KOYOT 6 P

User manual &
Technical data

AIVIUK BEYOND THE GLIDE

CATEGORIES

ENTRY-LEVEL

HIKE & FLY

The lightest way *to begin*

WELCOME

We welcome you to our team and thank you for the trust you have placed in us by choosing a Niviuk paraglider.

We would like you to share the enthusiasm with which we have created this paraglider and the importance and care with which we have developed the design and manufacture of this new model. All this, in order to be able to offer you the maximum pleasure in every flight under a Niviuk paraglider.

The KOYOT 6 P is designed to help you start and progress in paragliding with total confidence. This wing will also be by your side in your first hike and fly experiences.

The KOYOT 6 P delivers a high level of safety and comfort, with improved stability compared to the previous model. Start your journey the lightest way.

From 3 kg.

We are confident you will enjoy flying this glider and will soon discover the meaning of our motto:

“The importance of small details to make great things happen”.

This is the user manual and we recommend you read it carefully.

USER MANUAL

This manual provides you with the necessary information on the main characteristics of your new paraglider.

Whilst it provides information on the wing, it cannot be viewed as an instructional handbook and does not offer the training required to fly this type of paraglider.

Training can only be undertaken at a certified paragliding school and each country has its own system of licensing.

Only the aeronautical authorities of respective countries can determine pilot competence. The information in this manual is provided in order to warn you against adverse flying situations and potential dangers.

Equally, we would like to remind you that it is important to carefully read all the contents of your new KOYOT 6 P manual.

Misuse of this equipment could lead to severe injuries or death. The manufacturers and dealers cannot be held responsible for misuse of the paraglider. It is the responsibility of the pilot to ensure the equipment is used correctly.

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1. CARACTERISTICS

1.1 WHO IS IT DESIGNED FOR?

School: The KOYOT 6 P is the ideal tool for student progression. Suitable both for first flights and for advancing through the learning process.

Hike & Fly: Perfect for those who want to discover hike and fly with a comfortable, practical and accessible wing from day one.

1.2 CERTIFICATION

The KOYOT 6 P has been submitted for certification under the European standard EN (EN 926-2:2013+A1:202) and the German LTF standard (NfL LTF 2024-2-785) certification.

All certification tests were performed at the Swiss testing house Air Turquoise.

All sizes passed the load, shock and flight tests.

The load test proved that the wing can withstand the stipulated 8G.

The shock test proved that the wing can resist 800 daN of force.

The flight test resulted in the following certification of the KOYOT 6 P for all sizes (20, 22, 24, 26 and 28):

EN A
LTF A

We recommend that only pilots who are familiar with gliders of this certification or above fly this paraglider.

Only the aeronautical authorities of respective countries can determine pilot competence.

We recommend pilots read the flight test report carefully, especially the comments of the test pilot. The report contains all the necessary information on how the paraglider reacts during each of the tested manoeuvres.

It is important to note that different size wings will react differently during manoeuvres. Even within the same size, at maximum or minimum load, the behaviour and reactions of the wing may vary.

- Description of the EN A class wing characteristics:

Paragliders with maximum passive safety and extremely forgiving flight characteristics. EN A wings have very good resistance to departing from normal flight.

- Description of the skills required by the pilot to fly an EN A wing:

Designed for all pilots, including those at all stages of training.

For details of the flight tests and the corresponding certification number, see the final pages of this manual or visit the download section of our website.

1.3 IN-FLIGHT BEHAVIOUR

The working approach behind this new project followed clearly defined objectives: to offer the best possible performance in terms of stability, to harmonise the sensations, and to make flying easier for the pilot.

To achieve optimal performance while maintaining the highest level of safety. To ensure that the profile provides us with the maximum amount of information in a clear and comfortable way, allowing the pilot to focus on learning to fly.

The KOYOT 6 P supports the pilot smoothly and encourages progression from day one. This new generation offers an unprecedented level of stability and balance. It is ideal for pilots looking to start paragliding and hike and fly with a comfortable, accessible wing. Its lighter construction allows for even easier and smoother inflation compared to the KOYOT 6.

It has been flight-tested by our pilots, confirming that the new configuration offers increased stability. The new lateral stabilizers offer a more stable, balanced flight.

A lightweight version of the KOYOT 6 that retains a predictable and reassuring behaviour. Take-off is even easier, as the wing naturally settles itself into the correct position. The long brake travel is smooth and precise, enhancing the playful character of the KOYOT while forgiving the small inaccuracies typical of pilots in the learning phase.

The paraglider is very compact in all phases of flight. It does not display fluctuations in its glide, not even when fully accelerated. The glide remains high and the profile stable. It offers great comfort and passive safety in any situation, with particular emphasis on pitch stability thanks to the shape of the profile. You will be able to explore the sky with complete confidence.

The new KOYOT 6 P profile is even more stable, improving the wing's overall balance and enhancing the feeling of safety throughout all phases of flight.

The canopy arc has been redesigned with a smoother leading-edge curvature, improving canopy coherence and promoting a more efficient load distribution across the entire wingspan.

The distribution of flight loads across the lightweight structure has been improved by combining Nitinol rods, diagonals, and reinforced attachment points.

1.4 TECHNOLOGIES, CONSTRUCTION, MATERIALS

The KOYOT 6 P benefits from all the construction and assembly techniques used in our factory. It has all the current technology and accessories available to improve pilot comfort whilst increasing safety and performance.

In the design of all Niviuk products the team aims to ensure development and continuous improvement. The technologies developed in recent years have allowed us to develop greater, better wings. It is in this context that we would like to introduce the technologies included in this new model:

RAM Air Intake - the system is characterised by the arrangement of the air inlets, to ensure optimal maintenance of internal pressure across the whole range of angles of attack.

The result? Having greater internal pressure means better tolerance of turbulence, greater consistency of the profile shape across the speed range; excellent handling at low speed is achieved by allowing the pilot to extend the braking limit, there is a lower risk of collapse and consequently, greater control and safety.

The application of RAM technology ensures that the internal pressure of the wing is optimal and that the profile maintains its ideal shape in all flight conditions.

TNT Titanium Technology - a revolutionary technique using titanium. Using Nitinol in the internal construction provides a more uniform

profile and reduces the weight to gain efficiency in flight. Nitinol provides the highest level of protection against deformation, heat or breaks. Nitinol now features in all our wings.
The distribution of the Nitinol rods along the leading edge and top surface has been simplified. This ensures the lightness of the wing, while maintaining its durability and compactness when folded.

SLE Structured Leading Edge - SLE is the application of Nitinol rods in the leading edge. This technology provides increased strength and stability by maintaining the shape of the aerofoil throughout all phases of flight. This increases performance, efficiency and stability, absorbs turbulence better and makes the wing much more durable over time.

3DP Pattern Cut Optimisation - this involves placing the fabric of each panel in one direction only, taking as a reference its location on the leading edge. It has been proved that, if the cloth pattern is correctly aligned to the direction of the load axes, the material deforms much less flight after flight, so the leading edge keeps its shape better and is much more durable over time. Over the years, the design of our paragliding and paramotoring wings has evolved a lot, with a positive and specific advancement of the leading edge.

3DL 3D Leading Edge - this means adjusting the material of the leading edge to avoid ballooning and the creases that form in this curved area of the wing. Specifically, the leading edge is divided into "sub-panels" sewn into each of the cells at the front of the glider. As a result, the tension of the leading edge cloth is perfectly uniform, increasing the performance and durability of the glider.

IKS Interlock System - the IKS is a connection system that allows the risers to be connected to different parts of the wing, such as the lines or the harness. The IKS technology is a step towards greater lightness in wings and equipment, without sacrificing effectiveness and providing the same degree of safety and strength.

The KOYOT 6 P comes with IKS 1000 as standard and is designed to connect risers and lines. It has a breaking load of 1055 kg, which greatly exceeds that of the classic 3 mm (550 kg) maillon, but with a much less weight. This system allows a reduction in the total weight of the equipment, while maintaining safety and durability.

The use of these technologies is a big technological leap forward in building wings and a big improvement in flight comfort.

For the construction process of the KOYOT 6 P we use the same criteria, quality controls and manufacturing processes as in the rest of our range. From Olivier Nef's computer to fabric cutting, the operation does not allow for even a millimetre of error. The cutting of each wing component is performed by a rigorous, extremely meticulous, automated computer laser-cutting robotic arm. This program also paints the guideline markers and numbers on each individual fabric piece, thus avoiding errors during this delicate process.

The jigsaw puzzle assembly is made easier using this method and optimises the operation while making the quality control more efficient. All Niviuk gliders go through an extremely thorough and detailed final inspection. The canopy is cut and assembled under strict quality control conditions facilitated by the automation of this process.

Every wing is individually checked with a final inspection.

The KOYOT 6 P is built using lighter fabrics (Dokdo 32 g and 25 g) to reduce the overall weight of the wing. The material selection has been carefully considered to achieve a good balance between weight and durability, without being overly radical.

The 12 mm risers with quick links create a simpler, lightweight and functional setup, making both assembly and everyday use easier.

