



PRO GUIDE

/ MESCAL 7

CONTENT

1	Introduction	3
2	Description	4
3	Technical Data	5
4	Line System	5
5	Acceleration System	6
6	Flight Techniques and Characteristics	7
7	Descent Techniques	8
8	Materials	10
9	Homologation	11
10	Closing Words	12
11	Line Schematic	13
12	Line Length	13
13	Risers	14
14	Overview Glider	15
15	Test Protocol	16



1 INTRODUCTION

Welcome to skywalk!
Congratulations on the purchase of your new MESCAL7 and thank you for your trust in us and in our products. In this manual you will find product-specific information that will help you quickly get to know your new paraglider to ensure your fun for a long time. General information about the most important safety-relevant points for handling your paraglider can be found in the attached „BASIC GUIDE“.

We are always open for questions, comments or critique and are happy to provide you at any time with further information!

Your skywalk Team
PURE PASSION FOR FLYING

Edition 1.0/12_25
The latest version of the manual can be found on
www.skywalk.info

2 DESCRIPTION

The MESCAL7 was developed to offer new pilots the simplest, safest, and most intuitive entry into paragliding. With high stability, precise handling, and modern construction features, it supports you from your first groundhandling sessions to your first thermal and XC-flights. From the very first moment, it inspires confidence—easy to fly, safe, and with exactly the level of dynamics that enables real progression.

PILOT REQUIREMENTS

The MESCAL7 is suitable for pilots of all skill levels – from initial training to experienced recreational pilots. It offers maximum flying enjoyment with the highest level of passive safety, whether on the training hill or in strong thermals. Naturally, the MESCAL7 is fully approved and optimized for school use.

SCOPE OF DELIVERY

The MESCAL7 comes standard with inner bag, compression strap, riser bag and “BASIC GUIDE”.



3 TECHNICAL DATA

Size	75	85	95	105	115	135
Cell number	40	40	40	40	40	40
Area flat (m²)	21,70	23,68	25,22	26,80	28,57	30,97
Wingspan flat (m)	10,21	10,66	11,00	11,34	11,71	12,19
Aspect ratio flat	4,80	4,80	4,80	4,80	4,80	4,80
Area projected (m²)	18,37	20,05	21,35	22,69	24,19	26,22
Wingspan projected (m)	8,06	8,42	8,69	8,96	9,25	9,63
Aspect ratio projected	3,54	3,54	3,54	3,54	3,54	3,54
min. profile depth (m)	0,83	0,87	0,90	0,93	0,96	1,00
max. profile depth (m)	2,58	2,69	2,78	2,86	2,96	3,08
Middle line length without risers (m)	6,23	6,50	6,71	6,92	7,14	7,44
Line consumption (m)	230,9	241,7	249,5	257,5	266,1	277,5
Weight (kg)	4,30	4,60	4,90	5,10	5,30	5,60
Take-off weight, certified from-to (kg)	55-75	60-85	70-95	80-105	90-115	105-135
Winch certified	yes	yes	yes	yes	yes	yes
JET FLAP Technology	yes	yes	yes	yes	yes	yes
Paramotor homologation	yes	yes	yes	yes	yes	yes
Accelerator	yes	yes	yes	yes	yes	yes
Maximum speed bar travel (mm)	130	130	150	150	150	150
Brake line travel max. (cm)	59	62	65	68	70	74
Trimmers	no	no	no	no	no	no
Number of seats	1	1	1	1	1	1

4 LINE SYSTEM

The layout of the suspension points is designed for optimal load distribution and a long lifespan. With all considerations and calculations however, our focus is always on safety. The mix of materials used on the lines of the MESCAL7 is an ideal combination of durability, low stretch and low drag. The skywalk MESCAL7 has 3 A-, 3 B-, 3 C-, and 1 stabilo line. The main-stabilo is connected with the B-riser. The brake lines are not load-bearing and lead from the trailing edge over the main brake lines through the brake pulleys on the C-risers to the brake handles. A marking on the main brake line indicates the position of the handle attachment.

