	935	2
F3	COUSIN / VECTRAN	0,6	983	2
F4	COUSIN / VECTRAN	0,6	1064	2
F5	COUSIN / VECTRAN	0,6	1117	2
F6	COUSIN / VECTRAN	0,6	1095	2
F7	COUSIN / VECTRAN	0,6	1145	2
F8	COUSIN / VECTRAN	0,6	1269	2
F9	COUSIN / VECTRAN	0,6	1205	2
F10	COUSIN / VECTRAN	0,6	1268	2
F11	COUSIN / VECTRAN	0,6	1419	2
F12	COUSIN / VECTRAN	0,6	1649	2
FM3	COUSIN / VECTRAN	0,6	1175	12
FM2	COUSIN / VECTRAN	0,9	3025	2
FM1	COUSIN / VECTRAN	0,9	2800	4
FR	COUSIN / TECHNORA	2,1	3120	2





Line and Riser Measurements of flight test Paraglider (1)

Report No.: PG_1837.2021

Manufacturer: Sol Paragliders

Sample name: Atmus 3 L

S/N:

Total line length including risers [mm]

Date measure: 12.05.2021

Responsible: Claude Thurnheer

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

	A	B	C	D	E	Stab	Brake	+strap	
Manu (2)	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff	
Center 1	7952	7950	-2	7880	7876	-4	7952	7954	
2	7867	7867	-1	7794	7790	-4	7868	7872	
3	7842	7837	-5	7770	7767	-3	7843	7847	
4	7877	7875	-2	7810	7807	-3	7879	7886	
5	7839	7839	0	7776	7771	-5	7839	7842	
6	7764	7762	-2	7704	7700	-4	7765	7767	
7	7742	7736	-6	7689	7685	-4	7744	7747	
8	7770	7770	0	7722	7716	-6	7770	7773	
9	7650	7648	-2	7613	7611	-2	7655	7652	
10	7593	7592	-1	7560	7558	-2	7599	7601	
11	7510	7506	-4	7483	7481	-3	7511	7509	
12	7486	7484	-2	7458	7457	-1	7478	7480	
Wing tip	13	7309	7311	2	7276	7278	2	7303	7310
14	7147	7149	2	7155	7160	5	0	0	
15	0	0	0	0	0	0	0	0	
16	0	0	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	0	
18	0	0	0	0	0	0	0	0	

Riser measurement - total length (inner edge) [mm] (3)

	Total Risers	Std	Acc	Trim	Total length	Risers	Std	Acc
length	A	551	417	n/a	(incl. A')	549	436	n/a
Carabiner	B	553	463	n/a	or C	555	555	n/a
connect)	Acc	133	*[mm]	[mm]	Trimmer	n/a	[mm]	[mm]

Instrument validity

Laser distance meter

Line measurements system

date

07.09.2023

Uncertainty of instrument [mm]

3

Total line length including risers [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 91.20

(1) 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%. (2) Manu=Values from manufacturer, Sample=Measured by inspector.

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

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Line and Riser Measurements of flight test Paraglider (1)

Report No.: PG_1825.2021

Manufacturer: Sol Paragliders

Sample name: Atmus 3 XL

S/N:

Total line length including risers [mm]

Date measure: 24.05.2021

Responsible: Claude Thurnheer

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

	A	B	C	D	E	Stab	Brake	+strap
Manu (2)	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff
Center 1	8253	8251	-2	8178	8173	-5	8255	8261
2	8166	8165	-2	8090	8086	-4	8168	8173
3	8140	8142	2	8066	8067	1	8142	8148
4	8177	8178	1	8108	8107	-1	8180	8186
5	8137	8135	-3	8073	8073	0	8139	8144
6	8060	8060	0	8000	7996	-4	8064	8071
7	8038	8039	1	7984	7982	-3	8043	8050
8	8067	8067	0	8019	8018	-1	8070	8076
9	7946	7946	0	7907	7909	2	7952	7956
10	7886	7886	0	7853	7855	2	7894	7896
11	7801	7803	2	7773	7778	5	7803	7809
12	7776	7777	1	7747	7751	4	7769	7773
13	7591	7592	1	7557	7558	1	7586	7586
14	7423	7428	5	7432	7435	3	0	0
15	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0

Riser measurement - total length (inner edge) [mm] (3)

	Total Risers	Std	Acc	Trim	Total length	Risers	Std	Acc
length	A	552	420	n/a	(incl. A')	548	439	n/a
Carabiner	B	553	466	n/a	or C	555	555	n/a
connect)	Acc	132	*[mm]	[mm]	Trimmer	n/a	[mm]	[mm]

Instrument validity

Laser distance meter

Line measurements system

date

07.09.2023

Uncertainty of instrument [mm]

3

Total line length including risers [mm]

	A	B	C	D	E	Stab	Brake	+strap
Manu (2)	Sample	Diff	Manu	Sample	Diff	Manu	Sample	Diff
Center 1	8253	8251	-2	8178	8173	-5	8255	8261
2	8166	8165	-2	8090	8086	-4	8168	8173
3	8140	8142	2	8066	8067	1	8142	8148
4	8177	8178	1	8108	8107	-1	8180	8186
5	8137	8135	-3	8073	8073	0	8139	8144
6	8060	8060	0	8000	7996	-4	8064	8071
7	8038	8039	1	7984	7982	-3	8043	8050
8	8067	8067	0	8019	8018	-1	8070	8076
9	7946	7946	0	7907	7909	2	7952	7956
10	7886	7886	0	7853	7855	2	7	



Sol Sports Ind. e Com. Ltda.
Rua Walter Marquardt, 1180 cp 370
89259-565 Jaraguá do Sul, SC BRAZIL
Telefone (+55) 47 3275 7753
E-mail: info@solsports.com.br
www.solparagliders.com.br
facebook: [solparagliders](#)
instagram [@solparagliders](#)