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BREEZE OWNER'S MANUAL

Solo paraglider | EN / LTF B

Introduction

Welcome to BGD, a world leader in the design and production of paragliders. For many years Bruce Goldsmith and team have been developing products with world-beating performance for pilots who want the best. We apply our competitive knowledge to design top quality products that combine the highest performance with the safe handling our customers value and respect. BGD pilots appreciate our quality and reliability. BGD's world-class status is based on the skills and expertise we have developed in combining aerodynamic design with cloth and materials technology. All BGD products are developed and made with the same skill and attention to good design that are synonymous with the ultimate performance and precision required by paragliders.

Congratulations on your purchase of the BREEZE. The BREEZE is a safe, fun and performant paraglider for intermediate pilots and above. It is not suitable for beginners.

In order to ensure your wing retains its original flight characteristics, it should be properly looked after. Please read this manual from the first to the last chapter to ensure you get the best out of your wing. Do not hesitate to contact your nearest BGD dealer if you need any advice or information about your paraglider, or any replacement parts.

Limitations

Suitable for ...

Tandem	No
Towing	Yes – Both pilot and winch operator should have the necessary training and qualifications for towing, and the tow system should be certified for paraglider use.
Paramotor	Not yet tested

Warning

Do not perform spiral dives with big ears or asymmetric collapses. The high G loading on fewer lines could overload and break the lines.

This paraglider must not:

1. Be flown outside the certified weight range
2. Have its trim speed adjusted by changing the length of risers or lines
3. Be flown in rain or snow
4. Be towed with a tow-line tension in excess of 200kg

Warranty

Information about the BGD warranty can be found on the Warranty page of our website. In order to benefit from it, you must complete the [warranty registration form on the website](#).

It is your dealer's responsibility to test fly the paraglider before you receive it, to check the trim settings are correct. Please check that this has been completed. The warranty may be void if the test flight has not been completed by the dealer.

Weight Range

Each wing size is certified for a certain weight range. The weight refers to the overall take-off weight. This means the weight of the pilot, the glider, the harness and all other equipment carried in flight. We recommend pilots fly in the 'ideal' part of the weight range, as shown in the [Specs table](#).

If you fly in the upper half of the weight range, the glider will be faster and more agile. You will have greater stability in turbulence, but there will be reduced self-damping in turns and after collapses. If you prefer dynamic flight characteristics, want more speed or regularly fly in strong conditions you might choose to fly higher in the weight range.

If you mainly fly in weak conditions you might wish to fly towards the lower end of the weight range to benefit from a better sink rate. In the lower half of the weight range the glider will be more damped and less agile in turns. In strong turbulence a more lightly-loaded wing will have a greater tendency to deform or collapse.

Modifications

Any modifications to your glider e.g. changing the line lengths, can cause a loss of airworthiness and certification. We recommend that you contact your dealer or BGD directly before performing any kind of modifications.

Brake line lengths

The length of the brake lines is set at the factory so that the trailing edge is not deformed at all when brakes are not applied. There should be around 7cm slack in the brake lines, before they take effect on the canopy. It should not be necessary to shorten the brake lines. However, it is possible that shrinkage can occur. If necessary, the brake lines can be lengthened by adjusting the knots.

Harness

Your paraglider was tested with a 'GH' (without diagonal bracing) type harness. The GH category includes weight-shift harnesses as well as ABS style (semi-stable) harnesses.

The EN standard harness dimensions are a seat board width of 42cm.

The horizontal distance between the attachment points of the paraglider risers (measured from the centre line of the karabiners) should be:

- 38cm for pilots under 50kg
- 42cm for pilots from 50-80kg
- 46cm for pilots above 80kg

Preparation and Pre-flight Checks

The speed system

The BREEZE has accelerator risers. It can be flown with or without a speed bar attached. The speed bar should be connected and adjusted following the instructions in your harness manual to ensure correct routing of the lines.

Speed system attachment points

The risers have two sets of attachment points for the speed-system line. It is delivered with set-up A. Like this, bar pressure is light, and bar travel longer. To shorten the bar travel, the speed system line can be attached to the lower attachment points instead (B). Bar pressure will be greater in this set-up. The glider's speed at full bar is not affected by moving the attachment points.

**A**

The speed-system line is attached to the upper loop where the top pulley attaches

With this set-up:

Greater bar travel
Lighter pressure

**B**

The speed-system line is attached to the lower loop, a few centimetres below the top pulley.

With this set-up:

Shorter bar travel
Heavier pressure

Step by step: changing the speed system attachment points

1. Release the lark's foot and remove the Brummel hook from the speed system line



2. Pull the line back through both pulleys



3. Remove the line from the attachment point



4. Thread the line through the new attachment point (a piece of string can be helpful). Either, secure with a lark's foot (A).



Or if desired, extra loops can be made around the attachment point in order to shorten the the remaining speed system line, B.



5. Feed the speed system line back through the pulleys, lower first then upper. Use string to help if necessary



6. Re-attach the Brummel hook to the line. The Brummel hook has a curve and should be threaded in the direction shown in the photos



The speed system length should then be adjusted by moving the knots on the line at the harness end. To check the length is correct, sit in your harness and ask a helper to hold the risers up in their in-flight position. The speed bar should sit just beneath your harness seat for an open harness. In either case, the line should not be under tension when you are in flight position, with no bar applied.

You should be able to hook your heels into the bar, and attain full bar extension (the two pulleys touching) when you push your legs out.

Once you have set the bar up in this way on the ground, a test flight in calm air can be useful to fine-tune the length, ensuring it is even on both sides.

Preparations on launch

1. Select a suitable take-off area determined by wind and terrain, clear of any obstacles that may catch in the lines or damage the canopy.
2. Take your paraglider to the top of the take-off area, and allow the canopy to unroll itself down the hill if on a slope. This should leave the paraglider with the bottom surface facing upwards, the openings at the downwind/uphill end of the take-off area, and the harness at the trailing edge at the upwind side.
3. Unroll the canopy to each side so that the leading edge openings form a semicircular shape, with the trailing edge drawn together to form an arc. The harness should be drawn away from the canopy until the suspension lines are just tight

Pre-flight checks

Your paraglider is designed to be simple to inspect and maintain but a thorough pre-flight procedure is mandatory on all aircraft. The following pre-flight inspection procedure should be carried out before each flight.

