

english version 1.3



MERLIN

... get enchanted by Merlin's magic ...

Please read this manual carefully and keep its instructions in mind when using your

Merlin paraglider



Thank you for flying Drift glider and becoming Drift team pilot! We wish you many wonderful flying experiences.

...Catch the drift!...

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1. INTRODUCTION

Change of rules and permission to use folding lines in the lower category has refined our plans to create an ultimate cross country wing with as little air drag as possible and moderate aspect ratio. Two-liner constructions have already proven themselves very well in more than ten years of serial existence, and a significant part of pilots who have tried this concept do not want to go back. The feeling of direct speed control when piloting with the help of rear risers is very effective for XC flying and improves active piloting a lot. However, this concept also brings with it some challenges for successful certification in the EN-C class. According to the EN-C standard, paragliders are designed for self-regeneration without the need for pilot input. Merlin is intended for those who want to concentrate as much as possible on flight tactics and not worry too much about their ability to solve collapses.

After thorough testing in all possible conditions, we can confidently say that with the release of Merlin we managed to exceed our expectations, especially from the point of view of stability and regeneration of the canopy.

1.1 WARNING

Paragliding is considered as a high-risk sport that can result in injury, in the worst case, death, can occur if the appropriate weather conditions are not estimated well or if a pilot error occurs. By using a Drift glider, you are aware of these risks.

Please note that any changes to the paraglider will invalidate the result of the certification and may negatively affect flight characteristics of the Merlin. Correct usage of the glider is the pilot's responsibility. The manufacturer and distributor do not accept liability for loss or damage as a result of the misuse of this paraglider. It is the pilot's responsibility to comply with legal regulations and to maintain the airworthiness of the sports flying equipment.

2. YOUR PARAGLIDER

2.1 Technical description

The Merlin from Drift Paragliders is one of the first "two-liner" glider in the sport class available on the market. This means that the upper and middle gallery of lines are connected to only two rows of bottom main lines, A and B. Such a layout allows a significantly less total line consumption, which reduces air resistance and, above all, with this suspension system we use an optimized profile that can better penetrate various air masses and turbulences. The location of the inlet is further back on the bottom of the leading edge and it is practically shaped for the best possible air access and pressurization of the canopy - that's what we call the "beak" in our terminology. This ensures optimal inflation of the canopy and helps to retain the leading edge's clean shape at maximum speed. There are nylon reinforcements around the perimeter of much of the profile in elegantly placed tunnels for strengthening effect, mini-ribs on the trailing edge help improve handling and aerodynamic flow. The leading edge is spatially shaped with double convex seams to improve tension and smoothness. Maneuverability, climbing, performance and speed are accompanied by a high level of passive safety. This wing gives pilots precise and easy control and the instant feedback means pilots relax and quickly start flying in harmony. In the air, the Merlin responds to weight shifts and has precise brakes with medium-travel with increasing force to suit both intermediates and experts. Balanced wing dynamics and clear stall point give you good response in the air. The Merlin comes with high quality Ronstan pulleys as part of the riser's speed system, which provides great acceleration and low forces when pushing the speed bar.

The Merlin's ground plan has an elliptical shape. The glider's profile has been specially developed to deliver maximum stability over the widest possible speed range. The Drift team has paid special attention to various small details, including strong low-drag micro attachment points. The upper level lines have progressively differing diameters which thicken downwards and are made from very strong unsheathed aramid-technora lines. The connection between the risers and the lines is ensured by small carabiners, shaped for a better attachment to the webbing.

The amazing resistance against collapse is given by the tuned profile in combination with the location of the attachment points; this feature really stands out from the average in its class. And particularly the accelerated flight mode at a lower angle of attack against the wind in unstable air shows great results against the existing EN-C three-liners. An excellent choice for pilots willing to fly faster over longer distances in various conditions such as mountains and flatlands. Aspect ratio 6,3 flat is an average value within the EN-C class and it means a comfortable and relatively low level of workload level as expected for such a class.

We recommend the Merlin paraglider to experienced pilots who fly regularly or who has flown enough hours in the past. This wing is not suitable immediately after a paragliding course, it isn't recommended to someone who is not familiar with non-standard flight modes trained during SIV courses.

