

ADVANCE ALPHA⁵ MOTOR

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User manual supplement
Annexe au manuel d'utilisation

The ALPHA 5 Paramotor

In this supplement to the ADVANCE ALPHA 5 manual you will find everything you need to know for flying this glider with a motor.

Range of use

Because of its good takeoff qualities, high stability and compactness the ALPHA 5 is ideally suitable for paramotoring. The EN/LTF certified Hybrid-Risers, which can also be used for flight without the motor, are recommended.

Hybrid-Risers

The Hybrid-Risers are fitted with two different hang points, so that the best match of harness and motor system can be achieved without having to change the brake line length.

The trimmers can be used for counteracting the turning effect of the motor, and adjusting the airspeed. For flight without a motor the trimmer loops can be hooked into the main carabiners, so as to keep the normal EN 926-2/LTF 91-09 certification status.

The Hybrid-Risers have a speed system, which can be used when flying without the motor. On pages 14 and 15 you can find two illustrations of the Hybrid-Risers.



Caution: When the upper hang points are used the lower ends of the risers must run behind the carabiners, so that lines cannot get caught up in them.

Flight characteristics

This section is added to “Flight characteristics” in the ALPHA 5 manual, which also basically applies to paramotoring.

The flight characteristics of the ALPHA 5 are virtually identical when flying with or without a motor, especially at the same wing loading. In the expanded weight ranges for paramotoring (size 26: 85kg-135kg; size 28: 85kg-135kg, size 31: 110kg-135kg) manoeuvring will be slightly more dynamic because of the higher wing loading.

Similarly with trims open manoeuvres will be a little more dynamic because of the lower angle of attack. Even though the ALPHA 5 is very stable and compact the trimmers should stay closed when flying through turbulent air.

Thanks to the ALPHA 5's good takeoff behaviour the trims don't have to be opened when taking off with light wind. Lift off speed and takeoff run do not then have to be raised unnecessarily.



Caution: If you fly the ALPHA 5 as a paramotor in its expanded weight range the trim speed will be higher. Lift off and landing speeds will also be higher, and this is clearly noticeable in light wind.

Compatible motors

The certification test flights are carried out with a commercially available motor. Other types of motor can be approved by the DULV or the EAPR subject to an approved compatibility/handling test. A complete list of motors already certified can be reviewed at the DULV or the EAPR.

Certification

Provided that it is equipped with the Hybrid-Risers appropriate to the glider size the ALPHA 5 has LTF 23-05 certification for sizes 26, 28 and 31 as well as EN 926-2/LTF 91-09 certification. The certified weight ranges are shown in the adjoining tables.

Info: The ALPHA 5 EN 926-2/LTF 91-09 certification for flight without motor but with the Hybrid-Risers is only valid when the lower hangpoints are used and the trimmers stowed i.e. hung up.

Info: The LTF 23-05 Norm requires a compatibility test for every motor model (see precedent section).

The certification requirements can be seen on www.advance.ch/alpha

Technical Data

ALPHA 5 with Hybrid-Risers		26	28	31
Takeoff weight LTF 23-05 ¹	kg	85 - 135 ³	85 - 135 ³	110 - 135 ³
Takeoff weight EN/LTF ²	kg	70 - 110	85 - 125	100 - 130
Length of risers (upper hang point)	cm	36	38	40
Length of risers (lower hang point)	cm	46	48	50
Maximum line length incl. risers (lower hang point)	cm	713.0	746.0	788.7
Trimmer travel (DULV)	cm	6.0	6.0	6.0
Max. speed increase with trimmers	km/h	+ 6	+ 6	+ 6
Max. speed increase with speed bar	km/h	+ 9	+ 9	+ 9
Certification		LTF 23-05	LTF 23-05	LTF 23-05