1. Whilst opening the paraglider check the outside of the canopy for any tears where it could have been caught on a sharp object or even have been damaged whilst in its bag. Visually inspect the risers for any signs of damage.
2. Check the lines for signs of damage, twists or knots. Divide the suspension lines into groups, each group coming from one riser. By starting from the harness and running towards the canopy remove any tangles or twists in the lines. Partially inflating the canopy in the wind will help to sort out the lines.
3. Ensure the brakes are clear and free to move. Check the knot which attaches the brake handles to the brake lines. Avoid having too many knots, as there is a risk the knots could become stuck in the brake pulleys. Both

brakes should be the same length and this can be checked by having an assistant hold the upper end of the brake lines together whilst you hold the brake handles. The brake lines should be just slack with the wing inflated when the brakes are not applied.

4. Always check the buckles and attachments on the harness. Ensure the two main attachment maillons/karabiners from the harness to the main risers, and the individual shackles which attach the risers to the lines, are tightly done up.
5. Before getting in to the harness you should be wearing a good helmet. Check the parachute container is correctly closed and the handle is secure. Put on the harness ensuring all the buckles are fastened and that it is well adjusted for comfort.

Your paraglider is now ready for flight.

Flight Characteristics

This manual is not intended as an instruction book on how to fly your paraglider – you should be a qualified pilot. The following describes how to get the best from your wing.

Take-off

The glider is easy to inflate in light or stronger winds and will quickly rise overhead to the flying position. It will launch easily using either the forward launch technique (best for light winds) or reverse launch (best for stronger winds).

Forward Launch

Stand facing into wind with your back to the canopy and all the A-lines taut behind you, then take one or two steps back (do not walk all the way back to the canopy). The A-risers are marked with red cloth to make them easier to find. Take an A-riser in each hand and begin your launch run, pulling gently and smoothly on the A-risers. As soon as the canopy starts to rise off the ground, release your hands and maintain pressure on all the risers evenly through the harness. Maintaining gentle pressure on the A-risers helps in very calm conditions. Be ready to slow up the canopy with the brakes if it starts to accelerate past you.

Reverse Launch

In winds over 10km/h it is recommended to do a reverse launch and inflate the canopy whilst facing it, using the A-risers. Releasing pressure on the A-risers when it is at about 45° will help to stop it overshooting. The stronger the wind and the greater the pressure on the A-risers, the more quickly the canopy will rise. In stronger winds, taking a step towards the glider as it rises can take some of the energy out of the sail and it will be less likely to overshoot.

Straight Flight

Your paraglider will fly smoothly in a straight line without any input.

Turning

Your wing does not require a strong-handed approach to manoeuvring. For a fast turn smoothly apply the brake on the side to which the turn is intended. The speed with which the brake is applied is very important. If a brake is applied fairly quickly the canopy will do a faster banking turn, but care must be taken not to bank too severely. The wing will turn far more efficiently if you weightshift into the turn in the harness. To attain a more efficient turn at minimum sink, apply some brake to the outside wing to slow the turn and prevent excessive banking. Care must be taken not to over-apply the brakes, as this could result in a spin. Remember that violent brake application is dangerous and should be avoided.

Active piloting

The objective of active piloting is to get the glider to fly smoothly through the air with a stable position above your head, and controlled angle of incidence. Active piloting means flying in empathy with your paraglider, guiding it through the air and being aware of feedback from the wing. If the air is smooth the feedback can be minimal but in turbulence feedback is continuous and needs to be constantly checked.

In order to get the best performance from your wing it is best to control it though small brake inputs and weightshift rather than constantly being present on the brakes. A small brake movement early is more efficient than a big input later. The more you let the glider fly at trim speed, the better performance you will get out of it.

Your paraglider is resistant to collapse without any pilot action, but flying actively will increase the safety margin. Active piloting can make your flying experience safer and more enjoyable, and it becomes instinctive in good pilots.

Thermalling

To attain the best climb rate your wing should be thermalled using a mild turn as described above, keeping banking to a minimum. In strong thermals a tighter banking turn can be used to stay closer to the thermal's core. Remember that weightshifting in the harness will make the turn more efficient and reduce the amount of brake required.

Care must be taken not to apply so much brake as to stall. This is easy to avoid as the brake pressure increases greatly as you approach the stall point. Only fly near the stall point if you have enough height to recover (at least 100m).

Speed System

Launching and general flying is normally done without using the accelerator.

Full speed is achieved when the accelerator bar is pushed so that the two pulleys on each A-riser touch. Do not go beyond this point by using excessive force to attempt to make the glider go faster as this may result in the glider collapsing.

When you come off the bar it is important to do so smoothly and progressively, to manage the glider's pitch. It is possible for paragliders to front-collapse if the bar is released too quickly.

We recommend you only fly in conditions where you can progress into wind with no speed bar applied, so that you have extra airspeed in reserve should you need it.

IMPORTANT:

1. Practise using the speed system in normal flying and get fully used to using half speed-bar before you use full bar.
2. The speed increase is achieved by reducing the angle of attack, which means the canopy has slightly more collapse tendency. Take care when flying fast in rough or turbulent conditions as deflations are more likely to occur at speed.
3. Remember that your glide deteriorates at higher speeds. Best glide is achieved when the risers are level and the brakes are off, or with a little accelerator applied (up to 25% speed).

The dyneema line that connects the speed system in the risers is designed to have a small amount of slack in it, in order to obtain the correct riser lengths when accelerated. The amount of slack in this line varies with wing size and determines the B riser length when fully accelerated. The length of this line can be adjusted where it is looped on the maillon of the B-riser. It can also be replaced if necessary.

The component parts of the speed system should be regularly checked for signs of wear, and to ensure the system works smoothly.

C-steering

The BREEZE has an effective and light C-steering system that allows you to actively pilot the wing without using the brakes, which is particularly useful when flying accelerated.

The risers have a 'speed riser': this is an extra riser that is attached to the back of the speed system and to the front of the C steering handle. It balances the load on the C steering handle, giving the pilot more control over the glider when using the C-steering.

To fly with the C-steering system, keep hold of the brakes, and grasp the C-steering handle with your fingers as shown in FIG. 1. You can apply tension to the C's to make small adjustments to the pitch when gliding, especially when you are flying accelerated

The C-steering can also be used to control direction, but you must take care not to accidentally stall the glider as the range is much less than on the brakes.

C-steering



FIG. 1: Keeping the brake in your hand, grasp the C-steering handle with your fingers to apply pressure to the C's.