This setting should not be lengthened, for example, to provide more brake travel in extreme flight situations or during landing, nor shortened such that the glider is flown constantly with some brake on.

To provide a better overview and to make sorting easier, the lines have different colors:

- the A-lines and the A-risers are red.
- the B-lines and the B-risers are yellow.
- the C-lines are blue.
- the stabilo lines are orange.
- the brake lines are orange.

The lines are attached with loops to triangular shackles and secured with plastic inserts.

The skywalk MESCAL7 has 4 risers per side:

- the two inner A-lines lead to the front A-riser, while the outer A-line leads to the rear A-riser, which is narrower.
- the B-lines as well as the stabilo lines lead to the B-riser.
- the C-lines lead to the C-riser.

A schematic drawing of the risers can be found on page 14.

5 ACCELERATION SYSTEM

The skywalk MESCAL7 can be equipped with a foot-operated acceleration system. The acceleration system effects the A- and B-risers. Any other adjustable, removable or variable devices are not available.

You can find precise details in the riser diagram on page 14.



6 FLIGHT TECHNIQUES AND CHARACTERISTICS

WINCHTOWING

The skywalk MESCAL7 is suited for winch towing. Make sure that you only use certified winches and that you climb from the ground at a flat angle.

The pilot must have had proper towing instruction and must ensure that the winch operator has had proper training that includes paragliders.

When launching on a winch, always fly with a lot of feeling and don't brake too much as your glider will already have an increased angle of attack. We recommend the use of a towing adapter.

FLYING WITH A MOTOR

Thanks to its pronounced roll and pitch stability as well as its balanced handling, the MESCAL7 is an excellent choice for entering the world of paramotor flying and is certified according to DGAC "Fiche d'Identification – Classe 1."

A specially tuned paramotor riser is optionally available.

SMART LINK

The SMART LINK system ensures maximum clarity when attaching the risers: Colored stitching clearly marks each side — red for left, blue for right.

The color coded seam runs continuously from the attachment loop to the top of the C-riser, making any twist immediately visible. The system is fully compatible with the latest skywalk harnesses.

For correct use, the stitching must be visible continuously from the riser all the way to the harness.



STARTCHECK

In commercial and sport aviation, it is common practice for pilots to go through a checklist before takeoff.

We would like to help you with some pictograms on the C-riser not to forget anything while you make your take-off check:

1. Pilot check – Leg straps, carabiners, chest strap, helmet
2. Lines check – All lines free, brake lines free, risers correctly connected and not twisted
3. Canopy check – Canopy laid out cleanly, leading edge open, pilot centered
4. Wind check – Wind strength and direction suitable
5. Airspace check – My launch will not obstruct or endanger any other pilot

**ERGO HANDLE**

A Velcro strap on the brake handle allows you to adjust the handle size to your preference. Hold the brake line between your thumb and the rest of your hand. This gives you better control during launch, in flight, and throughout the landing phase.

You feel more easily what the wing is doing, and wrapping the brakes during landing is no longer necessary.

SAND RELEASE SYSTEM

The MESCAL7 features openings in the profile ribs along the trailing edge. These allow sand, dirt, or melting snow to be automatically transported toward the wing tips during flight. A dedicated dirt-release opening is located at the stabilo:

Open the Velcro, pull out the outlet, and remove all accumulated debris.

After cleaning, simply push the outlet back in and close the Velcro.

You can find further information on practices and characteristics of flying in the enclosed „BASIC GUIDE“.

7 DESCENT TECHNIQUES**BIG EARS**

In contrast to the spiral dive, with big ears your forward speed is higher than your sink speed. This descent method is used to quickly leave dangerous areas in a desired horizontal direction.

The danger of canopy disturbances in turbulent air is greatly reduced with big ears.

Proceed as follows (according to DHV teaching instructions):

- Step on the speed bar half-way, grab the outer A-lines, which are suspended on separate A-risers and features a visual big-ears aid, below the line shackles with your palms facing outward and pull the lines down.
- Now press the speed bar all the way. Keep the brake handles and the outer A-lines in your hands during the maneuver.
- Check the symmetry of the collapsed glider.
- To recover, release the A-lines. The glider usually will reinflate by itself.
- As soon as the glider is fully open, release the speed bar.
- To speed up reinflation, pull lightly on the brakes. Another proven technique is to first reinflate one side of the glider, then the other. This can reduce the risk of a stall.

