The ALPHA 6 Paramotor

In this supplement to the ADVANCE ALPHA 6 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, damped behaviour and compactness the ALPHA 6 is ideally suitable for paramotoring. Hybrid-Risers, which can also be used for flight without the motor, are recommended.

Hybrid-Risers

The Hybrid-Risers are fitted with trimmers. These can be used for both counteracting the turning effect of the motor and adjusting the flying speed. For flight without a motor the trimmers must be disabled by hooking them into the main carabiners. The wing then keep its paraglider certification.

The Hybrid-Risers have a speed system for use when flying without the motor. Illustrations of the Hybrid-Risers can be found on pages 5 and 6.

Caution: You are advised not to use the trimmers and speed system at the same time.

Flight characteristics

This section is added to “Flight characteristics” in the ALPHA 6 manual, which also basically applies to paramotoring.

The flight characteristics of the ALPHA 6 are virtually identical when flying with or without a motor, especially at the same wing loading. In the expanded weight ranges for paramotoring (see table) manouevring 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 6 is very stable and compact the trimmers should stay closed when flying through turbulent air.

Thanks to the ALPHA 6’s good takeoff behaviour the trims don’t have to be opened when taking off with light wind. The wing pulls up more easily if the trimmers are opened by about 3 cm (as far as the grey marks), but you should then expect a longer takeoff run.

Caution: If you fly the ALPHA 6 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. Provided that maximum engine performance figures are not exceeded (see table), other motor models can be expected to produce similar handling behaviour.

**Certification**

Provided that it is equipped with the Hybrid-Risers appropriate to the ALPHA 6 has EN / LTF certification as a paraglider. Sizes 24 to 31 have DGAC certification for motor flying. Relevant certified weight ranges are shown in the adjoining table.

**Info:** ALPHA 6 EN / LTF 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.

The certification requirements can be seen on www.advance.ch/alpa.
## Technical Data

<table>
<thead>
<tr>
<th>ALPHA 6 with Hybrid-Risers</th>
<th>24</th>
<th>26</th>
<th>28</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takeoff weight paramotor$^1$</td>
<td>kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of risers (upper hang point)</td>
<td>cm</td>
<td>40.5</td>
<td>43</td>
<td>44.5</td>
</tr>
<tr>
<td>Length of risers (lower hang point)</td>
<td>cm</td>
<td>48</td>
<td>50</td>
<td>51.5</td>
</tr>
<tr>
<td>Trimmer travel</td>
<td>cm</td>
<td>8.0</td>
<td>9.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

$^1$ Pilot, wing, equipment with engine
1. Fussbeschleuniger
   Speed system
   Accélérateur à pieds

2. Trimmer
   Trimmer
   Trim

3. Oberer Einhängepunkt
   Upper hang point
   Point d’ancrage supérieur

4. Haupteinhängepunkt
   Lower hang point
   Point d’ancrage inférieur

5. Trimmer-Schlaufe zur Fixierung
   Stowable trimmer loops
   Boucle de réglage et de vérouillage

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