Rapid descent procedures

Big Ears

The wingtips of your paraglider can be folded in to increase its sink rate. Big Ears allow you to descend quickly without substantially reducing the forward speed of your glider.

To engage Big Ears, lean forward in the harness and grasp the outer A-lines, or the maillons of the 'Baby-A' risers, keeping hold of both brake handles if possible. Pull the outer A-lines or Baby-A risers out and down at least 30cm so as to collapse the tips of the glider. It is very important that the other A-lines are not affected when you do this as pulling these could cause the leading edge to collapse. Steering with Big Ears is possible by weightshifting. When you let go of the outer A-lines or the Baby A risers, the Big Ears may come out on their own. If not, a pump on the brakes is all that is necessary.

Before using Big Ears in earnest you should practise with plenty of ground clearance in case a leading-edge collapse occurs. Always keep hold of both brakes in order to retain control.

B-Line Stall

B-line stalls also allow for fast descent, but they result in greatly reduced forward speed.

Keeping hold of the brake handles, take hold of the top of the B-risers, one in each hand, and pull them down by 10-15cm. This will stall the canopy and its forward speed will drop to zero. Make sure you have plenty of ground clearance because the descent rate can be over 10m/sec.

To increase the descent rate, pull harder on the B-risers. When you release the B-risers the canopy will automatically start flying again, usually within two seconds. Sometimes the canopy will turn gently when it exits from the B-line stall. It is normally better to release the B-risers fairly quickly rather than slowly, as the latter may result in the canopy entering deep stall. Always release the risers symmetrically, as an asymmetric release from a B-line stall may result in the glider entering a spin.

B-line stalls are useful if you need to lose a lot of height quickly, perhaps to escape from a thunderstorm. They should not be performed with less than 100m of ground clearance.

Spiral Dive

A normal turn can be converted into a spiral dive by continuing to apply one brake. The bank angle and speed of the turn will increase as the spiral is entered. Be careful to enter the spiral gradually and with control, as too quick a brake application can cause a spin or a high-G spiral.

Spiral dives are one of the most dangerous manoeuvres in paragliding and the high G-force and quick loss of altitude can easily catch pilots out. A mistake in judging these factors can lead to a very serious accident, so spirals must be treated with great respect. Pilots are advised to practise spiral dives under close supervision or during an SIV course.

Do not perform spiral dives with big ears or asymmetric collapses. The high G loading on fewer lines could overload and break the lines.

To pull out of a steep spiral dive, release the applied brake gradually and/or apply opposite brake gradually. A sharp release of the brake can cause the glider to surge and dive as the wing converts speed to lift. Always be ready to damp out any dive with the brakes. Also be ready to encounter turbulence when you exit from a spiral because you may fly through your own wake, which can cause a collapse.

CAUTION: Spiral dives can cause loss of orientation or black-out and they take some time to exit from. This manoeuvre must be exited with plenty of height.

Landing

Landing is very straightforward. When landing in light winds, flare in the normal way from a height of around 2m. It may sometimes help to take wraps on the brakes to make the flare more effective.

Strong-wind landings require a different technique. If you use the brakes to flare in a strong wind the wing tends to convert this energy to height, which can be a problem. The best method in strong winds, is to take hold of the rear-risers at the maillons just before landing, and collapse the canopy using these when you have landed. The glider will collapse very quickly using this method.

The B-risers can also be used to collapse the canopy after landing, although it is more difficult to control the collapsed canopy on the ground with the B-risers.

Recovery Techniques

Test pilots have tested the glider well beyond the normal flight envelope. Such tests are carried out in a very precise manner by trained test pilots with a back-up parachute, and over water. Stalls and spins on any paraglider are dangerous manoeuvres and are not recommended.

Stalls

Full stalls

Stalls are dangerous and should not be practised in the course of normal flying. Stalls are caused by flying too slowly. Airspeed is lost as brake pressure increases and as the canopy approaches the stall point it will start to descend vertically and finally begin to collapse. Should this occur it is important that the pilot releases the brakes at the correct moment. The brakes should never be released when the wing has fallen behind the pilot; the brakes should be released fairly slowly, to prevent the forward dive of the canopy from being too strong. Pilots are advised never to attempt this manoeuvre unless under SIV instruction.

Deep Stall (or Parachutal Stall)

Your paraglider has been designed so that it will not easily remain in a deep stall. However, if it is incorrectly rigged or its flying characteristics have been adversely affected by some other cause, it is possible that it could enter this situation. In the interests of safety all pilots should be aware of this problem, and know how to recover from it. The most common way to enter deep stall is from a flying too slowly, from a B-line stall or even from big ears. When in deep stall the pilot will notice the following:

- Very low airspeed.
- Almost-vertical descent (like a round canopy), typically around 5m/s.
- The paraglider appears quite well inflated but does not have full internal pressure. It looks and feels a bit limp.

Recovery from deep stall is quite simple: The normal method is to simply initiate a mild turn. As the canopy starts to turn it will automatically revert to normal flight, but it is very important not to turn too fast as this could induce a spin. The second method is to pull gently on the A-risers. This helps the airflow to re-attach to the leading edge, but be careful not to pull down too hard as this will induce a front collapse.

Spins

Spins are dangerous and should not be practised in the course of normal flying. Spins occur when the pilot tries to turn too fast. In a spin the pilot, lines and canopy basically stay vertical and rotate around a vertical axis. Your glider will resist spinning, but if a spin is inadvertently induced you should release the brake pressure but be ready to damp out any dive as the glider exits the spin. Failure to damp the dive on exiting the spin may result in an asymmetric deflation.

Symmetric Front Collapse

It is possible that turbulence can cause the front of the wing to symmetrically collapse, though active piloting can largely prevent this from occurring accidentally.

During the early stages of a front collapse the pilot should apply brake symmetrically on both sides for a maximum of one second. This will push the air from the back of the canopy towards the front, stopping the collapse from becoming deep. Make sure the brakes are fully released during the later stages of the collapse, or this may induce a full stall. The glider will normally recover on its own as long as the pilot keeps the brakes up. If the glider does not recover on its own it may be necessary to make a second pump on the brakes.

A pilot can reproduce the effect during an SIV course by taking hold of both the A-risers and pulling down sharply on them, then immediately releasing. Make sure that you pull all four A-risers at the same time, two risers in each hand (make sure to include the baby-A risers). The glider will automatically recover on its own from this situation in around three seconds. During this recovery period it is advisable not to apply the brakes as this could stall the wing.