The KOYOT 6 P combines sheathed and unsheathed lines in its line set. This mix of lines is a solution designed to optimize ergonomics and reduce wing weight without compromising durability.

The line diameter has been calculated depending on the workload and aims to achieve the required best performance with the least drag.

The lines are semi-automatically cut to length and all the sewing is completed under the supervision of our specialists.

Every line is checked and measured once the final assembly is concluded.

Each glider is packed following specific maintenance instructions as recommended by the fabric manufacturer.

Niviuk gliders are made of premium materials that meet the requirements of performance, durability and certification that the current market demands.

Information about the various materials used to manufacture the wing can be viewed in the final pages of this manual.

1.5 ELEMENTS, COMPONENTS

The KOYOT 6 P is delivered with a series of accessories that will greatly assist you in the maintenance of your paraglider:

- The Inner Bag, that allows you to keep your glider protected during storage and transport.
- An adjustable compression strap, which allows you to compress the Inner Bag as much as possible to reduce packing.
- A riser bag, to protect and pack them neatly.
- A repair kit with self-adhesive ripstop fabric.
- The Expe 80 backpack. This is not included in the pack, but it is recommended. It allows you to carry all the equipment comfortably and without space problems, independent of which KOYOT 6 P size you fly.

2. UNPACKING AND ASSEMBLY

2.1 CHOOSING THE RIGHT LOCATION

We recommend unpacking and assembling the wing on a training hill or a flat clear area without too much wind and free of obstacles. It will help you to carry out all the recommended steps required to check and inflate the KOYOT 6 P.

We recommend the whole installation procedure is supervised by a qualified professional instructor or official dealer. Only they can address any doubts in a safe and professional way.

2.2 PROCEDURE

Take the paraglider out of the rucksack, open and unfold it on the ground with the lines positioned on the undersurface, oriented in the direction of inflation. Check the condition of the fabric and the lines for defects. Check the IKS 1000 connecting the lines to the risers. Identify, and if necessary, untangle, the A, B and C-lines, the brake lines and corresponding risers. Make sure that there are no knots.

2.3 CONNECTING THE HARNESS

The KOYOT 6 P risers are colour-coded:

- Right: green
- Left: red

This colour-coding makes it easier to connect the wing to the correct side and helps prevent pre-flight errors.

Correctly connect the risers to attachment points of the harness so that the risers and lines are correctly ordered and free of twists. Check that the connecting elements are properly fastened and securely locked.

2.4 TYPES OF HARNESS

The KOYOT 6 P can be flown with all current harness types. If the harness features an adjustable chest strap, we recommend setting this to the distance specified in the certification report - this will vary depending on size. See the certification certificate.

The separation between risers varies according to the in-flight weight:

- From 0 to 80 kg: The separation must be 40 ±2 cm
- From 80 to 100 kg: The separation must be 44 ±2 cm
- Over 100 kg: The separation must be 48 ±2 cm

Care should be taken with the chest strap setting, as the distance of the chest strap setting will affect the handling of the glider. If the chest strap is too wide, it allows greater feedback but this carries the risk of affecting the stability of the wing. If the chest strap is set too tightly, the wing feels more solid, but there is a loss of feedback and a risk of twisting in the case of a violent asymmetric collapse.

2.5 SPEED-BAR INSTALLATION

The speed-bar is a means of temporary acceleration by changing the flow over the profile. The speed system comes pre-installed on the risers and is not modifiable as it conforms to the measurements and limits stipulated in its certification.

The KOYOT 6 P includes a speed system with maximum travel depending on its size (see Full speed-bar). The speed system is engaged when the pilot pushes the speed-bar (not included as standard with this glider model) with their feet (see 2.5.1 Speed system assembly).

The speed system uses an action/reaction system. Released, the speed-bar is set to neutral. When the bar is pushed using the feet, the wing accelerates. The speed can be regulated by varying the pressure on the bar. Once the pressure on the bar is released, the speed system returns to the neutral setting.

The speed system is efficient, sensitive and precise. The pilot can use the system whenever they want during the flight. In the neutral position the glider will fly at the standard speed and glide. Using full speed-bar, the wing will fly at maximum speed, but the glide will be adversely affected.

- Released speed-bar: the A, B and C-risers are aligned.
- Full speed-bar: The difference between A and C-risers is 130 mm for all the sizes.

(!) The use of the speed system results in changes to the speed and reactions of the wing. For more information, please see the certification report.

2.5.1 SPEED SYSTEM ASSEMBLY

The speed-bar consists of the bar that the pilot pushes with their feet, as well as the two cords that connect it to the speed system components on the risers. Once you have chosen the type of speed-bar you prefer, you must install it. Some considerations:

- You should use the type of speed-bar you consider appropriate, depending on the type of harness, personal preferences, etc.
- The speed-bar is detachable to facilitate its connection and/or disconnection to the risers as well as subsequent adjustment.
- To connect it to the harness, please follow the instructions of the harness manufacturer. The majority of harnesses have a speed system pre-installed.
- The standard connection is made by means of the Brummel hook where the two grooves face each other to interlock, securing their use and connection/disconnection. However, any safe connection system can be used.

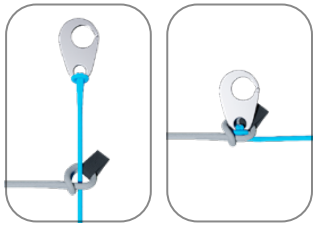
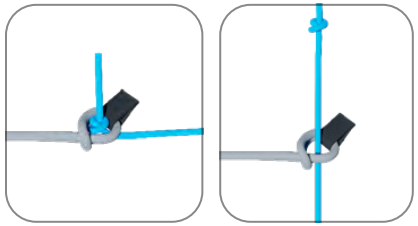


Diagram 1.
Speed-bar connection by means by means of the Brummel hook.

Diagram 2.
Speed-bar connection by means of kite loop (without Brummel hook).



1. A knot is tied in the speed-bar cord and passed through the connector of the webbing cord.

2. Tension is applied to both sides of the system until the knot tightens against the riser connector.

It should be noted that the connection procedure is exactly the same for the Brummel hooks as for the loops, and would in turn be applicable to other systems or connecting elements.

2.5.2 CHANGING THE RISER CORDS

In spite of the speed system having pulleys with bearings to reduce friction to a minimum, the frequency with which the speed-bar is used causes the cord to wear and you may need to replace them.

In all Niviuk gliders the speed system cords on the risers are completely removable and easily replaceable. You can use the Brummel hooks, not use them, remove them, use another type of connector, etc. It is even possible to fix the speed-bar cords directly to the speed system on the risers. This last option makes the connection / disconnection more laborious, but means the cord has maximum travel without obstructions or restrictions which is very useful for some models of harnesses.

2.6 INSPECTION AND WING INFLATION ON THE GROUND

After your gear has been thoroughly checked and the weather conditions deemed favourable for flying, inflate your KOYOT 6 P as many times as necessary to familiarise yourself with its behaviour. Inflating the KOYOT 6 P is easy and should not require a great deal of physical effort. Inflate the wing with a little pressure from the body using the harness. This may be assisted by using the A-lines. Do not pull on them; just accompany the natural rising movement of the wing. Once the wing is inflated to the overhead position, appropriate control with the brakes will be sufficient to hold it there.

2.7 ADJUSTING THE BRAKES

The length of the main brake lines are adjusted at the factory and conform to the length stipulated during certification. However, they can be changed to suit your flying style. It is advisable to fly with the original setting for a period of time to get used to the actual behaviour of the KOYOT 6 P. In case it is necessary to modify the brake length, loosen the knot, slide the line through the brake handle to the desired point and re-tighten the knot firmly. Only qualified personnel should carry out this adjustment. You must ensure that the modification does not affect the trailing edge and slow the glider down without pilot input. Both brake lines should be symmetrical and the same length. We recommend using a clove hitch or bowline knot.

When changing the brake length, it is necessary to check that they do not engage when the speed-bar is used. When we accelerate, the glider rotates over the C-riser and the trailing edge elevates. It is important to check that the brake is adjusted to take into consideration this extra distance during acceleration. With this profile deformation there is a risk of generating turbulence and causing a frontal or asymmetric collapse.

3. PRIMER VUELO

3.1 CHOOSING THE RIGHT LOCATION

For the first flight we recommend going to your usual flying area and that a qualified instructor is present and supervising the entire procedure.

3.2 PREPARATION

Repeat the procedures detailed in section 2 UNPACKING AND ASSEMBLY to prepare your equipment.

3.3 FLIGHT PLAN

Planning a flight before taking off to avoid possible problems later is always a good idea.

3.4 PRE-FLIGHT CHECK

Once ready, but before taking off, conduct another equipment inspection. Conduct a thorough visual check of your gear with the wing fully open, the lines untangled and properly laid out on the ground to ensure that all is in working order. Be certain the weather conditions are suited to your flying skill level.