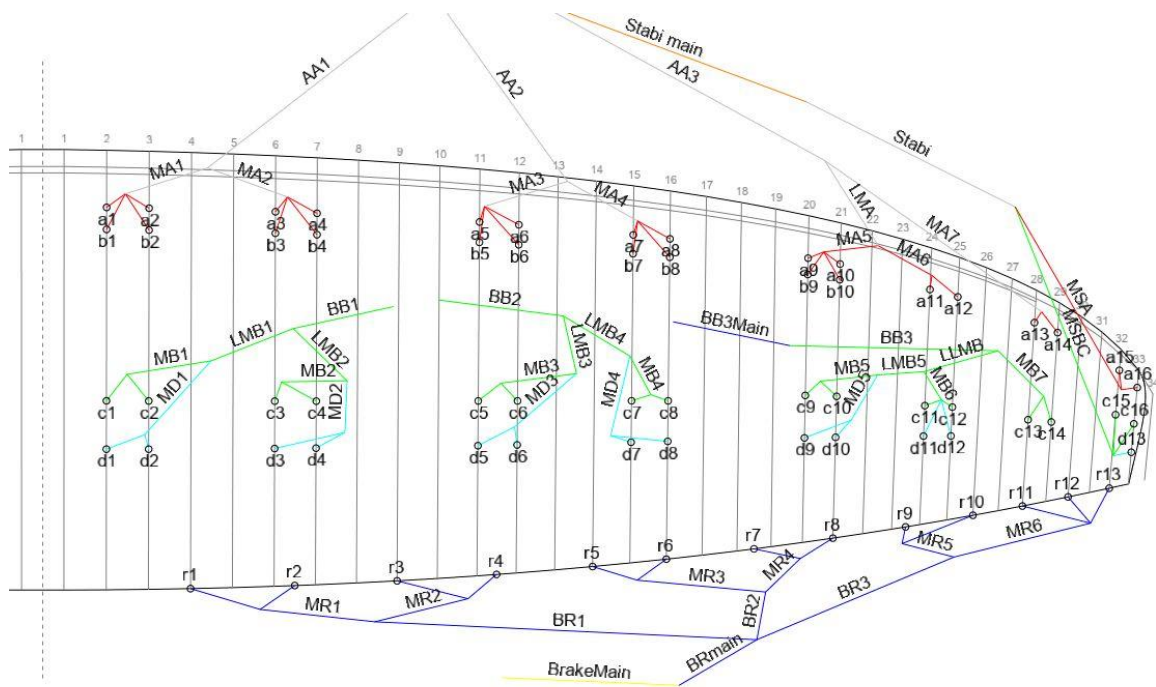
2.2 Technical data

Merlin						
Size	Units	XS	S	M	L	XL
Zoom	%	92	96.5	100	104	108.5
Max. chord	m	2.2	2.36	2.45	2.55	2.66
Flat Area	m ²	20.45	22.5	24.17	26.14	28.45
Projected Area	m ²	17.58	19.34	20.77	22.46	24.45
Flat span	m	11.3	11.85	12.28	12.77	13.33
Projected span	m	9.14	9.59	9.94	10.33	10.78
Aspect Ratio		6.3	6.3	6.3	6.3	6.3
Projected AR		4.75	4.75	4.75	4.75	4.75
Number of Cells	№	67	67	67	67	67
Bridle length	m	176	185	191	200	211
Glider weight	kg	*	4,53	4,82	5,17	*
Certification		*	EN-C	EN-C	*	*
Certified takeoff weight	kg	65-80	77-92	88-104	100-117	112-130
Ideal weight range	kg	70-80	81-92	93-104	105-117	118-130

*not yet

2.3 Technical Drawings

Bridle names



Length of Merlin risers (mm)

M, L, XL size		A ₁	A ₂	B
non-accelerated	[mm]	500	505	500
accelerated	[mm]	325	410	500

XS, S size		A ₁ +A ₂	B	B
non-accelerated	[mm]	500	505	500
accelerated	[mm]	340	420	500

A₁+B maillon carabiners measure 30mm, A₂ measure 25mm

Merlin has two main rows of risers: A and B



Length tolerance of risers is +/-5mm.

Merlin has no trimmers or any other adjustable or removable device.

2.4 Materials

Materials description

Canopy	
Upper sail:	Porcher Sport - Skytex 32 everlast Porcher Sport - Skytex 27 double coated
Supported ribs:	Porcher Sport - Skytex hard finish 40 / hf 27
Unsupported ribs:	Porcher Sport - Skytex hard finish 27
Lower sail :	Porcher Sport - Skytex 27 double coated
Reinforcement:	nylon rods \varnothing 2,4mm; \varnothing 2mm; \varnothing 1,5mm, Skytex-patch white, Skyforce 160
Thread:	Euronite nylon D60, D40
Attachment points:	Mouka Tišnov PN 99 301 (width 10 mm)

Suspension lines - EDELRID / LIROS	
Upper cascade:	Edelrid A-8000/8001-U (50-70); DC 40
Middle cascade:	Edelrid A-8000/8001-U (50-70-90-130-190-230); DC 40
Main lines:	Edelrid A-8000/8001-U (50-90-190-230-280-340) Liros PPSL 120, PPSL 160 / TSL 220

Risers	Mouka Tišnov – PES 13x2mm (900 daN)
Pulleys	Ronstan Orbit 20
	Riley black (brake line)
Rapid links	Maillon rapide - (min 150 daN)
Rigifoils	Nylon rigifoils Spokar/Hipa 2,4mm+2mm+1,5mm diameter

3. CERTIFICATION

The Merlin is EN/LTF - C certified. Certification is valid for the use with all ABS harnesses. The certification label on your glider is found on a rib in the middle of the canopy. You may only make adjustments to brake-line lengths or to the speed system of your Merlin – and only then in accordance with the recommendations of this manual. Other adjustments or changes to your Merlin lead to a loss of guarantee, airworthiness and validity of the Certification! Amateur modification may endanger yourself and other pilots.

4. BEFORE FLIGHT

4.1 Adjusting your glider

Every single paraglider goes through a final check and test-flight by a certified Drift team member. However, if you use your Merlin for the very first time, we recommend you to take your time to unpack, check and inflate the wing on the ground before the first flight. You should inspect the top and bottom surfaces for any rips and tears or any other obvious signs of damage. Check the canopy carefully and continue with lines and risers. Lines shouldn't be twisted or knotted and all maillon carabiners must be properly closed. Practicing ground handling will definitely help you become familiar with your wing.

4.1 Harness

As mentioned in section 3 - certification, our wings are certified with standard seated harnesses. It's important to set up your harness correctly before flying. Make sure you have a comfortable position. Don't put your chest strap too tight (below 42 cm) or too wide (over 48 cm) as this will affect the behaviour and feedback of the wing. Flying with the chest strap too tight indirectly increases the risk of asymmetrical collapses as well as slower regeneration from the deep spiral. Check the settings used during testing under the certification specimen section. Pod harnesses increase the risk of twists occurring during a large asymmetric collapse and should only be used by experienced pilots

4.2 Accelerator settings

Make sure you can use the whole range when you attach your speed bar. A basic set-up can be made on the ground. Ask your friend to pull the risers up into flight position whilst you sit in the harness. Adjust the lengths of the lines so that the main bar sits just beneath your seat. You should be able to hook your heel into the lower loop of the accelerator. The length of the speed bar lines should be adjusted on the ground so that your legs are fully extended at the point of full accelerator travel

While setting the speed line lengths make sure they are long enough, so that the speed system does not accelerate the glider by itself.