Asymmetric Front Collapse

Your paraglider is very resistant to deflations; however if the canopy collapses on one side due to turbulence, you should first of all control the direction of flight by countering on the opposite brake. Most normal collapses will immediately reinflate on their own and you will hardly have time to react before the wing reinflates automatically. The act of controlling the direction will tend to reinflate the wing. However, with more persistent collapses it may be necessary to pump the brake on the collapsed side using a long, strong, smooth and firm action. Normally one or two pumps of around 80cm will be sufficient. Each pump should be applied in about one second and smoothly released. In severe cases it can be more effective to pump both brakes together to get the canopy to reinflate. Be careful not to stall the wing completely if this technique is used.

Releasing a trapped tip (cravat)

Following a severe deflation it is possible for a wingtip to become trapped in the glider's lines (cravat). If this occurs then first of all use the standard method of recovery from a tip deflation as described in Asymmetric Front Collapse above. If the canopy still does not recover then pull the rear risers to help the canopy to reinflate. Pulling the stabilo line is also a good way to remove cravats, but remember to control your flight direction as your number-one priority. If you are very low then it is much more important to steer the canopy into a safe landing place or even throw your reserve.

Loss of brakes

In the unlikely event of a brake line snapping in flight, or a handle becoming detached, the glider can be flown by gently pulling the rear risers for directional control.

Maintenance

Packing

We recommend concertina-packing the wing as it helps to extend its life. Always start with a bunched glider. Do not lay it out, as this would mean pulling it across the ground when you gather the leading edge, risking damage from abrasion.

Stack the leading edge plastics together first, creating a single 'pile' from tip to tip (do not fold it in the middle). Turn the pile onto its side so the plastics are laid flat, and secure with the glider strap while you concertina-fold the rest of the glider. Push the air out, from the trailing edge towards the leading edge, and then fold the glider into three or four sections to fit the stuff sack. Remove the strap from the leading edge, and close around the whole glider, before placing it into the stuff sack.

A [concertina packing bag](#) can make this easier. It has a dedicated strap to hold the stacked leading edge in place. The rest of the glider can then be gathered and zipped into the bag, from the leading edge towards the trailing edge. Finally, the bag can be folded into three and secured with the outside strap. Bruce demonstrate how to use the concertina bag in this [video](#).

Storage

If you have to pack your canopy away wet, do not leave it for more than a few hours in that condition. As soon as possible dry it out, but do not use direct heat sources as it is inflammable!

It is recommended to store your glider loosely packed, in a dry place out of direct sunlight. Avoid extremes of temperature – do not leave it for long periods in a hot car in summer, and avoid letting it freeze, particularly if it is damp.

Your paraglider is made from high quality nylon which is treated against weakening from ultraviolet radiation. However, UV exposure will still weaken the fabric and prolonged exposure to harsh sunlight can severely compromise the safety of your canopy. Therefore once you have finished flying, put your wing away. Do not leave it laying in strong sunshine unnecessarily.

Never drag or slide the top surface of the glider over concrete or other hard surface as this can cause abrasion damage to the sail.

Do not treat your canopy with chemical cleaners or solvents. If you must wash the fabric, use warm water and a little soap. If your canopy gets wet in sea water, wash it with warm water and carefully dry it.

Small Repairs

Small tears in the top or bottom surface (not normally the ribs) of a canopy can be repaired with a patch of self-adhesive ripstop nylon. Tears of up to around 10 cm can be repaired in this way providing they are not in high-stress areas. If you have any doubt about the airworthiness of your canopy please contact your dealer or BGD directly.

Lines



Left: loops on maillons; Right: loops released.

Releasing loops on the rear lines

All BGD gliders are rigged from new with loops on the maillons of the C lines (and D lines if any) plus the stabi line. The loops are there so that they can be released to compensate for any shrinkage of the back lines as the glider gets older.

BGD recommends releasing the loops after 100 hours or one year, whichever comes first, or earlier if the pilot feels the glider does not come up as easily on launch.

When the first line check is done, normally at 2 years, the loops should already have been released, and this should be verified and fine-tuned by the check centre.

Mounting Replacement Lines

If you need to replace lines on your glider, we recommended that a professional should mount the new lines. The airworthiness of your glider, and your safety, depends on it being done correctly.

You can identify the line(s) you need to replace from the line layout diagram for your wing. Download the latest version from <https://flybgd.com/lines>.

Replacement lines can be ordered from the Accessories section of www.flybgd.com. Check that the lines you have received correspond with the [line plan](#) and that it matches your glider.

The quickest way to remove the old lines is to cut them off. make sure you don't cut the old lines off if you have not

received the new ones or you may end up not being able to fly! Sometimes only a part lineset is needed (eg excluding top lines or brakes) so take care not to cut any lines that need to be retained.

Correct alignment of lines

It is important that the lines are mounted the correct way up.

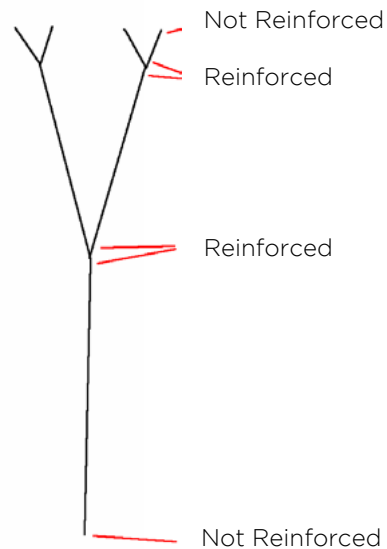


Sheathed lines have no additional reinforcing. They can be mounted either way up

Yellow thread marks the reinforced end of a microline

White thread marks the non-reinforced end of a microline.

Unsheathed lines have an internal reinforcement at one end, marked with a yellow thread. This is the line junction end. The non-reinforced end is marked with a white thread and must be attached to the glider attachment point or maillon. Sheathed lines have no additional reinforcement and can be mounted in both directions.



Alignment of tabs

Lines should be placed symmetrically on the tab, except where the tab is inclined. The A tabs are inclined backwards on all BGD gliders to align with the direction of pull of the line. So when assembling the lines, the A tab should be angled back, and the B, C and D tabs should be perpendicular to the undersurface of the wing.

Attaching the lines

All the lines are connected to other lines or to tabs with lark's foot junctions. Make sure that they are joined correctly with interlocked junction and not looped junctions.