3.5 WING INFLATION, CONTROL AND TAKE OFF

For launch, a smooth and progressive inflation is recommended. The KOYOT 6 P is easy to inflate and does not require a great deal of physical effort. It has no tendency to overshoot, which allows a smooth inflation phase, giving way to a control phase with enough time to make the decision to accelerate and take off when the pilot wishes to do so.

If the wind permits, we recommend a reverse launch, as this allows a better visual inspection of the wing during inflation. Winds of 25 to 30 km/h are considered strong for paragliding.

Correctly setting up the wing on the ground before takeoff is especially important. Choose an appropriate location facing the wind. Position the paraglider in a crescent configuration to facilitate inflation. A clean wing layout will ensure a trouble-free take off.

3.6 LANDING

The KOYOT 6 P lands excellently, it converts the wing speed into lift at your demand, allowing an enormous margin of error. Wrapping the brake lines around your hand to get greater braking efficiency is not necessary.

3.7 PACKING

The KOYOT 6 P has a complex leading edge, manufactured using a variety of different materials and it must be packed carefully. A correct folding method is very important to extend the useful life of your paraglider.

It should be concertina-packed, with the leading edge reinforcements flat and the flexible rods stacked one on top of the other. This method will keep the profile in its original shape and protect the integrity of the wing over time. Make sure the reinforcements are not bent or folded. It should not be folded too tightly to avoid damage to the cloth and/or lines.

At Niviuk we have designed the NKare Bag and the ZipNkare. Both are folding bags that assist you in packing the paraglider quickly, while keeping the profile and the integrity of its internal structures in perfect condition.

The NKare Bag guides you through the folding process, allowing you to stack the ribs one on top of another along the longitudinal axis in an “accordion” style, and then enables you to carry out the transverse folds required by each model with ease. This folding system ensures that both the fabric and the reinforcements of the internal structure remain in perfect condition. The ZipNkare, on the other hand, performs exactly the same folding procedure and, thanks to a zip closure, becomes a much easier-to-carry case.

4. IN FLIGHT

We recommend that you read the certification test report. The report contains all the necessary information on the KOYOT 6 P reacts during each of the tested manoeuvres.

It is important to point out that the appropriate response to each adverse manoeuvre can vary from size to size; even within the same size at maximum or minimum load the behaviour and reactions of the wing may vary. Having the knowledge that the testing house provides through the test report is fundamental to learning how to deal with possible situations.

To become familiar with the manoeuvres described below, we recommend practising within the auspices of a licensed training outfit.

4.1 FLYING IN TURBULENCE

The KOYOT 6 P has an excellent profile to deal with incidents; it is very stable in all conditions and has a high degree of passive safety, even in turbulent conditions.

All paragliders must be piloted for the prevailing conditions and the pilot is the ultimate safety factor.

We recommend active flying in turbulent conditions, always taking measures to maintain control of the wing, preventing it from collapsing and restoring the speed required by the wing after each correction.

Do not correct the glider (braking) for too long in case this provokes a stall. If you have to take corrective action, make the input then re-establish the correct flying speed.

4.2 POSSIBLE CONFIGURATIONS

To become familiar with the manoeuvres described below, we recommend practising within the environment of a licensed training outfit. You must adapt your use of the brakes depending on the wing-loading and avoid over-steering.

It is important to note that the type of reaction to a manoeuvre can vary from one size of wing to another, and even within the same size the behaviour and reactions may be different depending on the wing-loading.

In the test report, you will find all the necessary information on how to handle your new wing during each of the tested manoeuvres. Having this information is crucial to know how to react during these manoeuvres in real flight, so you can deal with these situations as safely as possible.

Asymmetric collapse

In spite of the KOYOT 6 P's profile stability, strong turbulent air may cause the wing to collapse asymmetrically in very strong turbulence, especially if you do not fly actively and prevent the collapse. In this case the glider conveys a loss of pressure through the brake lines and the harness. To prevent the collapse from happening, pull the brake handle on the affected side of the wing. It will increase the incidence of the wing (angle of attack). If the collapse does happen, the KOYOT 6 P will not react violently, the turning tendency is gradual and easily controlled. Weight-shift toward the open, flying side (the opposite side of the collapse) to keep the wing flying straight, while applying light brake pressure to that side if necessary. Normally, the collapsed side of the wing should then recover and reopen by itself. If it does not, try to weight-shift towards the collapsed side. If this does not resolve the issue, pull the brake handle on the collapsed side decisively and quickly all the way (100%) down and release it back up immediately. You may have to repeat this action to provoke the re-opening of the collapsed glider side. Do not over-brake or slow down the flying side of the wing (control the turn). Once the collapsed side is open make sure you return to normal flying speed.

Frontal collapse

Due to the KOYOT 6 P's design, in normal flying conditions frontal collapses are unlikely to take place. The wing's profile has great buffering abilities when dealing with extreme incidence changes. A frontal collapse may occur in strong turbulent conditions, entering or exiting powerful thermals. Frontal collapses usually re-inflate without the glider turning, but a symmetrically applied quick braking action with a quick deep pump of both brakes will accelerate the re-inflation if necessary. Release the brake lines immediately to return to default glider air speed.

Negative spin

A negative spin does not conform to the KOYOT 6 P's normal flight behaviour. Certain circumstances however, may provoke a negative spin (such as trying to turn when flying at very low air speed whilst applying a lot of brake). It is not easy to give any specific recommendation about this situation other than quickly restoring the wing's default air speed.

Parachutal stall

The possibility of entering or remaining in a parachutal stall have been eliminated from the KOYOT 6 P. A parachutal stall is virtually impossible with this wing. If it did enter into a parachutal stall, the wing loses forward motion, becomes unstable and there is a lack of pressure on the brake lines, although the canopy appears to be fully inflated. To regain normal air speed, release brake line tension symmetrically and manually push on the A-lines or weight- shift your body to any side WITHOUT PULLING ON THE BRAKE LINES.

Stall

The possibility of the KOYOT 6 P stalling during normal flight is very unlikely. It could only happen if you are flying at a very low air speed, whilst over-steering or performing dangerous manoeuvres in turbulent air.

To provoke a deep stall, the wing has to be slowed down to its minimum air speed by symmetrically pulling the brake lines all the way (100%) 10 down until the stall point is reached and held there. The glider will first pitch rearward and then reposition itself overhead, rocking slightly, depending on how the manoeuvre is done.

When entering a stall, remain clear-headed and ease off the brake lines until reaching the half-way point of the total brake travel. The wing will then surge violently forward and could reach a point below you. It is most important to maintain brake pressure until the glider has returned to its default overhead flying position.

To resume normal flight conditions, progressively and symmetrically release the brake line tension to regain air speed. When the wing reaches the overhead position, the brakes must be fully released. The wing will then surge forward to regain full air speed. Do not brake excessively at this moment as the wing needs to accelerate to pull away from the stall configuration. If you have to control a possible frontal collapse, briefly pull both brake handles down to bring the wing back up and release them immediately while the glider is still in transition to reposition itself overhead.

Cravat

A cravat may happen after an asymmetric collapse, when the end of the wing is trapped between the lines. Depending on the nature of the tangle, this situation could rapidly cause the wing to spin. The corrective manoeuvres to use are the same as those applied in case of

an asymmetric collapse: control the turn/spin by applying tension on the opposite brake and weight shift opposite to the turn. Then locate the stabilo line (attached to the wing tip) trapped between the other lines. This line has a different colour and is located on the outside position of the B-riser.

Pull this line until it is taut. This action will help to release the cravat. If ineffective, fly down to the nearest possible landing spot, controlling the direction with both weight-shift and the use of the brake opposite to the tangled side. Be cautious when attempting to undo a tangle while flying near terrain or other paragliders; it may not be possible to continue on the intended flight path.

Over-controlling

Most flying problems are caused by wrong pilot input, which then escalates into a cascade of unwanted and unpredicted incidents. We should note that the wrong inputs can lead to loss of control of the glider. The KOYOT 6 P was designed to recover by itself in most cases. Do not try to over-correct it!

Generally speaking, the reactions of the wing, which are caused by too much input, are due to the length of time the pilot continues to over–control the wing. You have to allow the glider to re-establish normal flying speed and attitude after any type of incident.

4.3 ACCELERATED FLIGHT

The KOYOT 6 P's profile was designed for stable flight throughout its entire speed range. The speed-bar can be used in strong winds or significant sink.

When accelerating the wing, the profile becomes more sensitive to turbulence and closer to a possible frontal collapse. If a loss in internal wing pressure is felt, tension on the speed-bar should be reduced to a minimum and a slight pull on the brake lines is recommended to increase the wing's incidence angle. Remember to re-establish the air speed after correcting the angle of attack.

It is NOT recommended to accelerate near obstacles or in very turbulent conditions. If necessary, constantly adjust the movements and pressure on the speed-bar whilst doing the same to the brake lines. This balance is considered to be 'active piloting'.

4.4 FLYING WITHOUT BRAKE LINES

If, for any reason at all, the KOYOT 6 P's brake lines become disabled in flight, it will become necessary to pilot the wing gently using the C-risers and weight shifting until landing. These risers steer easily because are not under significant tension. You will have to be careful and not handle them too heavily in case this causes a stall or negative spin. The wing must be flown at full speed (not accelerated) during the landing approach, and the C-risers should be pulled symmetrically shortly before contact with the ground. This braking method is not as effective as using the brake lines, and hence the wing will land with a higher ground speed.