4.3 Brake lines

Main brake lines on your wing have been set during the certification test and the usable brake travel meets the requirements for the category of EN-C gliders, which is approximately 55 cms at maximum weight in flight. This length should suit most pilots however if you choose to adjust their length we recommend you to make any change wisely taking into account the fact that the brake cascade lines on two-liner wings are tightened more with the use of the speed system. Brakes that are too short can make it difficult to recover from a stall and can reduce your glider's top speed. There must be at least 5cms of free travel before the brakes begin to deform the trailing edge. This prevents the trailing edge from being deformed when using the speed system. If the brakes are too long it may lead to loose control in extreme flying situations. It can also affect the pilot's control during takeoff and landing.

4.4 Weight range

Each size of the Merlin is certified for its own weight range. The above mentioned weight includes the weight of the pilot and complete paragliding equipment, together with the glider, harness, all accessories and optional ballast. Every glider changes its characteristics by changing the take-off weight. We recommend that you always fly your glider in the specified weight range.

5. OPERATION IN FLIGHT

This manual is intended as a guide to the characteristic features of your new Merlin paraglider. Under no circumstances should it be used as a 'learn-to-fly' manual for paragliding or as a substitute for a paragliding pilot's training course.

5.1. Standard flight

5.1.1 Pre-flight check

Before every flight you need to do a pre-flight check and the inspection of other equipment like the harness, reserve, speed system and all connections, it is essential for safe flying - pay special attention to it. You should have a consistent method of checking and preparing your equipment and doing the final pre-flight check. Above all, you should check that the canopy, lines and risers are free from damage and tangles.

5.1.2. Launch

Take-offs with two-liners, Merlin included, require slightly different habits and the consistency of the correct spread of the sail on the ground. It is especially important to stretch the middle part between rows A and B sufficiently, do not leave this part bent on the ground and especially when there is no wind, the wing should lie in a U-shape on the ground with the center further up. Dynamic pull on the front webbing of the risers (lines AI, All - colored red) raises the canopy above the pilot's head, under suitable conditions your canopy inflates evenly and smoothly. It is important that the central A's are significantly more in the pull, the pull of the body by the rest of risers lifts rather the wingtips. The Merlin does not tend to overshoot the pilot, rather due to the smaller openings it takes a little longer to pressurize the middle part when there is nil wind, however it stabilizes quickly above the pilot. Once there, visually check the canopy and the lines before taking off. The Merlin paraglider is built for hill or tow launching. It is not built to withstand jumping from a plane, buildings or for any jumps where there is a delayed opening of the canopy.

5.1.3. Flight

Speed to fly

The Merlin is trimmed to fly more or less at its best glide when the brakes/hands are fully up. Best sink rate is achieved when both brakes are pulled down symmetrically to about 20% of their range. For better penetration in headwinds and improved glide performance in sinking air, crosswinds or headwinds, you should fly faster than trim speed using the accelerator system. Using up to 2/3 bar does not degrade the glide angle or stability significantly and will improve your flying performance, you will reach the next thermal faster and you have a better chance of reaching thermals in time before it disappears.

Turbulent conditions

When flying through severe turbulence, stabilize the canopy by simultaneously applying a little brake to both sides or prevent a possible collapse during an overshoot by briefly pulling the blue rear riser handle downwards. Responding correctly to the paraglider's movement by means of the brakes, rear risers and weight shift is known as 'active flying'. A pilot demonstrating good active-flying skills will significantly reduce both the number and severity of collapses he or she experiences!

Turning

The Merlin is very comfortable and pleasant in turns. Handling characteristics are responsive and accurate and do not require any special habits or non-standard procedures. Brake pressure is reassuringly progressive. In flight, brakes are firm but responsive and precise and enable perfect communication with the canopy. In an emergency (for example accidentally broken brake line) the glider can be steered easily with the rear risers or eventually by weight shift.

Using the speed system

Using up to 70% of the speed bar does not degrade the glide angle or stability significantly and will improve your flying performance, you will reach the next thermal faster and higher, especially against the wind or in a huge sinking air areas.

When pushing the bar to 70-100%, it is advisable to avoid sharp action with classic brake handles, due to the profile with slightly auto-stabilizing properties. The canopy is more susceptible to frontal collapse due to the rapid change in forces this action could cause. It is recommended to steer and have your hands ready on the blue handles with the free handlebars and at the first sign of collapse, immediately release the speed system accompanied by a short pull down and back with your hands. Use the speed system very carefully or not at all at low altitude when you don't feel the need for speed.

Active B Riser Control

This feature gives the pilot more control over the wing and allows you to fly actively without using the brakes to minimize glide ratio losses. Using "B row piloting" increases the angle of attack evenly and doesn't weaken the profile as much as using brakes. It is an ideal way of correcting the direction of (not only) accelerated flight. In addition, this mechanism can be used for the most efficient climb in thermals, when the pilot can slow down the outer part of the wing and stay better in the thermal core.

At the same time it is the Control Procedure in case of failure of the primary controls or brake pulleys.