Interlocked junction – correct



Looped junction – incorrect



Interlocked junction – correct



Looped junction – incorrect

Loops on the rear lines

The new lines should be mounted without loops on the A and B risers. The Stabi line and the C risers should have a single loop.

BGD **maillons** have black **plastic inserts** to prevent them from accidentally coming undone and the lines from falling out. Always ensure that they are correctly installed after rigging the glider. If they are lost, use a line lock insert to hold the link closed. New inserts can be ordered from www.flybgd.com.

After rigging the wing, always do a full **dimensional check** of the lines, and inflate it to ensure that everything is correct before flying.

Servicing / Inspection

It is important to have your glider regularly serviced. Your wing should have a thorough check / inspection every 24 months or every 150 flight hours, whichever occurs first. This check must be made by the manufacturer, importer, distributor or other authorised persons.

Please print out the [service pages](#) from this manual, fill in the number of flights and hours flown in the Service Record, and send together with your glider when it goes for inspection or servicing. The manufacturer will only accept responsibility for lines and repairs which we have produced and fitted or repaired by an approved service centre.

Environmental protection and recycling

Our sport takes place in the natural environment, and we should do everything to preserve our environment. A glider is basically made of nylon, synthetic fibres and metal. At the end of your paraglider's life, please remove all metal parts and put the different materials in an appropriate waste/recycling plant.

Technical Data

Materials

The BREEZE is made from the following quality materials:

Sail

Top surface	Porcher Skytex Classic II 27 g/m ²
Top surface leading edge	Porcher Skytex 32 g/m ²
Bottom surface	Porcher Skytex Classic II 27 g/m ²
Internal structure	Porcher Skytex 27 g/m ² hard finish
Nose reinforcing	LSNR (linear stock nylon rod) yellow
Risers	12 mm Kevlar / nylon
Pulleys	Sprenger (brakes and speed system) and Riley

Lines

Top lines	Edelrid Magix Pro Dry 8001U (unsheathed)
Middle lines	Edelrid Magix Pro Dry 8001U (unsheathed)
Lower lines	Edelrid Magix Pro Dry 8001U (unsheathed)
Brakes	Liros DSL

Spare parts can be obtained directly from BGD or through our network of registered BGD repair shops.

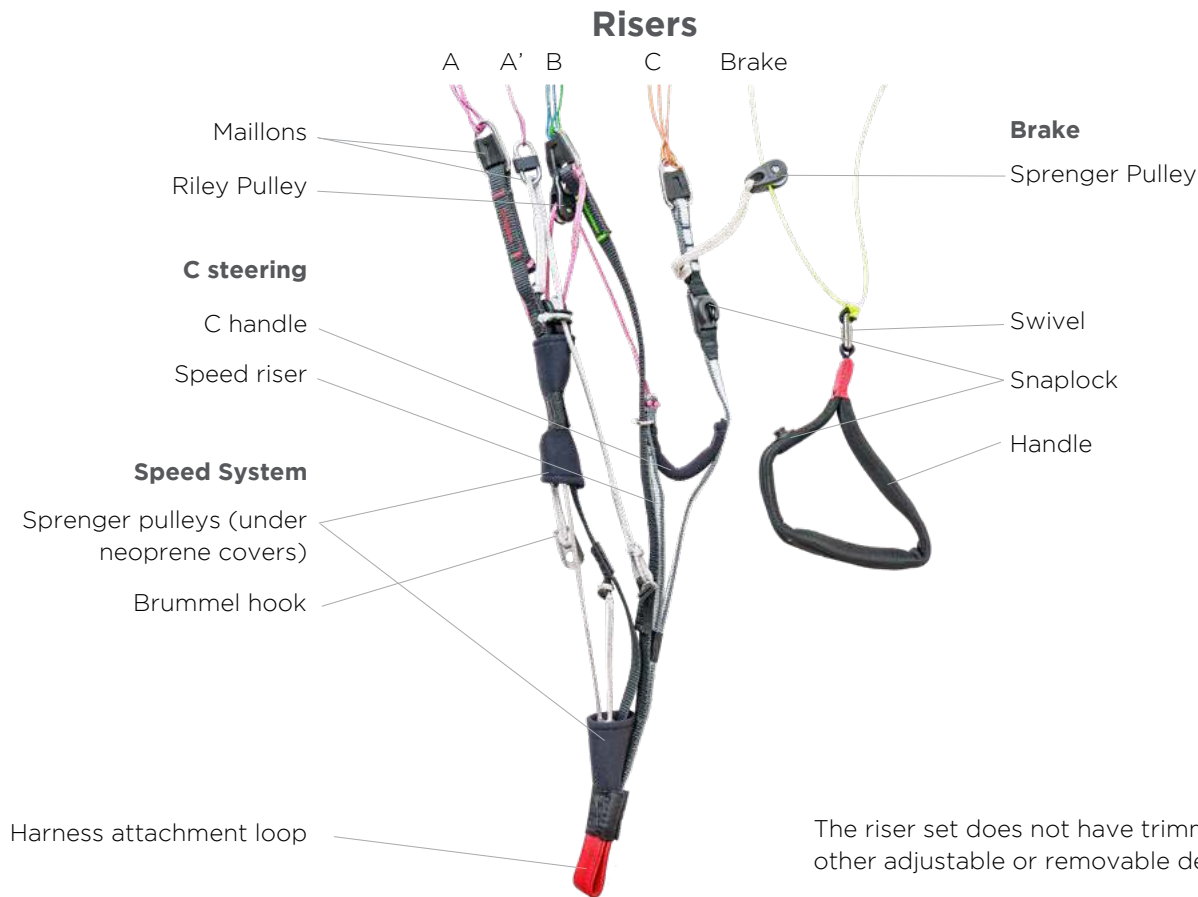
For a full list check www.flybgd.com

Specifications

	XS	S	M	ML
Linear scaling factor	0.93	0.96	1.00	1.04
Projected area (m ²)	17.7	19.2	20.6	22.2
Flat area (m ²)	20.9	22.7	24.4	26.3
Glider weight (kg)	3.3	3.6	3.7	3.9
Number of main lines	3/2/3			
Cells	57			
Flat aspect ratio	5.7			
Root chord (m)	2.5	2.6	2.7	2.8
Flat span (m)	10.9	11.4	11.8	12.2
Certified weight range (kg)	55-75	65-85	75-95	88-108
Ideal weight range (kg)	60-73	73-84	84-95	95-108
Certification	EN+LTF: B			
Suitable for paramotor	Not yet tested			
Suitable for towing	Yes			