Examples:

- If the pilot is surprised near a summit with little ground clearance by strong wind or a thundercloud, neither a B-stall nor a spiral dive can help.
- If the pilot is stuck in very strong lift, it is advisable to exit the lift band with the use of big ears and to find sinking air in which to lose altitude.

B-LINE STALL

The B-lines are pulled down symmetrically 15-20cm. Keep the brake handles in the respective hands. The airflow on top of the profile largely detaches and the paraglider descends without flying forward. Pulling hard on the B-risers allows you to decrease the area of the wing and increase your sink rate, but this also increases the risk of the wing forming a rosette to the front. If this happens, recovery from the B-stall immediately!

You can exit the stall by quick and symmetric release of the B-lines. The paraglider will pitch forward and pick up speed. At no time you may use the brakes in this case!

You can find further information about descent techniques in the enclosed "BASIC GUIDE".



8 MATERIALS

The skywalk MESCAL7 is manufactured from the highest quality materials. skywalk has selected the best possible combination of materials with regard to resilience and longevity. We are aware that the durability of the glider is a deciding factor in the pilot's satisfaction. Spare parts can be obtained from skywalk.

WINGS AND RIBS

Upper sail: Porcher Skytex Easyfly
Lower sail: Porcher Skytex Easyfly
Ribs: Dominico 30 DFM

LINES

A, B, C Main lines: Edelrid 7343 - 230/190/140
A, B, C Middle lines: Edelrid 7343 - 140; Liros DSL 70
A, B, C, D Top lines: Edelrid 7343 - 140; Liros DSL 70
Brake lines: Liros DFLP 200/32, DSL 70; Edelrid 7343 - 190

RISERS

Güth & Wolf 20mm webbing

PULLEYS

Ronstan ball bearing

SHACKLES

Jootech triangular

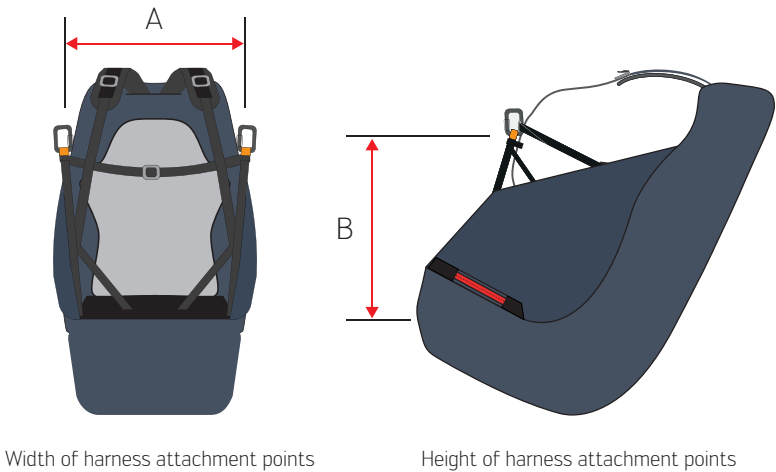


9 HOMOLOGATION

The MESCAL7 is certified to LTF and EN926-1, EN926-2 in the category A. The MESCAL7 is defined as a lightweight sport aircraft with an empty weight of less than 120 kg in the paraglider category. The many homologation tests are the last hurdle in the development of a skywalk paraglider. The homologation test flights only take place when the test team is completely happy with the glider development.

We remark that the certification results will differ during flight in thermals or turbulent air. The homologation informs solely regarding the paraglider performance during extreme-flight-maneuvers performed in stable air conditions. These extreme-flight-maneuvers during the homologation process should thus not be over-valued. Remember that certification maneuvers were carried out with a harness in the group GH with a carabiner distance (middle to middle) of 40-48 cm. If another harness is used, the glider may display flight characteristics that differ from those in the description.