5.1.4. Landing

The Merlin has no unusual landing characteristics, is very simple and should offer no difficulty. On your first flights you may be surprised at how well it glides, so take account of this when making your landing approach! Into wind, at about one meter above the ground pull the brakes slowly down all the way. In nil-wind conditions, or if forced to make an emergency landing downwind, you may prefer to take a wrap of each control line to enable a more dynamic flare.

5.1.5 Towing

The Merlin is tested for towing and It has no tendencies towards deep stall. Make sure you use proper towing equipment, experienced crew and all relevant safety precautions.

5.1.6 Motorised flight

Merlin is applicable for PPG operation provided that the local regulations are met. However, it is not recommended and originally intended or tested by our team.

Caution: the paramotor carabiners may be significantly higher and therefore the main brake must be extended in this case.

5.2. Fast descent

In order to descend, the paraglider must fly away from the areas of lift. In case any problems occur, the following techniques might be used to increase the sink rate.

Sooner or later every pilot will need to descend quickly. It might be because of a sudden and unexpected change in the weather, reaching the cloudbase and not wishing to enter the cloud, or simply because you need to finish your flight. If you don't have enough experience, practise following manoeuvres under the supervision of an instructor and with a reserve parachute.

5.2.1. Big Ears

Pull down the outer BB3Main line (coloured blue) on both sides as high as possible and pull them down quickly and hold them firmly. The effective area of the glider is reduced equally on both sides of the wing by stalling the wingtip. Because the wing is decelerating, we recommend you to push about a third of the speed system just before the "big ears" maneuver, although if the Merlin is regularly checked and the line set properly trimmed, this is not necessary and entering the whole span deep stall is not possible. The size of the deflated area depends on how deeply the lines are pulled down and that affects the sink values. Be sure to pull both sides equally. To finish the maneuver, drop the BB3Main line quickly and let the wing stabilize, you will see a movement of the tips back and forth, but nothing to worry about.

This is the easiest technique for a rapid descent. Depending on how much of the wing tip you deflate, 3 m/s to 4 m/s sink rate can be achieved. While in Big Ears your sink rate and forward speed can be further increased by using the speed system. The Merlin can be steered slowly by pulling the BB3 main line asymmetrically.

5.2.2. B-line Stall

B-line stall is not possible with two liners.

5.2.3. Spiral Dive

Smoothly pull on one brake so that the glider goes from a normal 360-degree turn into a steep turn and from there into a spiral dive. The transition into a spiral dive can be made easier by weight shifting to the inner side of the turn. The Merlin recovers from a spiral dive automatically as soon as the brakes are released. Release them smoothly and always finish a spiral dive with safe altitude! Recovery from a spiral dive can be delayed if you are weight shifting to the inner side of the turn.

The spiral dive is the most effective way to make a fast descent. Every pilot should be able to perform a spiral dive and one day you may need to. When in a spiral dive always stay aware of your altitude, which decreases very rapidly. Warnings: There is a possibility of losing consciousness while in the spiral dive, so never make a spiral with more than 16-18m/s sinking speed. During the maneuver the pilot and glider will experience strong centrifugal forces. Forces of greater than 3G are possible – a great strain on the pilot as well as the glider.

5.3. SIV maneuvers

No matter what category of canopy you fly, what level of certification it has and although the two-liners are very stable - in turbulence or in strong thermals you may experience all kinds of collapses.

The Merlin behaves comfortably in these situations. Even so, you must follow all safety rules when practicing SIV and always pay attention to your altitude.

Practice SIV maneuvers only under the supervision of an instructor and with a reserve parachute.

WARNING: Whenever a paraglider is not in normal flight and airflow is disrupted there is always a rapid increase in sink rate and therefore a substantial loss of altitude.

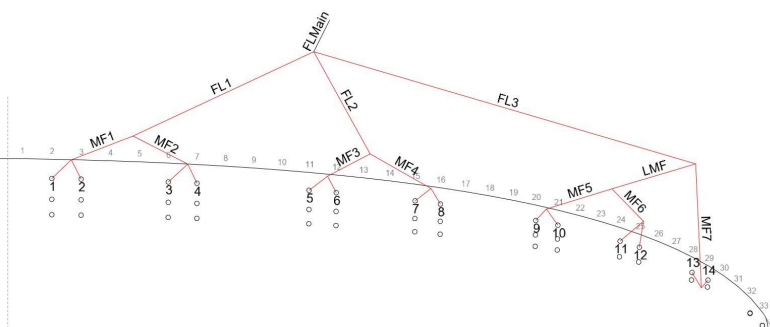
REMEMBER: You are also exposing your glider to forces that may damage it.

NOTE: Following manual cannot replace real instruction from an experienced SIV instructor.

5.3.1 Folding lines (FL)

For successful training and simulation of collapses on two-liners, the use of so-called “folding lines” is necessary. The position of the front row (A lines) is even further back and this does not allow easy folding of the leading edge, especially in accelerated flight.

According to the rules, we include a set of extra lines and a simple strap with a red handle with each Merlin paraglider. When completing the SIV course, an instructor or an experienced colleague will possibly help you prepare the wing for such an exercise. You can concentrate on practicing other maneuvers besides Frontstall and Asymmetric Collapse as well.



5.3.2. Asymmetric Collapse

Grab the FLMain+FL main lines connection and pull it straight down on one side. Half of the wing collapses depending on the depth of the lines pulled and on the force. Both in simulation and in real conditions, you can stop any turn tendency by applying the opposite brake and by weight shifting onto the inflated side of the canopy (be careful not to overreact and stall the inflated side). Under normal conditions the Merlin will re-inflate spontaneously when the pulled lines are released. If the collapse remains then re-inflate the collapsed side by ‘pumping’ the brake on the collapsed side.