Overview of glider parts





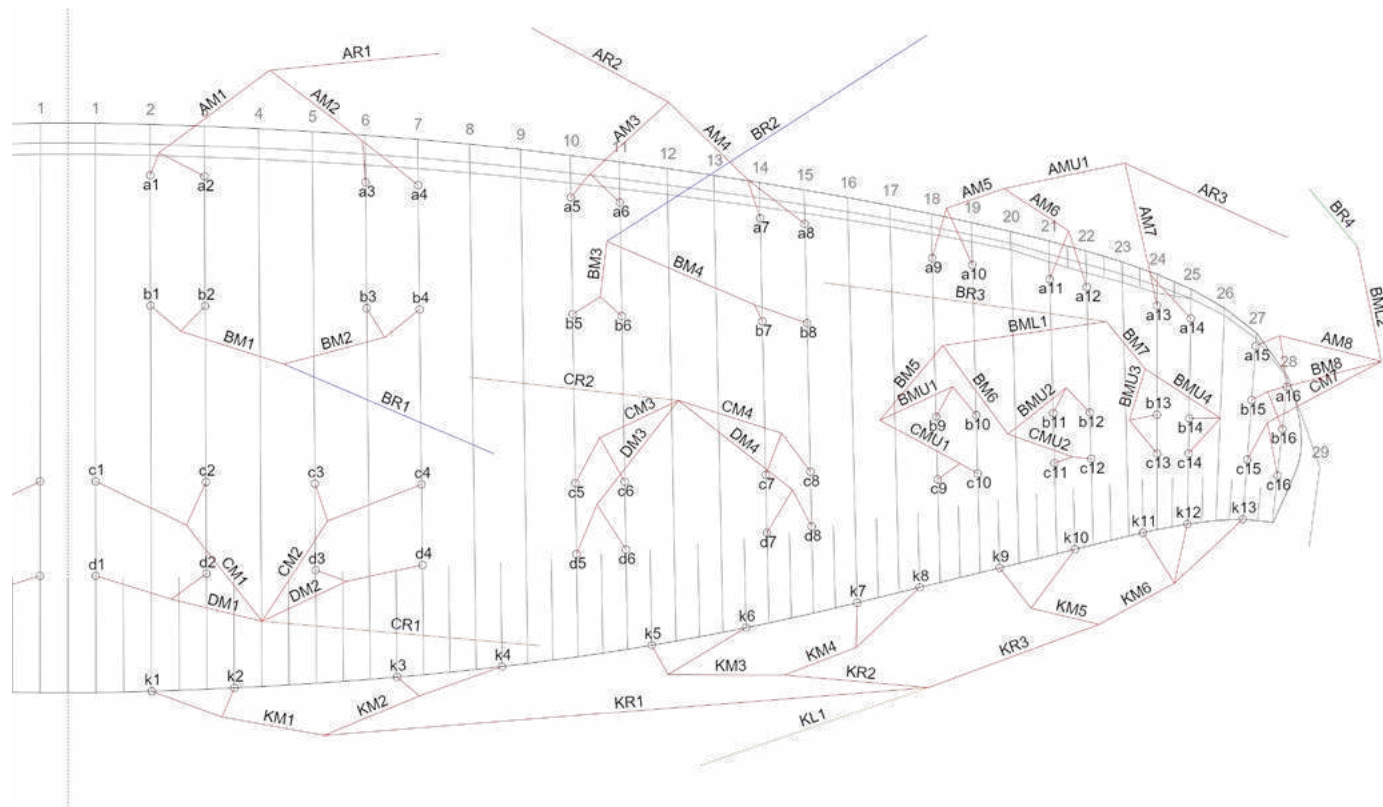
Accelerator and brake ranges

The actual measured **riser length** must be no more than 5mm different to the value in the table.

Brake travel is for maximum all-up weight.

Size	Riser lengths Trim speed (mm)	A-riser length Accelerated (mm)	Accelerator travel (mm)	Brake travel (mm)
XS	500	320	180	660
S	500	310	190	680
M	500	310	190	700
ML	500	310	190	720

Line Plan



Line Lengths

The latest line lengths and diagrams can be downloaded from <https://flybgd.com/lines>

All measures are in mm, with 50 N line tension, the tension being slowly and gradually applied before taking the measurement. The lengths are measured from the lower surface of the canopy and include the risers.

Compliance of the test sample's suspension lines, control lines and risers with the dimensions given in the user's manual are checked by the testing laboratory after the test flights have been completed

The difference in line lengths between the manual and the sample may be no more than 10 mm. The measured lengths are in the appendix.

Size XS

	A	B	C	D	K
1	6345	6189	6325	6438	6722
2	6283	6129	6189	6314	6492
3	6222	6072	6144	6261	6201
4	6246	6093	6148	6255	6141
5	6121	5976	6053	6137	5903
6	6073	5936	5997	6077	5735
7	5978	5858	5897	5966	5626
8	5980	5862	5893	5954	5687
9	5779	5730	5816		5623
10	5739	5677	5757		5574
11	5665	5598	5676		5573
12	5661	5588	5642		5621
13	5582	5548	5601		5760
14	5573	5555	5607		
15	5507	5516	5633		
16	5512	5541	5643		

Bridle check ▲

Single line lengths ►

Technical data

A		B		C		D		K	
a1	312	b1	333	c1	1006	d1	834	k1	440
a2	250	b2	272	c2	870	d2	710	k2	210
a3	272	b3	280	c3	1013	d3	773	k3	485
a4	295	b4	301	c4	1017	d4	767	k4	425
a5	296	b5	300	c5	323	d5	328	k5	470
a6	247	b6	258	c6	266	d6	268	k6	349
a7	265	b7	270	c7	317	d7	286	k7	280
a8	266	b8	274	c8	314	d8	274	k8	292
a9	301	b9	615	c9	300			k9	349
a10	260	b10	561	c10	241			k10	348
a11	271	b11	330	c11	275			k11	502
a12	267	b12	320	c12	242			k12	550
a13	261	b13	323	c13	375			k13	689
a14	252	b14	326	c14	377				
a15	391	b15	307	c15	253				
a16	395	b16	331	c16	263				
AM1	1442	BMU1	513	CMU1	913	DM1	1551	KM1	1430
AM2	1360	BMU2	590	CMU2	722	DM2	1436	KM2	864
AM3	1662	BMU3	255	CM1	1268	DM3	1711	KM3	901
AM4	1547	BMU4	259	CM2	1080	DM4	1581	KM4	862
AM5	1342	BM1	1453	CM3	1633			KM5	768
AM6	1256	BM2	1387	CM4	1482			KM6	564
AMU1	1830	BM3	1684	CM7	781			KR1	2439
AM7	3005	BM4	1593	CR1	3534			KR2	2070
AM8	517	BM5	599	CR2	3581			KR3	2044
AR1	4068	BM6	674					KL1	2381
AR2	3639	BM7	1449						
AR3	1794	BM8	610						
		BML1	490						
		BML2	3576						
		BR1	3882						
		BR2	3468						
		BR3	3003						
		BR4	510						