4.5 LINE KNOT(S) IN FLIGHT

The best way to avoid knots and tangles is to thoroughly inspect the lines as part of a systematic pre-flight check. If a knot is spotted during the take off phase, immediately abort the launch sequence and stop.
If inadvertently taking off with a knotted line, the glider drift will need to be compensated by weight-shifting to the opposite side and applying a slight brake pull to that side. Gently pull the brake line to see if the knot can be undone or try to locate the problem line. Try pulling it to see if the knot can be undone. Beware of trying to clear a knotted line or untangle a line in flight when close to the terrain. If the knot is too tight and cannot be undone, carefully and safely fly to the nearest landing zone. Be careful: do not pull too hard on the brake handles because there will be an increased risk of stalling the wing or entering a negative spin. Before attempting to clear a knot, make sure there are no other pilots flying in the vicinity.

5. LOSING ALTITUDE

Knowledge of different descent techniques could become vital in certain situations. The most suitable descent method will depend on the particular situation. To become familiar with the manoeuvres described below, we recommend practising within the environment of a licensed training outfit.

5.1 BIG EARS

“Big Ears” is a moderate descent technique, able to increase the sink rate to –3 or –4 m/s and reduces the ground speed by 3 to 5 km/h. The angle of attack and effective wing-loading will also increase due to the smaller surface area of the wing.

To perform the Big Ears manoeuvre, take outermost line on both A-risers as high as you can and simultaneously, smoothly pull them outward and downward. The wingtips will fold in.

To re-establish forward speed and the correct angle of attack, accelerate once the ears are pulled.

Keep the ears pulled in until you have lost the desired altitude.

Let go of the lines to re-inflate the tips automatically. If they do not, try progressively pulling one brake then the other. Asymmetric reopening is recommended in order to avoid compromising the angle of attack, particularly flying near the ground or in turbulent conditions.

5.2 B-LINE STALL

When carrying out this manoeuvre, the wing stops flying, loses all horizontal speed and the pilot is no longer in control of the paraglider. The airflow over the profile is interrupted and the wing enters a situation similar to parachuting.

To enter this manoeuvre, the B-risers are gripped below the maillons and symmetrically pulled down together (approx. 20-30 cm) and maintained in that position.

Initiating the maneuver is physically demanding because it can take some strength to pull the risers down until the wing is deformed. After this, the physical effort is less. Continue to hold the risers in position. Once the wing is deformed, its horizontal speed will drop to 0 km/h; vertical descending speed increases to –6 to –8 m/s, depending on the conditions and how the manoeuvre is performed.

To exit the manoeuvre, simultaneously release both risers. The wing will then slightly surge forward and automatically return to normal flight. It is better to let go of the lines quickly rather than slowly.

This is an easy descent technique to perform, but remember that the wing will stop flying, will lose all forward horizontal speed, and its reactions will change markedly when compared to a normal flight configuration.

5.3 SPIRAL DIVE

This is a more effective way to rapidly lose altitude. Beware that the wing will experience and be subjected to a tremendous amount of descending and rotating speed (g-force), which can cause a loss of orientation and consciousness (blackout). This manoeuvre must therefore be done gradually to increase one’s capacity to resist the g-force exerted on the body. With practise, you will fully appreciate and understand it. Only practise this manoeuvre at high altitude and with enough ground clearance.

To start the manoeuvre, first weight shift and pull the brake handle located on the inner side of the turn. The intensity of the turn can be controlled by braking slightly using the outer brake handle.

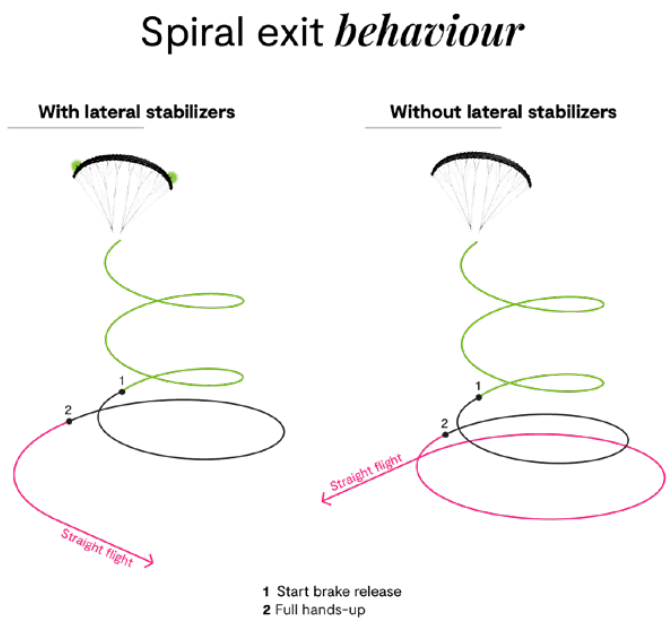
A paraglider flying at its maximum rotating speed can reach –20 m/s, or the equivalent of a 70 km/h vertical descent, and will stabilise in a spiral dive from 15m/s onwards. Good enough reasons to familiarise yourself with the manoeuvre and understand how to exit it.

To exit this manoeuvre, the inner brake handle (down side of the turn) must progressively be relaxed while momentarily applying tension to the outer brake handle opposite to the turn.

The pilot must also weight shift and lean towards the opposite side of the turn at the same time. The exit should be performed gradually and smoothly so that the changes in pressure and speed can be noted.

When exiting the spiral, the glider will briefly experience an asymmetrical acceleration and dive, depending on how the manoeuvre was carried out. On the KOYOT 6 P, lateral stabilisers have been introduced that improve spiral exit and significantly reduce residual roll. The position, size, orientation, and optimised profile of these lateral stabilisers have been specifically designed to achieve this.

Practise these manoeuvres at sufficient altitude and carefully.



5.4 SLOW DESCENT TECHNIQUE

This technique allows descent without straining the wing or taxing the pilot. Glide normally while searching for descending air and begin to turn as if climbing in a thermal, but with the intention to sink.

Common sense has to be used to avoid dangerous areas of rotor when looking for descending air. Safety first!

6. SPECIAL METHODS

6.1 TOWING

The KOYOT 6 P does not experience any problem whilst being towed. Only qualified winch personnel should handle the certified equipment to carry out this operation. The wing must be inflated similarly as during a normal take off.

It is important to use the brakes to correct the flight path alignment, especially in the first phase of the tow. Since the wing is subject to a slow airspeed and with a high positive angle of attack, we must make any corrections with a high degree of feel and delicacy, in order to avoid a stall.

6.2 ACROBATIC FLIGHT

Although the KOYOT 6 P was tested by expert acrobatic pilots in extreme situations, it was not designed for it. We do not recommend using this glider for acrobatic flying!!!

We consider acrobatic flights to be any form of piloting different than standard flights. Learning acrobatic manoeuvres should be conducted under the supervision of qualified instructors within a school environment and over water with all safety/rescue elements in place. Centrifugal forces as high as 4 to 5 g can be exerted on the body and wing during extreme manoeuvres.

7. CARE AND MAINTENANCE

7.1 MAINTENANCE

Careful maintenance of your equipment will ensure continued top performance. Apart from the general checks, we recommend actively maintaining your equipment.

A pre-flight check is obligatory before each flight. If there is any damage to the equipment or you suspect any areas of the wing are susceptible to wear, you should inspect these and act accordingly.

Niviuk we are firmly committed to make technology accessible to all pilots. Therefore, our wings are equipped with the latest technological advances gained from the experience of our R&D team. Thanks to these new technologies, paragliders are gaining more safety and performance, which requires greater care of the materials.

(!) IMPORTANT: it is critical to avoid any kind of impact or dragging the leading edge on the ground. This part is reinforced with very durable and strong Nitinol rods that can be easily replaced. Dragging and/or hitting the leading edge can cause serious damage to the fabric, which is much more complicated and costly to repair.

The KOYOT 6 P is part of our P Series range. All the lightweight and ultralight materials we use offer a good balance between performance and durability. These materials minimise weight by reducing the quantity and type of thread, and by modifying the surface induction, that is, their resistance. For this reason, care should be taken in how the product is used, avoiding anything that might increase the material's natural wear. Nevertheless, in the specific case of the KOYOT 6 P, thanks to its characteristics as a school wing, an excellent balance between lightness, strength, and durability has been achieved. Regarding material properties, the lightweight version behaves very similarly to the standard KOYOT 6.

The fabric and the lines do not need to be washed. If they become dirty, clean them with a soft damp cloth, using only water. Do not use detergents or other chemicals.

If your wing is wet from contact with water, place it in a dry area, air it and keep it away from direct sunlight.

Direct sunlight may damage the wing's materials and cause premature aging. After landing, do not leave the wing exposed to the sun. Pack it properly and stow it away in its backpack.