5.3.3. Frontal Collapse

Grab the FLMain+FL main lines connection on both sides and pull it straight down forcefully until the leading edge collapses at full wingspan. The Merlin automatically resumes flight within a few seconds without pilot input. A brief application of the brakes on both sides (one pump) may help reopen the paraglider.

After a symmetric collapse always consider your airspeed. Make sure the glider is not in a parachutal stall before making any further inputs.

5.3.4. Deep Stall

Pull both brakes smoothly until the sink rate increases markedly and the forward speed reaches almost zero. The pull on the brakes should be controlled so that the canopy stays inflated and doesn't fall back into a full stall. After the brakes are released the glider automatically returns to normal flight with a gentle forward move. If you need to, you can accelerate recovery by pulling on both brakes,

followed by a fast release. With the Merlin it is very unlikely to get into this situation unintentionally. This could possibly happen if you are flying at a very low speed in turbulent conditions. Also the porosity of the material and shortening of the rear lines on a very old glider can increase the possibility of the deep stall tendency.

5.3.5 Full Stall

Wind the control lines once around your hands (optional) and pull both of them down smoothly. Hold them down until the canopy falls behind the pilot and deforms into a characteristic U shape. Releasing the brakes improperly in the moment the wing is far behind the pilot may lead to massive shoot of the glider with danger of falling into the canopy. Hold your hands firmly and be careful that you do not release the brakes prematurely or asymmetrically. To exit full stall smoothly and slowly release the brakes, the last third of the brake range release faster.

advice for more experienced pilots: usually the entry into a full stall is more clearly done in two phases with a short release of the brakes at the moment of the pilot falling on his back and re-braking at bottom dead center. This primarily helps to prevent pilot twisting.

5.3.6 Negative Spin

Slow down by braking to nearly minimum speed. Then pull a brake on one side all the way down while simultaneously releasing the brake on the other side. Because the stalled side falls back, the canopy suffers airflow disruption over one half of the wing which results in a spin and a rapid loss of altitude. The Merlin is capable of recovering from a negative spin automatically when the brakes are released.

5.3.7. Cravats

During SIV training or, very rarely normal flying, a situation called a "cravat" can happen. It means the tip of your wing gets stuck in the lines and due to the large amount of drag, cravats can turn your wing into a spiral dive very quickly, which is difficult to control.

The first reaction should be to stop the rotation by adequately applying the brake on the non-cravated side. Once you have control of the rotation, apply strong deep pumps of the brake on the cravated side whilst weight shifting away from the cravat. Small cravats can be re-inflated by pulling down the stabilo line, which is the orange line on the outer side of a A2 carabiner. In the case the cravat is too big to fly straight in a controlled manner, full stall can be the next option. You still need to be aware of your altitude and if you can't get the situation under control, use a reserve parachute.

6. MAINTAINING YOUR GLIDER

If you handle your glider with care and store it in a suitable place it can last you a very long time. On the other hand, neglecting maintenance, bad storage and the use of unsuitable cleaning products can reduce the lifespan of your glider significantly or may even make it dangerous.

You must follow these rules:

- Choose a suitable area for your launches. Lines caught on roots or rocks lead to unnecessary strain on the attachment tabs during inflation. Snagging the lines may rip the canopy tissue or damage lines.
- When preparing the paraglider for a launch or when ground handling, be sure not to step on any of the lines or the canopy.
- Protect the canopy from unnecessary strain. Inconsiderate handling of your glider – pulling it over grass, soil, sand or rocks – will significantly reduce its lifetime and increase porosity.
- Protect your canopy and lines from unnecessary exposure to sunlight and don't keep your glider on the car in hot conditions. UV-rays can damage many parts of a paraglider and deformation lines. When storing or during transport make sure your glider isn't exposed to temperatures higher than 50 degrees Celsius.
- Try not to pack your glider when wet. If it's unavoidable then dry it as soon as possible but away from direct sunlight. Be careful to avoid storing your canopy wet - this is the most common reason for cloth degradation and is easily preventable.
- Don't let your glider come into contact with seawater. If it does, rinse the lines, canopy and risers with fresh water and dry before storing.
- For long-term storage don't pack the glider too tightly. Store it in a cold, dry and well-ventilated room.
- Never let the paraglider come into contact with chemicals. Clean the glider with clean lukewarm water only.

6.1 Checking your glider

After 100 flying hours or 24 months of usage your Merlin must be thoroughly checked and tested by the manufacturer or by a Drift Paragliders authorized service center. This check is primarily focused on:

- measuring of porosity
- measuring of tear strength of fabric
- sewing of panels, attachment points, cell openings, etc.
- condition of lines and risers
- line strength
- **geometry of the suspension system**

Remember: frequent service at an authorized center, where the technician checks the length of the lines with a laser and does necessary trimming, maintains the correct performance of the glider and the enjoyment of the flight. The Merlin comes with loops on the B row lines for easier maintenance. After an interval of 40-80 flying hours, it is advisable to unloop those lines, especially if you feel the wing is a little slower.

All data are recorded in the test report. On the basis of the real wing's condition, authorized technicians will define the next check interval: under normal circumstances it is two years.

The recommended interval for replacing the line set with a new one is +- 150 flight hours.

Please note that the condition of the glider can vary considerably depending on the type of usage and environment. For more information please visit our website or contact your dealer.

Respect the environment and look after your flying sites. If you need to dispose the wing, do so in an environmentally responsible manner. Do not dispose it with the normal household waste.

6.2 Repairing your glider

To repair small damages up to 10 cm on the canopy cloth, may be done by the user using the ripstop tape. Greater damages, including stitches and lines must be repaired by a specialized repair shop. Damaged lines should be replaced by Drift Paragliders dealers.