Size S

	A	B	C	D	K
1	6602	6452	6578	6696	7052
2	6538	6390	6438	6568	6812
3	6476	6333	6392	6514	6509
4	6502	6355	6398	6509	6448
5	6374	6231	6300	6389	6197
6	6324	6189	6242	6326	6022
7	6226	6109	6138	6211	5910
8	6228	6114	6137	6198	5974
9	6026	5973	6067		5907
10	5985	5917	6006		5857
11	5907	5836	5919		5855
12	5902	5825	5885		5906
13	5819	5783	5838		6051
14	5811	5791	5845		
15	5740	5750	5872		
16	5745	5774	5882		

Bridle check ▲

Single line lengths ►

Technical data

A		B		C		D		K	
a1	325	b1	347	c1	1049	d1	870	k1	460
a2	261	b2	284	c2	908	d2	741	k2	220
a3	282	b3	292	c3	1056	d3	805	k3	506
a4	308	b4	314	c4	1061	d4	800	k4	444
a5	309	b5	313	c5	337	d5	343	k5	490
a6	258	b6	270	c6	278	d6	280	k6	362
a7	277	b7	281	c7	330	d7	299	k7	290
a8	278	b8	286	c8	329	d8	286	k8	305
a9	314	b9	642	c9	313			k9	363
a10	271	b10	585	c10	252			k10	361
a11	283	b11	345	c11	286			k11	522
a12	278	b12	334	c12	252			k12	573
a13	272	b13	337	c13	392			k13	718
a14	263	b14	340	c14	394				
a15	408	b15	321	c15	264				
a16	413	b16	345	c16	274				
AM1	1501	BMU1	534	CMU1	956	DM1	1615	KM1	1491
AM2	1417	BMU2	614	CMU2	756	DM2	1498	KM2	901
AM3	1730	BMU3	265	CM1	1320	DM3	1782	KM3	939
AM4	1612	BMU4	270	CM2	1126	DM4	1648	KM4	899
AM5	1398	BM1	1512	CM3	1701			KM5	800
AM6	1307	BM2	1447	CM4	1545			KM6	588
AMU1	1906	BM3	1753	CM7	814			KR1	2539
AM7	3129	BM4	1661	CR1	3693			KR2	2158
AM8	539	BM5	624	CR2	3745			KR3	2133
AR1	4257	BM6	702					KL1	2530
AR2	3814	BM7	1509						
AR3	1893	BM8	635						
		BML1	509						
		BML2	3771						
		BR1	4074						
		BR2	3643						
		BR3	3153						
		BR4	510						

Size M

	A	B	C	D	K
1	6846	6694	6834	6955	7301
2	6781	6631	6690	6824	7053
3	6718	6572	6641	6770	6740
4	6746	6596	6648	6765	6680
5	6613	6470	6547	6640	6431
6	6562	6426	6487	6576	6250
7	6461	6343	6380	6457	6104
8	6462	6348	6380	6444	6171
9	6254	6195	6273		6118
10	6213	6138	6209		6066
11	6131	6052	6120		6065
12	6126	6043	6085		6118
13	6043	6001	6057		6221
14	6033	6009	6064		
15	5961	5972	6098		
16	5966	5997	6108		

Bridle check ▲

Single line lengths ►

Technical data

A		B		C		D		K	
a1	337	b1	360	c1	1088	d1	902	k1	477
a2	272	b2	295	c2	943	d2	770	k2	228
a3	292	b3	302	c3	1094	d3	835	k3	524
a4	320	b4	326	c4	1100	d4	830	k4	461
a5	320	b5	325	c5	349	d5	355	k5	508
a6	267	b6	280	c6	288	d6	291	k6	374
a7	287	b7	292	c7	342	d7	310	k7	299
a8	288	b8	297	c8	341	d8	297	k8	317
a9	325	b9	665	c9	325			k9	377
a10	282	b10	607	c10	261			k10	373
a11	293	b11	357	c11	297			k11	541
a12	288	b12	347	c12	262			k12	594
a13	283	b13	350	c13	407			k13	745
a14	273	b14	353	c14	409				
a15	423	b15	334	c15	274				
a16	428	b16	358	c16	284				
AM1	1554	BMU1	553	CMU1	970	DM1	1674	KM1	1544
AM2	1470	BMU2	636	CMU2	763	DM2	1555	KM2	935
AM3	1792	BMU3	275	CM1	1368	DM3	1848	KM3	988
AM4	1671	BMU4	280	CM2	1169	DM4	1709	KM4	917
AM5	1448	BM1	1566	CM3	1762			KM5	828
AM6	1354	BM2	1499	CM4	1602			KM6	610
AMU1	1974	BM3	1817	CM7	843			KR1	2630
AM7	3243	BM4	1721	CR1	3852			KR2	2236
AM8	558	BM5	646	CR2	3909			KR3	2213
AR1	4429	BM6	727					KL1	2619
AR2	3973	BM7	1564						
AR3	1983	BM8	658						
		BML1	528						
		BML2	3948						
		BR1	4240						
		BR2	3796						
		BR3	3283						
		BR4	510						

Size ML

	A	B	C	D	K
1	7095	6935	7074	7203	7592
2	7027	6869	6925	7067	7336
3	6962	6810	6876	7010	7011
4	6991	6835	6884	7006	6947
5	6857	6705	6787	6882	6684
6	6804	6661	6725	6816	6497
7	6700	6575	6614	6693	6352
8	6702	6580	6614	6679	6422
9	6480	6430	6524		6376
10	6437	6370	6457		6323
11	6354	6281	6366		6322
12	6349	6270	6329		6376
13	6263	6227	6287		6533
14	6253	6236	6293		
15	6172	6183	6315		
16	6177	6209	6325		