If you fly in sandy areas, avoid getting sand in the cells or down into the trailing edge. At the end of the flight, empty any sand that is in your wing. The openings at the end of the wingtips make this much easier.

If your wing is wet from contact with salt water, immerse it in fresh water and dry it away from direct sunlight.

7.2 STORAGE

It is important for the wing to be correctly folded when stored. Keep it in the in a cool, dry place away from solvents, fuels, oils.

Do not leave your gear inside a car boot, as cars left in the sun can become very hot. A rucksack can reach temperatures up to 60ºC.

Weight should not be laid on top of the equipment. It is very important to pack the wing correctly before storage.

In case of long-term storage, it is advisable, if possible, that the wing is not compressed and it should be stored loosely without direct contact with the ground. Humidity and heating can have an adverse effect on the equipment.

7.3 CHECKS AND INSPECTIONS

The KOYOT 6 P must be periodically serviced. An inspection must be scheduled every 100 flying hours or every two years whichever comes first (EN/LTF norm).

We strongly recommend that any repairs should be done in a specialist repair shop by qualified personnel.

This will guarantee the airworthiness and continued certification of your KOYOT 6 P.

A thorough pre-flight check must be performed before every flight.

The KOYOT 6 P is fitted with sheathed lines. Their durability conforms to sheathed line standards. Their strength is guaranteed and their resistance to UV is one of the highest in this type of lines.

However, to maintain the wing's standard performance, it is necessary to keep the trim constantly adjusted.

Generally speaking, line lengths change as the glider is used. For this reason we recommend a trim check after approximately the first 30 hours of flight. The hours or actions to be taken to repair the lines may vary for each glider, depending on the conditions of each flying area, climatic conditions, temperature, humidity, type of terrain, wing loading, etc.

Thanks to the experience acquired and the thorough inspections that our R+D team carry out on our gliders, we have the necessary information to be able to know the real behaviour of the lines. With this knowledge we can keep our gliders in the optimum condition for more flights without any loss of performance due to use.

The most important detail to check and/or repair on the lines are the so called "loops" (knots). These loops must be released or readjusted according to the current line length.

Never adjust a paraglider according to the parameters of another paraglider. Each adjustment must be performed individually for each wing concerned, as a result of an analysis carried out by specialised and authorised personnel.

7.4 REPAIRS

In the case of small tears, you can temporarily repair these by using the Ripstop tape included in the repair kit, as long as no stitching is required to mend the fabric.

Any other tears or repairs should be done in a specialist repair shop by qualified personnel.

Damaged lines must be repaired or exchanged immediately.

Please refer to the line plan at the end of this manual. We recommend any inspection or repair is performed by a Niviuk professional in our official workshop.

Any modification of the glider made in an external workshop will invalidate the guarantee of the product. Niviuk cannot be held responsible for any issues or damage resulting from modifications or repairs carried out by unqualified professionals or who are not approved by the manufacturer.

8. SAFETY AND RESPONSIBILITY

It is well known that free-flying with a paraglider is considered a high-risk sport, where safety depends on the person who is practicing it.

Incorrect use of this equipment may cause severe, life-changing injuries to the pilot, or even death. Manufacturers and dealers cannot be held responsible for your decisions, actions or accidents that may result from participating in this sport.

You must not use this equipment if you have not been properly trained to use it. Do not take advice or accept any informal training from anyone who is not properly qualified as a flight instructor.

9. GUARANTEE

The equipment and components are covered by a 2-year warranty against any manufacturing defect.

The warranty does not cover misuse of the equipment.

Any modification of the paraglider or its components invalidates the guarantee and its certification.

If you notice any defects in your harness, please contact Niviuk immediately for a more thorough inspection.

A N N E X E S

10. ANNEXES

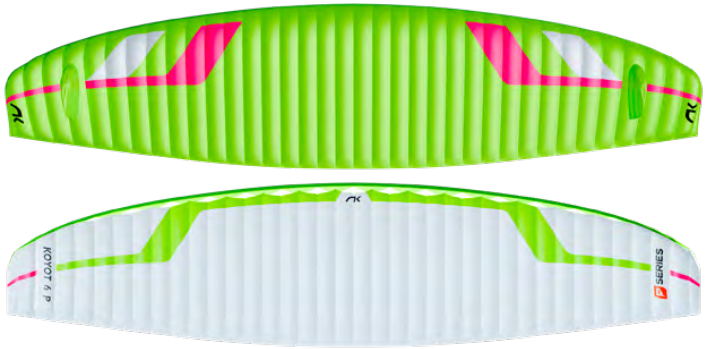
10.1 Technical specifications

			20	22	24	26	28
Cells	Number		38	38	38	38	38
Aspect Ratio	Flat		4,70	4,70	4,70	4,70	4,70
	Projected		3,70	3,70	3,70	3,70	3,70
Area	Flat	m2	20	22	24	26	28
	Projected	m2	17,29	19,00	20,74	22,47	24,20
Span	Flat	m	9,70	10,17	10,62	11,05	11,47
Chord	Max	m	2,54	2,66	2,78	2,89	3,00
Lines	Total	m	236	248	260	271	281
	Main		2+1/4/3	2+1/4/3	2+1/4/3	2+1/4/3	2+1/4/3
Risers	Number	3+1	A+A'/B/C	A+A'/B/C	A+A'/B/C	A+A'/B/C	A+A'/B/C
	Speed-bar	mm	130	130	130	130	130
Glider weight		kg	3	3,30	3,50	3,75	3,95
Total weight in flight	Min-max	kg	50-70	55-80	65-90	80-105	95-119
Certification			EN/LTF A	EN/LTF A	EN/LTF A	EN/LTF A	EN/LTF A