¹ Pilot, wing, equipment with engine

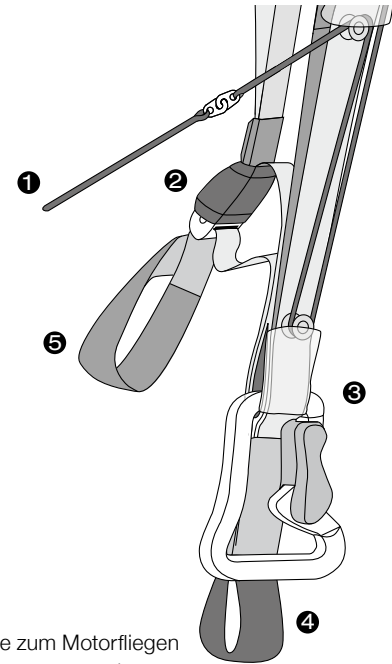
² Pilot, wing, equipment

³ Upper weight limit as load tested is a function of the line configuration

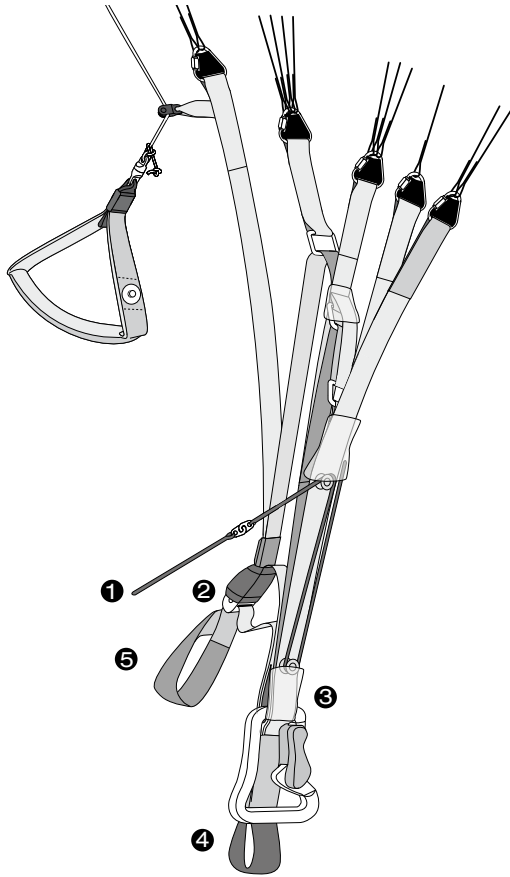


Hybrid-Tragegurten • Hybrid-Risers Elévateurs hybrides

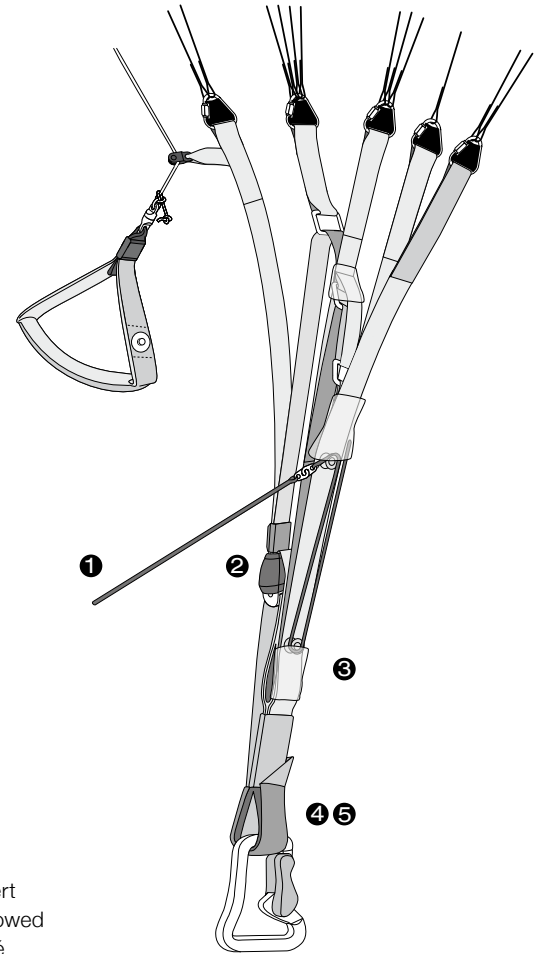
- ❶ Fussbeschleuniger
Speed system
Accélérateur à pieds
- ❷ Trimmer
Trimmer
Trim
- ❸ Oberer Einhängepunkt
Upper hang point
Point d'ancrage supérieur
- ❹ Haupteinhängepunkt
Lower hang point
Point d'ancrage inférieur
- ❺ Trimmer-Schleife zur Fixierung
Stowable trimmer loops
Boucle de réglage et de verouillage



Zwei Einhängepunkte zum Motorfliegen
Two hangpoints for paramotor flying
Deux point d'attache pour le paramoteur



Trimmer offen
 Trimmers in use
 Trim déverouillé



Trimmer fixiert
 Trimmers stowed
 Trim verouillé

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