HARNESS MEASUREMENTS DURING THE TEST FLIGHTS



Width of harness attachment points

Height of harness attachment points

Total weight in flight (kg)	< 80	80-100	> 100
Width (cm-measurement ‚A‘)	40 ± 2	44 ± 2	48 ± 2
Height (cm-measurement ‚B‘)	40 ± 1	42 ± 1	44 ± 1

10 CLOSING WORDS

The skywalk MESCAL7 is at the pinnacle of paraglider development in the market for beginner wings and shows what is possible regarding performance, safety and innovation. It cost us a lot of time to develop this glider, but it was also a lot of fun.

In this development we recognize the challenge of making the right product for every area and individual taste. We are pleased if you notice this during your first flight and if you feel a certain unity with your glider from the very beginning.

The MESCAL7 will provide you with plenty of joy over many years if you treat it and care for it properly. Respect for the demands and dangers of our sport are essential for successful and beautiful flights.

Even the safest paraglider can be dangerous due to misjudgments of meteorological conditions or pilot error. Always remember that flying sports are potentially risky and that you are responsible for your own safety. We advise you to fly carefully and to respect laws in the interest of our sport, because every pilot always flies at his or her own risk!

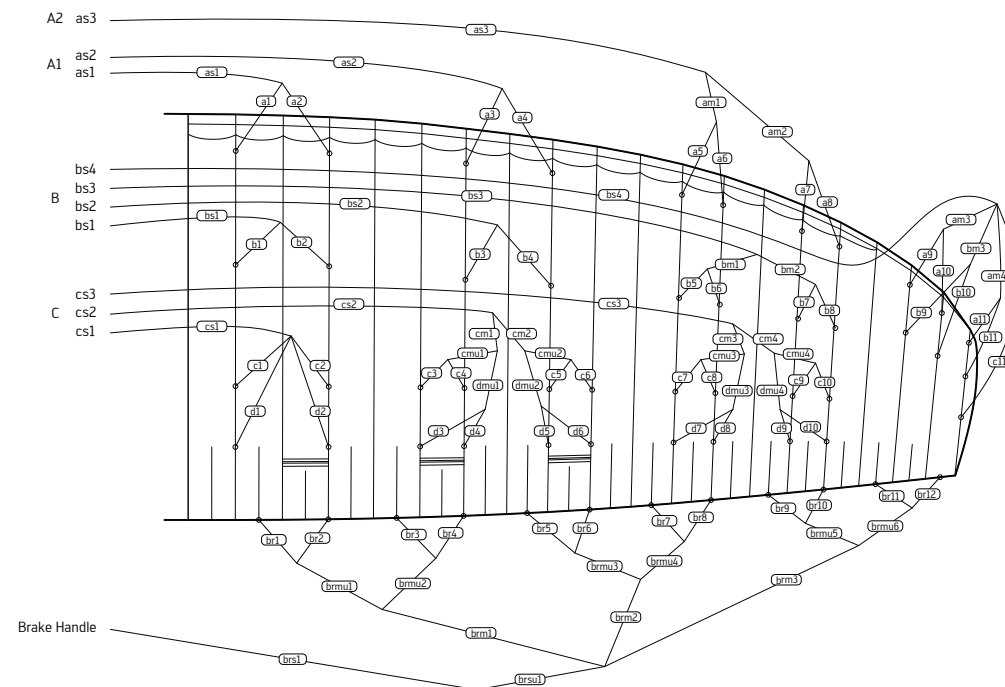
**WE WISH YOU A LOT OF FUN WITH YOUR NEW GLIDER AND ALWAYS
HAPPY LANDINGS!!**

Your skywalk Team



11 LINE SCHEMATIC

This line schematic is only for illustration purposes.



12 LINE LENGTH

The total line length has to be measured under a tension of 50N. The difference between the measured length and the original length should not exceed $\pm 10\text{mm}$.

Compliance of the test sample's suspension lines, brake lines and risers were checked by the testing laboratory after the test flights were completed.