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

10.2 Colours

	UPPER	ORANGE	**LOWER**	WHITE
TIGER	**TOP 1**	BLACK	**BOTTOM 1**	ORANGE
	TOP 2	GOLD	**BOTTOM 2**	BLACK



	UPPER	LIME	**LOWER**	WHITE
GECKO	**TOP 1**	PINK	**BOTTOM 1**	LIME
	TOP 2	WHITE	**BOTTOM 2**	PINK

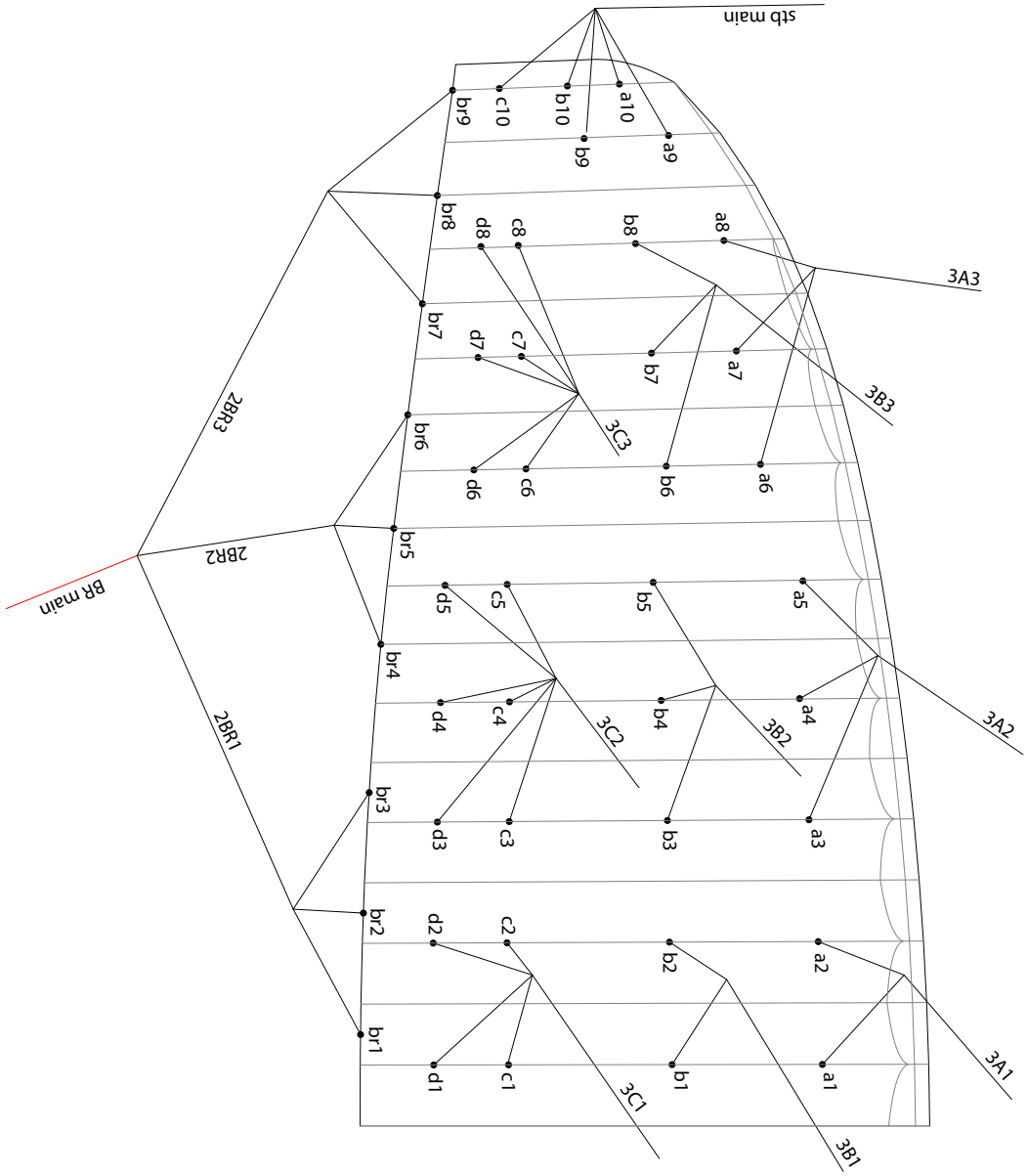
10.3 Materials

CANOPY	FABRIC CODE	SUPPLIER
UPPER SURFACE	2044 32 PS	DOMINICO TEX CO (KOREA)
BOTTOM SURFACE	D10-25	DOMINICO TEX CO (KOREA)
PROFILES	70000 E91 / 2044 32 FM	PORCHER SPORT (FRANCE) / DOMINICO TEX CO (KOREA)
DIAGONALS	2044 32 FM	DOMINICO TEX CO (KOREA)
LOOPS	LKI - 12	KOLON IND. (KOREA)
REIFORCEMENT LOOPS	RIPSTOP	D-P (GERMANY)
TRAILING EDGE REIFORCEMENT	MYLAR	D-P (GERMANY)
RIBS REIFORCEMNET	LTN-0.8/0.5 STICK	SPORTWARE CO.CHINA
THREAD	SERAFIL 60	AMAN (GERMANY)

SUSPENSION LINES	FABRIC CODE	SUPPLIER
UPPER CASCADES	8001U - 90	EDELRID (GERMANY)
UPPER CASCADES	8001U - 70	EDELRID (GERMANY)
UPPER CASCADES	8001U - 50	EDELRID (GERMANY)
UPPER CASCADES	MATRIX - 80	EDELRID (GERMANY)
MIDDLE CASCADES	MATRIX - 80	EDELRID (GERMANY)
MAIN	TNL - 140	TEIJIM LIMITED (JAPAN)
MAIN	TNL - 220	TEIJIM LIMITED (JAPAN)
MAIN	TNL - 280	TEIJIM LIMITED (JAPAN)
MAIN BREAK	TARAX-200	EDELRID (GERMANY)
THREAD	SERAFIL 60	AMAN (GERMANY)

RISERS	FABRIC CODE	SUPPLIER
MATERIAL	3455	COUSIN (FRANCE)
COLOR INDICATOR	210D	TECNI SANGLES (FRANCE)
THREAD	V138	COATS (ENGLAND)
MAILLONS	MRI4	ANSUNG PRECISION (KOREA)

10.4 Line plan



LINE REPLACEMENT

The use of new high performance materials in modern wings is now common. The advantages of using these materials in terms of performance are widely acknowledged as part of our sport's evolution. However, along with those technological advances come additional responsibilities which cannot be avoided. As a result, line inspection and replacement must be carried out more frequently. That increased frequency appears to be encouraging some pilots to try to perform line replacement themselves.

WE STRONGLY RECOMMEND ANY LINE REPLACEMENT IS PERFORMED BY AN AUTHORISED SPECIALIST ONLY.

Ultimately, if the pilot decides to perform any line replacement without professional oversight they therefore assume all responsibility. In this case, these guidelines will have to be followed.

BEFORE REMOVING ANY LINES, CHECK:

- That the line plan is correct according to the glider model and size.
- That the line kit is complete and correct. Never assume but always check each individual line for the correct specification.

AFTER CONFIRMING THAT ALL LINES ARE CORRECT:

- Fit the new line(s) WITHOUT removing the label.
- Once replaced, measure each line length to confirm the correct measurement.
- Inflate the wing to check for any irregularities.
- The line labels may then be removed but NOT BEFORE completion of the line replacement.

Niviuk strongly recommends for any line replacement to be carried out by an authorised professional only, and will not accept responsibility for any damage or injury caused as a result of incorrect re-assembly.

10.5 Riser plan

10.6 Line measurements by size

KOYOT 6 P - 20

ref.	mat.	kg	color	mm
A				
a1	8001U	130	ORANGE	1280
a2	8001U	130	ORANGE	1248
a3	8001U	130	ORANGE	2071
a4	8001U	90	ORANGE	2017
a5	8001U	130	ORANGE	2045
a6	8001U	90	ORANGE	2026
a7	8001U	90	ORANGE	1905
a8	8001U	50	ORANGE	1823
a9	8001U	50	ORANGE	1455
a10	8001U	50	ORANGE	1344
3A1	TNL	280	GREEN	4284
3A2	TNL	280	GREEN	3463
3A3	TNL	220	GREEN	3439

ref.	mat.	kg	color	mm
B				
b1	8001U	130	BLUE	1264
b2	8001U	130	BLUE	1230
b3	8001U	130	BLUE	2025
b4	8001U	90	BLUE	1974
b5	8001U	130	BLUE	2007
b6	8001U	90	BLUE	1936
b7	8001U	90	BLUE	1833
b8	8001U	50	BLUE	1782
b9	8001U	50	ORANGE	1445
b10	8001U	50	ORANGE	1370
3B1	TNL	220	BLUE	4179
3B2	TNL	220	BLUE	3389
3B3	TNL	220	BLUE	3437
STB MAIN	TNL	140	RED	3614

ref.	mat.	kg	color	mm
C				
c1	8001U	70	BLUE	1060
c2	8001U	70	BLUE	1029
c3	8001U	70	BLUE	1574
c4	8001U	70	BLUE	1505
c5	8001U	70	BLUE	1564
c6	8001U	70	BLUE	1499
c7	8001U	50	BLUE	1381
c8	8001U	50	BLUE	1348
c9	8001U	50	ORANGE	1513
3C1	TNL	220	BLUE	4456
3C2	TNL	220	BLUE	3927
3C3	TNL	220	BLUE	3957

ref.	mat.	kg	color	mm
D				
d1	8001U	70	BLUE	1165
d2	8001U	70	BLUE	1135
d3	8001U	50	BLUE	1676
d4	8001U	50	BLUE	1604
d5	8001U	50	BLUE	1648
d6	8001U	50	BLUE	1570
d7	8001U	50	BLUE	1443
d8	8001U	50	BLUE	1395

ref.	mat.	kg	color	mm
BRAKE				
br1	MATRIX	80	RED	1548
br2	MATRIX	80	RED	1306
br3	MATRIX	80	RED	1234
br4	MATRIX	80	RED	1404
br5	MATRIX	80	RED	1292
br6	MATRIX	80	RED	1317
br7	MATRIX	80	RED	1419
br8	MATRIX	80	RED	1292
br9	MATRIX	80	RED	1177
2BR1	MATRIX	80	RED	2058
2BR2	MATRIX	80	RED	1778
2BR3	MATRIX	80	RED	1627
BR-MAIN	TARAX	200	RED	2670

KOYOT 6 P - 22

ref.	mat.	kg	color	mm
A				
a1	8001U	130	ORANGE	1341
a2	8001U	130	ORANGE	1310
a3	8001U	130	ORANGE	2171
a4	8001U	90	ORANGE	2115
a5	8001U	130	ORANGE	2146
a6	8001U	90	ORANGE	2124
a7	8001U	90	ORANGE	1999
a8	8001U	50	ORANGE	1913
a9	8001U	50	ORANGE	1526
a10	8001U	50	ORANGE	1410
3A1	TNL	280	GREEN	4517
3A2	TNL	280	GREEN	3660
3A3	TNL	220	GREEN	3637

ref.	mat.	kg	color	mm
B				
b1	8001U	130	BLUE	1325
b2	8001U	130	BLUE	1292
b3	8001U	130	BLUE	2122
b4	8001U	90	BLUE	2071
b5	8001U	130	BLUE	2107
b6	8001U	90	BLUE	2031
b7	8001U	90	BLUE	1923
b8	8001U	50	BLUE	1870
b9	8001U	50	ORANGE	1515
b10	8001U	50	ORANGE	1437
3B1	TNL	220	BLUE	4406
3B2	TNL	220	BLUE	3582
3B3	TNL	220	BLUE	3635
STB MAIN	TNL	140	RED	3823

ref.	mat.	kg	color	mm
C				
c1	8001U	70	BLUE	1110
c2	8001U	70	BLUE	1080
c3	8001U	70	BLUE	1650
c4	8001U	70	BLUE	1579
c5	8001U	70	BLUE	1642
c6	8001U	70	BLUE	1572
c7	8001U	50	BLUE	1448
c8	8001U	50	BLUE	1414
c9	8001U	50	ORANGE	1587
3C1	TNL	220	BLUE	4698
3C2	TNL	220	BLUE	4146
3C3	TNL	220	BLUE	4181

ref.	mat.	kg	color	mm
D				
d1	8001U	70	BLUE	1221
d2	8001U	70	BLUE	1191
d3	8001U	50	BLUE	1756
d4	8001U	50	BLUE	1682
d5	8001U	50	BLUE	1730
d6	8001U	50	BLUE	1647
d7	8001U	50	BLUE	1513
d8	8001U	50	BLUE	1464

ref.	mat.	kg	color	mm
BRAKE				
br1	MATRIX	80	RED	1623
br2	MATRIX	80	RED	1371
br3	MATRIX	80	RED	1296
br4	MATRIX	80	RED	1471
br5	MATRIX	80	RED	1356
br6	MATRIX	80	RED	1383
br7	MATRIX	80	RED	1487
br8	MATRIX	80	RED	1355
br9	MATRIX	80	RED	1236
2BR1	MATRIX	80	RED	2155
2BR2	MATRIX	80	RED	1865
2BR3	MATRIX	80	RED	1710
BR-MAIN	TARAX	200	RED	2825