Bridle check ▲

Single line lengths ►

Technical data

A		B		C		D		K	
a1	350	b1	374	c1	1129	d1	937	k1	495
a2	281	b2	307	c2	980	d2	801	k2	238
a3	303	b3	314	c3	1135	d3	866	k3	544
a4	331	b4	339	c4	1142	d4	862	k4	479
a5	331	b5	337	c5	363	d5	369	k5	527
a6	278	b6	291	c6	300	d6	302	k6	387
a7	298	b7	303	c7	355	d7	322	k7	308
a8	300	b8	308	c8	355	d8	308	k8	329
a9	338	b9	691	c9	338			k9	391
a10	293	b10	630	c10	271			k10	386
a11	305	b11	371	c11	309			k11	562
a12	300	b12	360	c12	272			k12	616
a13	294	b13	364	c13	423			k13	773
a14	284	b14	367	c14	424				
a15	439	b15	347	c15	285				
a16	444	b16	372	c16	295				
AM1	1612	BMU1	574	CMU1	1021	DM1	1737	KM1	1602
AM2	1525	BMU2	660	CMU2	806	DM2	1615	KM2	971
AM3	1860	BMU3	285	CM1	1418	DM3	1917	KM3	1009
AM4	1734	BMU4	290	CM2	1214	DM4	1774	KM4	943
AM5	1502	BM1	1624	CM3	1829			KM5	859
AM6	1406	BM2	1557	CM4	1663			KM6	634
AMU1	2048	BM3	1886	CM7	875			KR1	2719
AM7	3366	BM4	1787	CR1	4015			KR2	2323
AM8	579	BM5	670	CR2	4078			KR3	2300
AR1	4613	BM6	754					KL1	2745
AR2	4143	BM7	1623						
AR3	2080	BM8	682						
		BML1	547						
		BML2	4137						
		BR1	4419						
		BR2	3961						
		BR3	3437						
		BR4	509						

Service Record

Service No 1

Date		Stamp / Signature
N° flights		
Type of Service		
Notes		

Service No 2

Date		Stamp / Signature
N° flights		
Type of Service		
Notes		

Service No 3

Date		Stamp / Signature
N° flights		
Type of Service		
Notes		

Service No 4

Date		Stamp / Signature
N° flights		
Type of Service		
Notes		

Service No 5

Date		Stamp / Signature
N° flights		
Type of Service		
Notes		

Service No 6

Date		Stamp / Signature
N° flights		
Type of Service		
Notes		

Owner Record

Pilot No 1

First name

Family name

Street

City

Post code

Country

Telephone

Email

Pilot No 2

First name

Family name

Street

City

Post code

Country

Telephone

Email

Closing Words

Your paraglider promises many hours of safe and enjoyable flying, provided you treat it with care and always respect the potential dangers of aviation. Please remember that flying can be dangerous and your safety depends on you.

With careful treatment your wing should last for many years. It has been tested to current international airworthiness standards, and these represent the current knowledge concerning the safety of a paraglider. However, there are still many unknowns, for example the effective lifespan of the current generation of gliders and how much material material ageing is acceptable without affecting the airworthiness.

There are natural forces that can seriously threaten your safety, regardless of the quality of construction or the condition of your glider. Your security is ultimately your responsibility. We strongly recommend that you fly carefully, adapt to the weather conditions and keep your safety in mind. Flying in a club or a school with experienced pilots is highly recommended.

We recommend that you fly with a standard harness with back protection and a reserve parachute. Always use good equipment and an approved helmet.

See you in the sky!

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9413 St Gertraud, Austria
Tél +43 (0) 4352 35676

43N SARL R&D
195 Avenue Auguste Renoir,
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[email: sales@flybgd.com](mailto:sales@flybgd.com)

Appendix

EN line measurements

The tables below show the line measurements for the test wings, as measured by the test house during the certification procedure. These figures relate to the Bridle Check Tables.

Size XS

	A	B	C	D	K
1	6349	6200	6316	6427	6719
2	6288	6138	6177	6303	6492
3	6225	6080	6132	6247	6204
4	6249	6100	6138	6241	6143
5	6125	5976	6043	6124	5904
6	6077	5938	5989	6065	5735
7	5981	5860	5884	5954	5632
8	5983	5861	5879	5942	5689
9	5777	5729	5810		5622
10	5742	5673	5755		5582
11	5667	5594	5674		5580
12	5663	5584	5639		5626
13	5580	5543	5598		5764
14	5568	5549	5603		
15	5503	5509	5623		
16	5510	5532	5633		

Size S

	A	B	C	D	K
1	6606	6456	6579	6691	7046
2	6547	6397	6437	6566	6810
3	6485	6336	6387	6509	6506
4	6511	6357	6391	6503	6444
5	6385	6231	6298	6385	6192
6	6336	6190	6241	6320	6022
7	6234	6110	6138	6207	5912
8	6237	6115	6135	6194	5972
9	6032	5976	6060		5901
10	5991	5920	6001		5856
11	5916	5835	5925		5858
12	5908	5827	5891		5903
13	5826	5784	5838		6051
14	5817	5792	5842		
15	5739	5744	5864		
16	5742	5768	5871		

Size M

	A	B	C	D	K
1	6852	6693	6835	6951	7296
2	6787	6632	6688	6817	7040
3	6721	6570	6639	6765	6743
4	6750	6592	6645	6759	6693
5	6617	6468	6551	6641	6433
6	6563	6427	6491	6580	6261
7	6462	6346	6386	6462	6106
8	6464	6349	6385	6448	6163
9	6260	6202	6277		6113
10	6227	6147	6213		6062
11	6142	6057	6118		6070
12	6135	6042	6083		6124
13	6049	6003	6060		6221
14	6036	6010	6064		
15	5965	5974	6094		
16	5967	5996	6105		

Size ML

	A	B	C	D	K
1	7109	6941	7086	7214	7611
2	7040	6878	6938	7076	7355
3	6973	6817	6891	7018	7034
4	7005	6842	6896	7014	6969
5	6869	6711	6790	6886	6703
6	6813	6666	6733	6819	6520
7	6710	6585	6619	6697	6400
8	6713	6589	6620	6684	6468
9	6491	6433	6528		6396
10	6447	6373	6463		6344
11	6366	6284	6367		6344
12	6362	6273	6331		6396
13	6262	6228	6286		6544
14	6255	6237	6293		
15	6178	6186	6314		
16	6181	6213	6324		