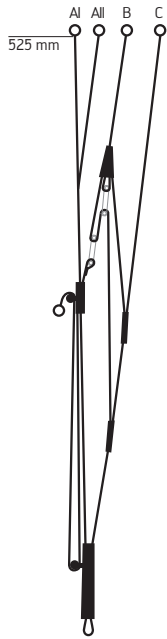
Total line length and single line length MESCAL7 size 75, 85, 95, 105, 115 and 135:

www.skywalk.info

13 RISERS

The difference between the measured riser lengths and the original riser lengths should not exceed $\pm 5\text{ mm}$.

MESCAL7, size 75 and 85:

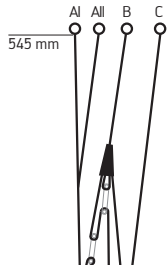


Trim speed

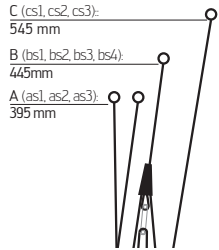


Accelerated flight

MESCAL7, size 95, 105, 115 and 135::

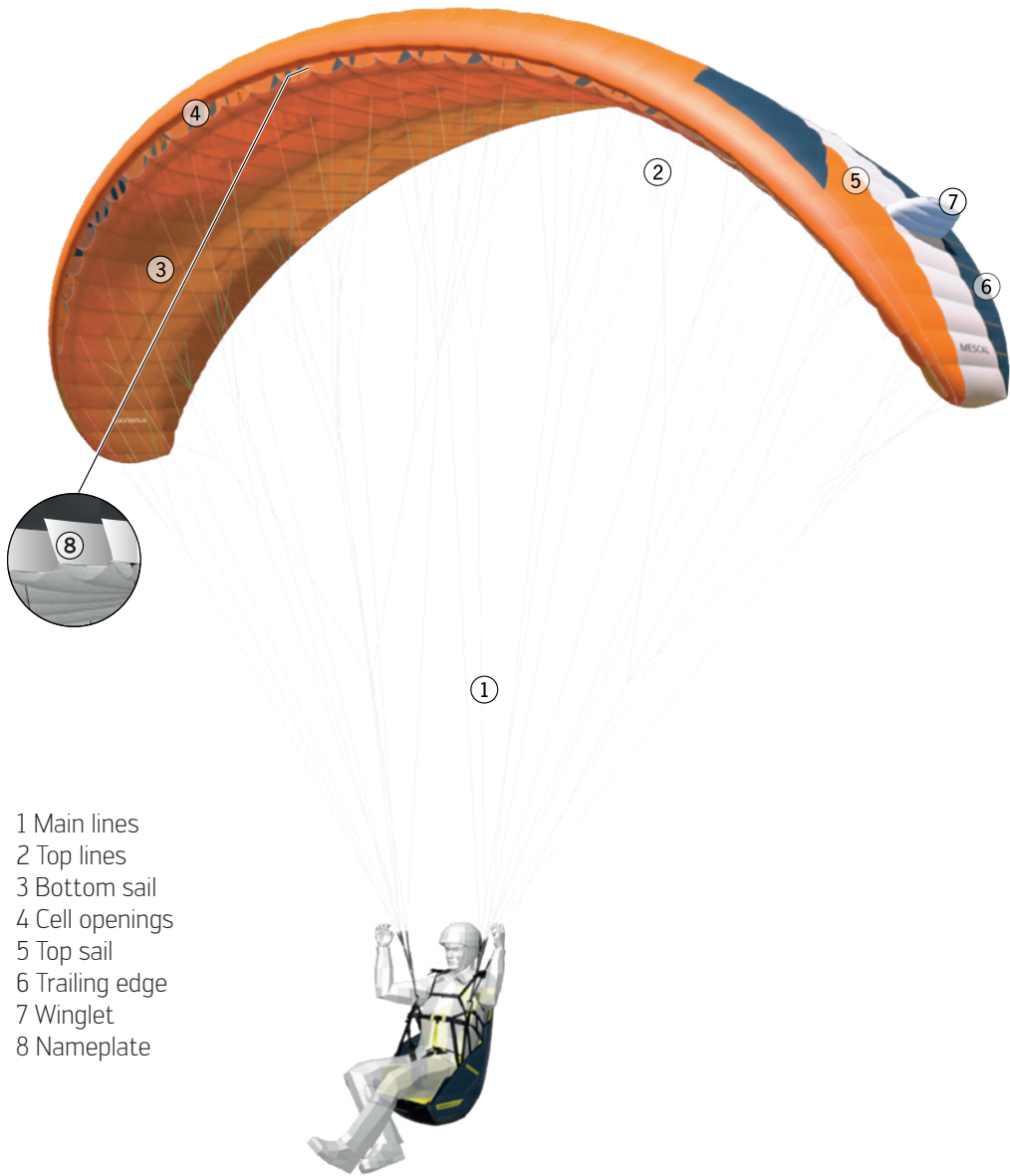


Trim speed



Accelerated flight

14 OVERVIEW GLIDER



- 1 Main lines
- 2 Top lines
- 3 Bottom sail
- 4 Cell openings
- 5 Top sail
- 6 Trailing edge
- 7 Winglet
- 8 Nameplate

15 TEST PROTOCOL			Date:
Customer, Name:			
Adress:		Phone:	
Glider:	Size:	Serial number:	
Type certificate number:		Date of last check:	
Date of first flight:		Year of construction:	

Accomplished checking:	Results [+/-]:	Description of failure:	Suggested repairs:
Identification:	<input type="checkbox"/> + <input type="checkbox"/> -		
Visual check of canopy:			
Upper surface:	<input type="checkbox"/> + <input type="checkbox"/> -		
Lower surface:	<input type="checkbox"/> + <input type="checkbox"/> -		
Profiles:	<input type="checkbox"/> + <input type="checkbox"/> -		
Line flares:	<input type="checkbox"/> + <input type="checkbox"/> -		
Leading edge:	<input type="checkbox"/> + <input type="checkbox"/> -		
Trailing edge:	<input type="checkbox"/> + <input type="checkbox"/> -		
Crossports:	<input type="checkbox"/> + <input type="checkbox"/> -		
Visual check of lines:			
Seams:	<input type="checkbox"/> + <input type="checkbox"/> -		
Abrasion spots:	<input type="checkbox"/> + <input type="checkbox"/> -		