KOYOT 6 P - 24

ref.	mat.	kg	color	mm
A				
a1	8001U	130	ORANGE	1400
a2	8001U	130	ORANGE	1370
a3	8001U	130	ORANGE	2269
a4	8001U	90	ORANGE	2209
a5	8001U	130	ORANGE	2240
a6	8001U	90	ORANGE	2218
a7	8001U	90	ORANGE	2089
a8	8001U	50	ORANGE	2001
a9	8001U	50	ORANGE	1594
a10	8001U	50	ORANGE	1473
3A1	TNL	280	GREEN	4738
3A2	TNL	280	GREEN	3849
3A3	TNL	220	GREEN	3827

ref.	mat.	kg	color	mm
B				
b1	8001U	130	BLUE	1383
b2	8001U	130	BLUE	1350
b3	8001U	130	BLUE	2215
b4	8001U	90	BLUE	2163
b5	8001U	130	BLUE	2202
b6	8001U	90	BLUE	2121
b7	8001U	90	BLUE	2009
b8	8001U	50	BLUE	1954
b9	8001U	50	ORANGE	1582
b10	8001U	50	ORANGE	1501
3B1	TNL	220	BLUE	4623
3B2	TNL	220	BLUE	3767
3B3	TNL	220	BLUE	3824
STB MAIN	TNL	140	RED	4021

ref.	mat.	kg	color	mm
C				
c1	8001U	70	BLUE	1159
c2	8001U	70	BLUE	1129
c3	8001U	70	BLUE	1722
c4	8001U	70	BLUE	1650
c5	8001U	70	BLUE	1716
c6	8001U	70	BLUE	1642
c7	8001U	50	BLUE	1513
c8	8001U	50	BLUE	1478
c9	8001U	50	ORANGE	1658
3C1	TNL	220	BLUE	4929
3C2	TNL	220	BLUE	4356
3C3	TNL	220	BLUE	4395

ref.	mat.	kg	color	mm
D				
d1	8001U	70	BLUE	1274
d2	8001U	70	BLUE	1245
d3	8001U	50	BLUE	1834
d4	8001U	50	BLUE	1758
d5	8001U	50	BLUE	1808
d6	8001U	50	BLUE	1720
d7	8001U	50	BLUE	1581
d8	8001U	50	BLUE	1529

ref.	mat.	kg	color	mm
BRAKE				
br1	MATRIX	80	RED	1695
br2	MATRIX	80	RED	1432
br3	MATRIX	80	RED	1355
br4	MATRIX	80	RED	1536
br5	MATRIX	80	RED	1416
br6	MATRIX	80	RED	1446
br7	MATRIX	80	RED	1552
br8	MATRIX	80	RED	1415
br9	MATRIX	80	RED	1292
2BR1	MATRIX	80	RED	2248
2BR2	MATRIX	80	RED	1949
2BR3	MATRIX	80	RED	1790
BRMAIN	TARAX	200	RED	2980

KOYOT 6 P - 26

ref.	mat.	kg	color	mm
A				
a1	8001U	130	ORANGE	1457
a2	8001U	130	ORANGE	1426
a3	8001U	130	ORANGE	2358
a4	8001U	90	ORANGE	2299
a5	8001U	130	ORANGE	2335
a6	8001U	90	ORANGE	2309
a7	8001U	90	ORANGE	2174
a8	8001U	50	ORANGE	2081
a9	8001U	50	ORANGE	1660
a10	8001U	50	ORANGE	1533
3A1	TNL	280	GREEN	4953
3A2	TNL	280	GREEN	4028
3A3	TNL	220	GREEN	4008

ref.	mat.	kg	color	mm
B				
b1	8001U	130	BLUE	1439
b2	8001U	130	BLUE	1407
b3	8001U	130	BLUE	2304
b4	8001U	90	BLUE	2251
b5	8001U	130	BLUE	2293
b6	8001U	90	BLUE	2207
b7	8001U	90	BLUE	2091
b8	8001U	50	BLUE	2035
b9	8001U	50	ORANGE	1647
b10	8001U	50	ORANGE	1562
3B1	TNL	220	BLUE	4832
3B2	TNL	220	BLUE	3944
3B3	TNL	220	BLUE	4006
STB MAIN	TNL	140	RED	4212

ref.	mat.	kg	color	mm
C				
c1	8001U	70	BLUE	1205
c2	8001U	70	BLUE	1176
c3	8001U	70	BLUE	1792
c4	8001U	70	BLUE	1717
c5	8001U	70	BLUE	1788
c6	8001U	70	BLUE	1709
c7	8001U	50	BLUE	1575
c8	8001U	50	BLUE	1539
c9	8001U	50	ORANGE	1725
3C1	TNL	220	BLUE	5150
3C2	TNL	220	BLUE	4557
3C3	TNL	220	BLUE	4600

ref.	mat.	kg	color	mm
D				
d1	8001U	70	BLUE	1325
d2	8001U	70	BLUE	1296
d3	8001U	50	BLUE	1908
d4	8001U	50	BLUE	1830
d5	8001U	50	BLUE	1884
d6	8001U	50	BLUE	1789
d7	8001U	50	BLUE	1645
d8	8001U	50	BLUE	1592

ref.	mat.	kg	color	mm
BRAKE				
br1	MATRIX	80	RED	1763
br2	MATRIX	80	RED	1491
br3	MATRIX	80	RED	1412
br4	MATRIX	80	RED	1597
br5	MATRIX	80	RED	1474
br6	MATRIX	80	RED	1506
br7	MATRIX	80	RED	1615
br8	MATRIX	80	RED	1473
br9	MATRIX	80	RED	1346
2BR1	MATRIX	80	RED	2336
2BR2	MATRIX	80	RED	2029
2BR3	MATRIX	80	RED	1866
BRMAIN	TARAX	200	RED	3115

KOYOT 6 P - 28

ref.	mat.	kg	color	mm
A				
a1	8001U	130	ORANGE	1511
a2	8001U	130	ORANGE	1481
a3	8001U	130	ORANGE	2446
a4	8001U	90	ORANGE	2386
a5	8001U	130	ORANGE	2425
a6	8001U	90	ORANGE	2396
a7	8001U	90	ORANGE	2256
a8	8001U	50	ORANGE	2161
a9	8001U	50	ORANGE	1722
a10	8001U	50	ORANGE	1591
3A1	TNL	280	GREEN	5158
3A2	TNL	280	GREEN	4202
3A3	TNL	220	GREEN	4183

ref.	mat.	kg	color	mm
B				
b1	8001U	130	BLUE	1493
b2	8001U	130	BLUE	1461
b3	8001U	130	BLUE	2390
b4	8001U	90	BLUE	2336
b5	8001U	130	BLUE	2381
b6	8001U	90	BLUE	2290
b7	8001U	90	BLUE	2170
b8	8001U	50	BLUE	2113
b9	8001U	50	ORANGE	1709
b10	8001U	50	ORANGE	1621
3B1	TNL	220	BLUE	5032
3B2	TNL	220	BLUE	4115
3B3	TNL	220	BLUE	4181
STB MAIN	TNL	140	RED	4396

ref.	mat.	kg	color	mm
C				
c1	8001U	70	BLUE	1249
c2	8001U	70	BLUE	1221
c3	8001U	70	BLUE	1859
c4	8001U	70	BLUE	1783
c5	8001U	70	BLUE	1856
c6	8001U	70	BLUE	1773
c7	8001U	50	BLUE	1634
c8	8001U	50	BLUE	1597
c9	8001U	50	ORANGE	1790
3C1	TNL	220	BLUE	5363
3C2	TNL	220	BLUE	4750
3C3	TNL	220	BLUE	4798

ref.	mat.	kg	color	mm
D				
d1	8001U	70	BLUE	1374
d2	8001U	70	BLUE	1345
d3	8001U	50	BLUE	1979
d4	8001U	50	BLUE	1899
d5	8001U	50	BLUE	1956
d6	8001U	50	BLUE	1857
d7	8001U	50	BLUE	1708
d8	8001U	50	BLUE	1653

ref.	mat.	kg	color	mm
BRAKE				
br1	MATRIX	80	RED	1830
br2	MATRIX	80	RED	1548
br3	MATRIX	80	RED	1466
br4	MATRIX	80	RED	1657
br5	MATRIX	80	RED	1530
br6	MATRIX	80	RED	1564
br7	MATRIX	80	RED	1676
br8	MATRIX	80	RED	1529
br9	MATRIX	80	RED	1397
2BR1	MATRIX	80	RED	2422
2BR2	MATRIX	80	RED	2106
2BR3	MATRIX	80	RED	1940
BR-MAIN	TARAX	200	RED	3251