7. PACKING GLIDER

It is important to correctly pack your glider as this prolongs its lifespan. We recommend that you fold the glider like a harmonica, neatly aligning the profiles with the leading edge reinforcements side by side. The wing should then be folded in three parts or two folds. The wing should be packed as loosely as possible. While packing be careful not to trap any grasshoppers inside your canopy as they will tear the canopy cloth. This technique will make your glider last longer and ensure its best performance.

7.1. Into the Drift Concertina bag



- Step 1 Open your concertina bag (CB)
- Step 2 put your glider to the middle of CB in “harmonica” style with leading edge’s ribs one on each other
- Step 3 Put the risers



Step 4 Start fastening the straps



Step 5 Fold the wing in the first 1/3 part starting from the trailing edge



Step 6 Now comes the leading edge bending over the trailing edge in the middle and the job is done

8. CUSTOMER CARE

Please contact your nearest Drift Paragliders dealer for any questions concerning your equipment.

You can find the list of all Drift Paragliders dealers on our website driftgliders.com

For all other questions or requests please email us at info@driftgliders.com

9. CONTACT

Our production and development center is located in the Czech Republic.

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Online resources

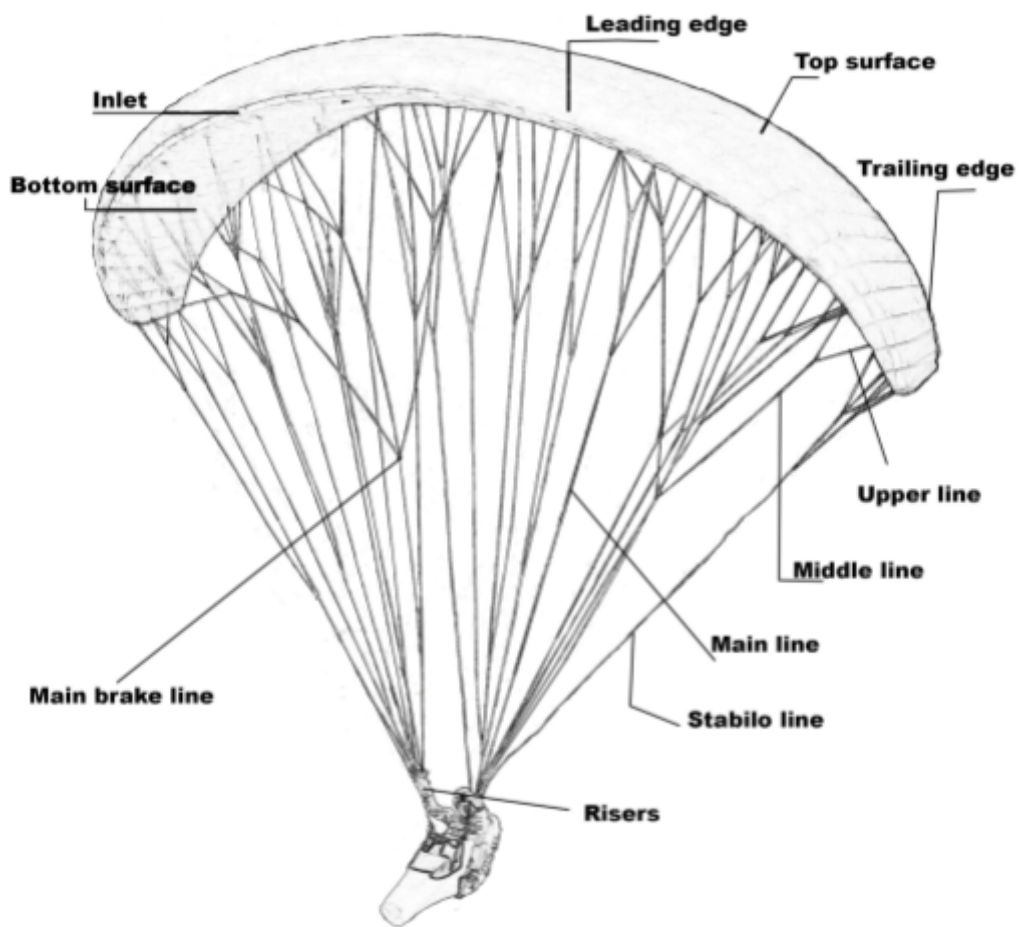
Website: driftgliders.com

Newsletter register:

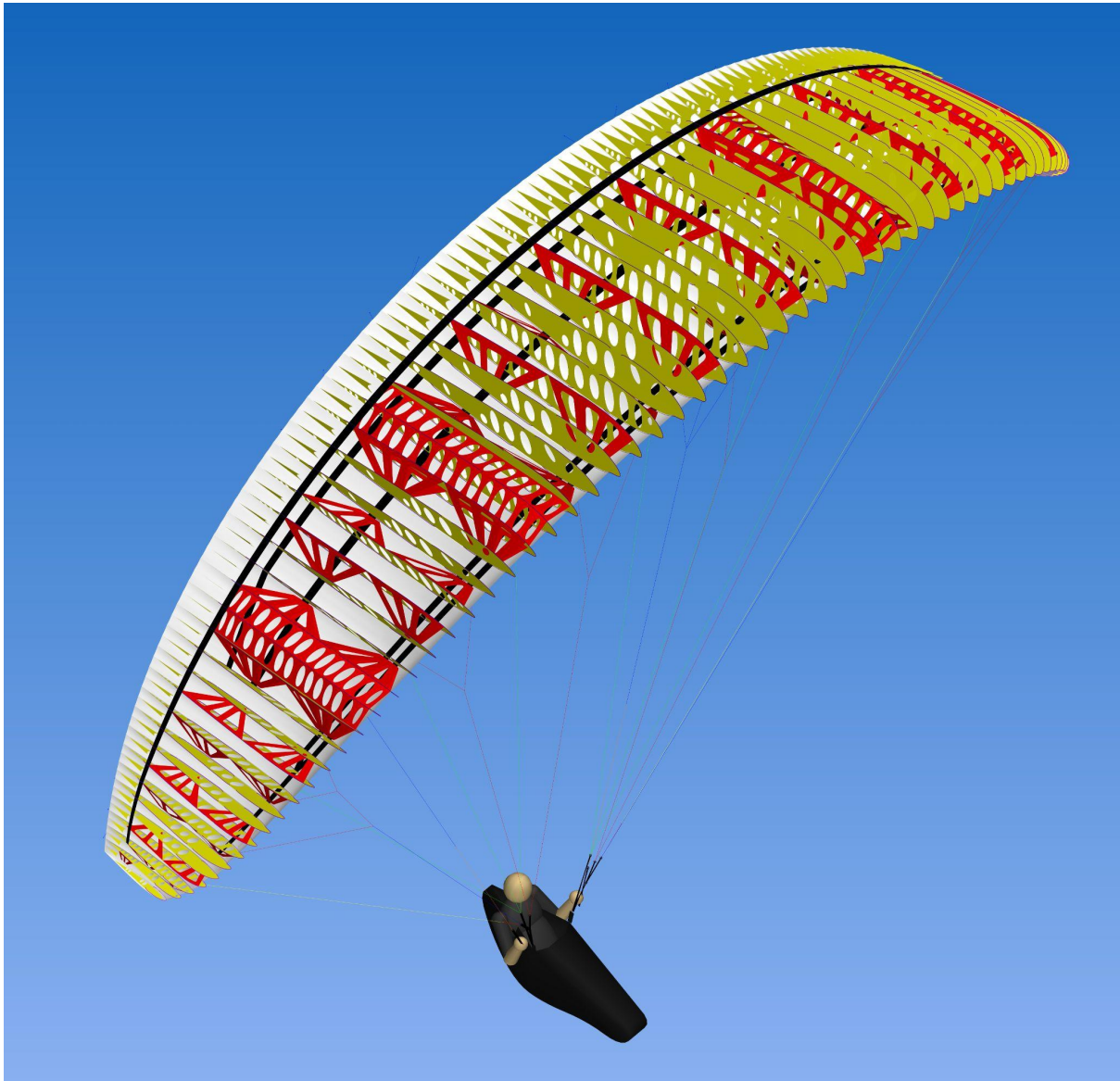
Facebook: drift paragliders

Youtube: Drift Paragliders

10. DIAGRAM & DIMENSIONS



11. MERLIN'S INTERNAL STRUCTURE



12. TOTAL LINES LENGTHS MEASUREMENT

- in millimetres (measured under a tension of 50 N, this tension being slowly and gradually applied before taking the measurement)
- distance from the bottom of a risers to the canopy included attachment points

S SIZE	A	B	C	D	Br	Fold.lines
	average R+L	average R+L	average R+L	average R+L	average R+L	average R+L
1	7211	7183	7168	7245	7680	7513
2	7164	7132	7117	7194	7390	7473
3	7132	7096	7084	7164	7171	7413
4	7143	7115	7102	7176	7056	7416
5	7100	7068	7052	7135	6981	7321
6	7068	7039	7023	7109	6817	7286
7	7030	7004	6995	7070	6758	7229
8	7044	7024	7014	7082	6796	7227
9	6951	6925	6943	7008	6734	7208
10	6900	6884	6892	6957	6696	7149
11	6810		6784	6859	6721	7015
12	6831		6794	6861	6731	7000
13	6709		6720	6526	6839	6845
15	6708		6715			6820
16	6470		6462			
17	6435		6437			

M SIZE	A	B	C	D	Br	Fold.lines
	average R+L	average R+L	average R+L	average R+L	average R+L	average R+L
1	7514	7483	7460	7538	7975	7814
2	7463	7432	7407	7490	7670	7764
3	7432	7397	7376	7453	7449	7727
4	7444	7416	7394	7468	7327	7718
5	7400	7372	7346	7424	7246	7615
6	7367	7341	7311	7395	7078	7577
7	7331	7304	7285	7361	7025	7521
8	7344	7325	7304	7372	7062	7519
9	7236	7212	7239	7308	7008	7502
10	7183	7164	7187	7262	6966	7435
11	7088		7074	7145	6995	7290
12	7111		7077	7146	7010	7284
13	6989		7006	6794	7121	7144
15	6989		7004			7123
16	6736		6727			
17	6696		6702			

1.) compliance of the test samples' 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.