Core withdrawals:	<input type="checkbox"/> + <input type="checkbox"/> -		
Visual check of connectionparts:			
Suspension line screw locks:	<input type="checkbox"/> + <input type="checkbox"/> -		
Risers:	<input type="checkbox"/> + <input type="checkbox"/> -		
Length measurement:			
Risers:	<input type="checkbox"/> + <input type="checkbox"/> -		
Lines:	<input type="checkbox"/> + <input type="checkbox"/> -		
Examinations of the canopy:			
Firmness of canopy:	<input type="checkbox"/> + <input type="checkbox"/> -		
Porosity:	<input type="checkbox"/> + <input type="checkbox"/> -		

Examinations of the lines:			
Firmness of main lines: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> daN			
	Results [+/-]:	Description of failure:	Suggested repairs:
Visual check of trimming:	<input type="checkbox"/> + <input type="checkbox"/> -		
Checkflight necessary?	<input type="checkbox"/> + <input type="checkbox"/> -		
Type certificate patch?	<input type="checkbox"/> + <input type="checkbox"/> -		
Identification plate?	<input type="checkbox"/> + <input type="checkbox"/> -		
Condition: <input type="checkbox"/> New <input type="checkbox"/> Very good condition <input type="checkbox"/> Good condition <input type="checkbox"/> Well used <input type="checkbox"/> Heavily used, but within homologation standards, frequent checks required <input type="checkbox"/> No longer airworthy, outside of the limit values.			
Repairs made?:			
Signature of tester:		Date:	
Name of tester:		Firm stamp:	

Skywalk GmbH & Co. KG

Windeckstr. 4 | 83250 Marquartstein

+49 (0) 8641/69 48 0

info@skywalk.org | www.skywalk.info

SKYWALK

   PURE PASSION FOR FLYING