10.7 Total line length

KOYOT 6 P – 20

LINES HEIGHT + RISER mm

	A	B	C	D	br
1	6050	5932	6008	6113	6320
2	6018	5898	5977	6082	6078
3	6020	5903	5992	6094	6006
4	5966	5852	5923	6022	5896
5	5994	5885	5982	6066	5784
6	5951	5863	5947	6018	5809
7	5830	5760	5829	5891	5760
8	5748	5709	5796	5843	5633
9	5557	5547	5615		5518
10	5446	5472			

KOYOT 6 P – 22

LINES HEIGHT + RISER mm

	A	B	C	D	br
1	6346	6221	6300	6411	6647
2	6315	6188	6270	6380	6395
3	6319	6194	6287	6393	6320
4	6263	6143	6216	6319	6205
5	6294	6187	6279	6367	6090
6	6249	6157	6244	6319	6117
7	6124	6049	6120	6185	6066
8	6038	5996	6086	6136	5934
9	5838	5827	5899		5815
10	5722	5749			

KOYOT 6 P – 24

LINES HEIGHT + RISER mm

	A	B	C	D	br
1	6626,4	6496	6579	6694	6967
2	6596,4	6463	6549	6664	6704
3	6606,4	6472	6568	6680	6627
4	6546,4	6420	6496	6604	6509
5	6577,4	6467	6562	6654	6389
6	6533,5	6436	6527	6605	6419
7	6404,5	6324	6398	6466	6366
8	6316,5	6269	6363	6414	6229
9	6103,6	6092	6168		6106
10	5982,6	6011			

KOYOT 6 P – 26

LINES HEIGHT + RISER mm

	A	B	C	D	br
1	6899	6762	6847	6967	7258
2	6868	6730	6818	6937	6986
3	6875	6739	6840	6956	6907
4	6816	6686	6765	6878	6785
5	6852	6728	6836	6932	6662
6	6806	6705	6800	6880	6694
7	6671	6589	6666	6736	6640
8	6578	6533	6630	6683	6498
9	6362	6349	6427		6371
10	6235	6264			

KOYOT 6 P – 28

LINES HEIGHT + RISER mm

	A	B	C	D	br
1	7157,7	7013	7102	7227	7547
2	7127,7	6981	7074	7197	7265
3	7136,7	6993	7098	7218	7183
4	7076,7	6939	7022	7138	7058
5	7115,7	6984	7095	7195	6931
6	7065,5	6960	7060	7144	6965
7	6925,5	6840	6921	6995	6911
8	6830,5	6783	6884	6940	6764
9	6610,3	6597	6678		6632
10	6479,3	6509			

10.8 Minimum strength of suspension lines

LINE REFERENCE	SIZE				
	20	**22**	**24**	**26**	**28**
TNL-140	45	51	58	68	77
TNL-220	70	80	90	105	119
TNL-280	87	100	112	131	149
8001U-50	18	20	23	27	30
8001U-70	20	23	26	30	35
8001U-90	34	39	44	51	58
8001U-130	40	46	52	60	69
Matrix-80	34	39	44	51	58

Minimum resistance values in daN

Based on the original experimental resistance values of each suspension line material obtained in certification tests, a correction factor is applied depending on the material and its aging, resulting in the reference values shown in the table.

10.9 Certification

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paragliding by air turquoise

NIVIUK

Classification: **A**

In accordance with standards: EN 926-1:2015, EN 926-2:2013+A1:2021 and NfL 2024-2-785	PG_2691.2026
Date of issue (DMY):	12.02.2026
Manufacturer:	Niviuk Gliders / Air Games S.L.
Model:	Koyot 6 P 20
Serial number:	KOYOT620V3

Configuration during flight tests

Paraglider	
Maximum weight in flight [kg]	**70**
Minimum weight in flight [kg]	**50**
Glider's weight [kg]	**3**
Number of risers	**3+1**
Projected area [m²]	**17.29**

Accessories	
Range of speed system [cm]	**13.3**
Speed range using brakes [km/h]	**14**
Total speed range with accessories [km/h]	**23**
Range of trimmers [cm]	**n/a**

Harness used for testing (max weight)	
Harness type	**ABS**
Harness brand	**Flugsau GmbH**
Harness model	**XX-Light**
Harness to risers distance [cm]	**40**
Distance between risers [cm]	**40**

Inspections (whichever happens first)
every 100 hours of use or every 24 months

Person or company having presented the glider for testing: **None**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**0**

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Classification: **A**

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Date of issue (DMY):	12.02.2026
Manufacturer:	Niviuk Gliders / Air Games S.L.
Model:	Koyot 6 P 22
Serial number:	KOYOT622V3

Configuration during flight tests

Paraglider	
Maximum weight in flight [kg]	**80**
Minimum weight in flight [kg]	**55**
Glider's weight [kg]	**3.3**
Number of risers	**3+1**
Projected area [m²]	**19**

Accessories	
Range of speed system [cm]	**13.5**
Speed range using brakes [km/h]	**14**
Total speed range with accessories [km/h]	**23**
Range of trimmers [cm]	**n/a**

Harness used for testing (max weight)	
Harness type	**ABS**
Harness brand	**Supair s.a.s.**
Harness model	**ALTIRANDO M**
Harness to risers distance [cm]	**43**
Distance between risers [cm]	**44**

Inspections (whichever happens first)
every 100 hours of use or every 24 months

Person or company having presented the glider for testing: **None**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**0**

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Classification: **A**

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Date of issue (DMY):	12.02.2026
Manufacturer:	Niviuk Gliders / Air Games S.L.
Model:	Koyot 6 P 24
Serial number:	KOYOT624V3

Configuration during flight tests

Paraglider

Maximum weight in flight [kg]	**90**
Minimum weight in flight [kg]	**65**
Glider's weight [kg]	**3.6**
Number of risers	**3+1**
Projected area [m²]	**20.74**

Accessories

Range of speed system [cm]	**13.3**
Speed range using brakes [km/h]	**14**
Total speed range with accessories [km/h]	**23**
Range of trimmers [cm]	**n/a**

Harness used for testing (max weight)

Harness type	**ABS**
Harness brand	**Woody Valley srl**
Harness model	**Wani Light 2 M**
Harness to risers distance [cm]	**43**
Distance between risers [cm]	**44**

Inspections (whichever happens first)
every 100 hours of use or every 24 months

Person or company having presented the glider for testing: **None**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**0**

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Classification: **A**

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Date of issue (DMY):	12.02.2026
Manufacturer:	Niviuk Gliders / Air Games S.L.
Model:	Koyot 6 P 26
Serial number:	KOYOT6P26V21

Configuration during flight tests

Paraglider

Maximum weight in flight [kg]	**105**
Minimum weight in flight [kg]	**80**
Glider's weight [kg]	**3.8**
Number of risers	**3+1**
Projected area [m²]	**22.47**

Accessories

Range of speed system [cm]	**13.7**
Speed range using brakes [km/h]	**14**
Total speed range with accessories [km/h]	**23**
Range of trimmers [cm]	**n/a**

Harness used for testing (max weight)

Harness type	**ABS**
Harness brand	**Advance Thun AG**
Harness model	**Success 4 M**
Harness to risers distance [cm]	**43**
Distance between risers [cm]	**48**

Inspections (whichever happens first)
every 100 hours of use or every 24 months

Person or company having presented the glider for testing: **None**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**0**

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Classification: **A**

In accordance with standards: EN 926-1:2015, EN 926-2:2013+A1:2021 and NfL 2024-2-785	PG_2695.2026
Date of issue (DMY):	12.02.2026
Manufacturer:	Niviuk Gliders / Air Games S.L.
Model:	Koyot 6 P 28
Serial number:	KOYOT628V3

Configuration during flight tests

Paraglider

Maximum weight in flight [kg]	**119**
Minimum weight in flight [kg]	**95**
Glider's weight [kg]	**4.2**
Number of risers	**3+1**
Projected area [m²]	**24.2**

Accessories

Range of speed system [cm]	**14.1**
Speed range using brakes [km/h]	**14**
Total speed range with accessories [km/h]	**23**
Range of trimmers [cm]	**n/a**

Harness used for testing (max weight)

Harness type	**ABS**
Harness brand	**Woody Valley srl**
Harness model	**NAOS L**
Harness to risers distance [cm]	**45**
Distance between risers [cm]	**48**

Inspections (whichever happens first)
every 100 hours of use or every 24 months

Person or company having presented the glider for testing: **None**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
A	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**0**

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