2.) difference in lengths shall not be more than ± 10 mm from user's manual and reality

13. EACH LINES LENGTHS

NAME	QUANTITY	MATERIAL	XS	S	M	L	XL
			*	*			
a1	2	U 70	269	282	292	304	317
a2	2	U 70	224	235	244	254	265
a3	2	U 70	251	263	273	284	296
a4	2	U 70	262	275	285	296	309
a5	2	U 70	258	270	280	291	304
a6	2	U 70	229	240	249	259	270
a7	2	U 70	264	277	287	298	311
a8	2	U 70	276	290	300	312	326
a9	2	U 50	237	249	258	268	280
a10	2	U 50	190	199	206	214	224
a11	2	U 50	171	179	186	193	202
a12	2	U 50	190	200	207	215	225
a13	2	DC 40	155	163	169	176	183
a14	2	DC 40	155	162	168	175	182
a15	2	DC 40	218	229	237	246	257
a16	2	DC 40	182	191	198	206	215

MA1	2	U 190*/230	1719	1803	1868	1943	2027
MA2	2	U 190*/230	1660	1741	1804	1876	1957
MA3	2	U 190*/230	1529	1604	1662	1728	1803
MA4	2	U 190*/230	1459	1530	1586	1649	1721
MA5	2	U 130	926	971	1006	1046	1092
MA6	2	U 90	863	905	938	976	1018
MA7	2	U 70	1914	2007	2080	2163	2257
MSA	2	U50	581	610	632	657	686
AA1	2	U 340	4416	4632	4800	4992	5208
AA2	2	U 280*/ 340	4508	4729	4900	5096	5317
UAA3	2	U 190*/230	1124	1179	1222	1271	1326
AA3	2	U 230	3864	4053	4200	4368	4557
b1	2	U 70	241	253	262	272	284
b2	2	U 70	192	202	209	217	227
b3	2	U 70	219	230	238	248	258
b4	2	U 70	236	247	256	266	278
b5	2	U 70	229	240	249	259	270
b6	2	U 70	202	212	220	229	239
b7	2	U 70	236	248	257	267	279
b8	2	U 70	256	268	278	289	302
b9	2	U 50	213	223	231	240	251

b10	2	U 50	170	179	185	192	201
c1	2	U 50	270	283	293	305	318
c2	2	U 50	221	232	240	250	260
c3	2	U 50	236	248	257	267	279
c4	2	U 50	253	265	275	286	298
c5	2	U 50	245	257	266	277	289
c6	2	U 50	215	226	234	243	254
c7	2	U 50	206	216	224	233	243
c8	2	U 50	224	234	243	253	264
c9	2	U 50	201	211	219	228	238
c10	2	U 50	152	159	165	172	179
c11	2	U 50	193	203	210	218	228
c12	2	U 50	199	208	216	225	234
c13	2	DC 40	152	159	165	172	179
c14	2	DC 40	153	160	166	173	180
c15	2	DC 40	213	224	232	241	252
c16	2	DC 40	189	198	205	213	222
MB1	2	U 90	438	459	476	495	516
MB2	2	U 90	443	464	481	500	522
MB3	2	U 90	258	270	280	291	304
MB4	2	U 70*/90	264	277	287	298	311
MB5	2	U 70	446	468	485	504	526
MB6	2	U 70	799	838	868	903	942

MB7	2	U 50	1561	1638	1697	1765	1841
MSBC	2	U 50	579	607	629	654	682
LMB1	2	U 130	1240	1301	1348	1402	1463
LMB2	2	U 130	1188	1246	1291	1343	1401
LMB3	2	U 130	1246	1307	1354	1408	1469
LMB4	2	U 90*/130	1222	1282	1328	1381	1441
LMB5	2	U 90	501	526	545	567	591
LLMB	2	U 90	783	821	851	885	923
BB1	2	U 190	4416	4632	4800	4992	5208
BB2	2	U 190	4508	4729	4900	5096	5317
BB3main	2	U 130	3680	3860	4000	4160	4340
BB3sheet	2	PPSL 120*/160	552	579	600	624	651
d1	2	DC 40	282	296	307	319	333
d2	2	DC 40	237	249	258	268	280
d3	2	DC 40	252	264	274	285	297
d4	2	DC 40	265	278	288	300	312
d5	2	DC 40	265	278	288	300	312
d6	2	DC 40	238	250	259	269	281
d7	2	DC 40	227	238	247	257	268
d8	2	DC 40	239	251	260	270	282
d9	2	DC 40	208	218	226	235	245
d10	2	DC 40	160	168	174	181	189

d11	2	DC 40	262	275	285	296	309
d12	2	DC 40	262	275	285	296	309
d13	2	DC 40	274	288	298	310	323
MD1	2	DC 40	493	517	536	557	582
MD2	2	DC 40	498	522	541	563	587
MD3	2	DC 40	311	326	338	352	367
MD4	2	DC 40	312	327	339	353	368
MD5	2	DC 40	490	514	533	554	578
br1	2	DC 40	670	703	728	757	790
br2	2	DC 40	431	453	469	488	509
br3	2	DC 40	592	620	643	669	698
br4	2	DC 40	535	561	581	604	630
br5	2	DC 40	538	565	585	608	635
br6	2	DC 40	382	400	415	432	450
br7	2	DC 40	370	388	402	418	436
br8	2	DC 40	429	450	466	485	506
br9	2	DC 40	359	376	390	406	423
br10	2	DC 40	323	339	351	365	381
br11	2	DC 40	319	335	347	361	376
br12	2	DC 40	313	328	340	354	369
br13	2	DC 40	424	445	461	479	500
BR1	2	DC 40	1324	1389	1439	1497	1561

BR2	2	DC 40	924	969	1004	1044	1089
BR3	2	DC 40	928	974	1009	1049	1095
BR4	2	DC 40	881	924	958	996	1039
BR5	2	DC 40	594	623	646	672	701
BR6	2	DC 40	677	710	736	765	799
BRI	2	U 50	1954	2050	2124	2209	2305
BRII	2	U 70	1855	1945	2016	2097	2187
BRIII	2	U 50	2162	2268	2350	2444	2550
brmain	2	PPSL 120	2021	2120	2197	2285	2384
BrakeMain	2	TSL 220	1288	1351	1400	1456	1519
Stabi	2	U50	4600	4825	5000	5200	5425
StabiMain	2	PPSL120*/160	276	290	300	312	326