



## UP K2 5 44

Type designation UP K2 5 44

Type test reference no DHV GS-01-3045-26

Holder of certification [UP International GmbH](#)Manufacturer [UP International GmbH](#)

Classification B

Winch towing Yes

Number of seats min / max 1 / 2

Accelerator No

Trimmers Yes



## BEHAVIOUR AT MIN WEIGHT IN FLIGHT (120KG) BEHAVIOUR AT MAX WEIGHT IN FLIGHT (240KG)

## Test pilots



Harald Buntz

No release

A



Mario Eder

No release

B

## Inflation/take-off

Rising behaviour Smooth, easy and constant rising

Easy rising, some pilot correction is required

Special take off technique required No

No

## Landing

A

A

Special landing technique required No

No

## Speeds in straight flight

A

B

Trim speed more than 30 km/h Yes

Yes

Speed range using the controls larger than 10 km/h Yes

Yes

Minimum speed Less than 25 km/h

25 km/h to 30 km/h

## Control movement

A

A

Symmetric control pressure Increasing

Increasing

Symmetric control travel Greater than 65 cm

Greater than 65 cm

## Pitch stability exiting accelerated flight

Not carried out because the glider is not equipped with an accelerator

## Pitch stability operating controls during accelerated flight

Not carried out because the glider is not equipped with an accelerator

## Roll stability and damping

A

A

Oscillations Reducing

Reducing

## Stability in gentle spirals

A

A

Tendency to return to straight flight Spontaneous exit

Spontaneous exit

|  |          |  |
|--|----------|--|
| <b>Behaviour exiting a fully developed spiral dive</b>   | <b>A</b> | <b>B</b>   |
| <b>Initial response of glider (first 180°)</b> Immediate reduction of rate of turn   |          | Immediate reduction of rate of turn  |
| <b>Tendency to return to straight flight</b> Spontaneous exit (g force decreasing, rate of turn decreasing)                |          | Spontaneous exit (g force decreasing, rate of turn decreasing)                 |
| <b>Turn angle to recover normal flight</b> Less than 720°, spontaneous recovery  |          | Less than 720°, spontaneous recovery   |
| <b>Symmetric front collapse</b>  | <b>A</b> | <b>B</b>   |
| <b>Entry</b> Rocking back less than 45°  |          | Rocking back less than 45°   |
| <b>Recovery</b> Spontaneous in less than 3 s   |          | Spontaneous in less than 3 s   |
| <b>Dive forward angle on exit</b> Dive forward 0° to 30°   |          | Dive forward 0° to 30°   |
| <b>Change of course</b> Keeping course   |          | Keeping course   |
| <b>Cascade occurs</b> No   |          | No   |
| <b>Folding lines used</b> no   |          | no   |
| <b>Unaccelerated collapse (at least 50 % chord)</b>  | <b>A</b> | <b>B</b>   |
| <b>Entry</b> Rocking back less than 45°  |          | Rocking back less than 45°   |
| <b>Recovery</b> Spontaneous in less than 3 s   |          | Spontaneous in less than 3 s   |
| <b>Dive forward angle on exit</b> Dive forward 0° to 30°   |          | Dive forward 0° to 30°   |
| <b>Change of course</b> Keeping course   |          | Keeping course   |
| <b>Cascade occurs</b> No   |          | No   |
| <b>Folding lines used</b> no   |          | no   |
| <b>Accelerated collapse (at least 50 % chord)</b>  |          |  |
| Not carried out because the glider is not equipped with an accelerator   |          |  |
| <b>Exiting deep stall (parachutal stall)</b>   | <b>B</b> | <b>A</b>   |
| <b>Deep stall achieved</b> Yes   |          | Yes  |
| <b>Recovery</b> Spontaneous in less than 3 s   |          | Spontaneous in less than 3 s   |
| <b>Dive forward angle on exit</b> Dive forward 30° to 60°  |          | Dive forward 30° to 60°  |
| <b>Change of course</b> Changing course less than 45°  |          | Changing course less than 45°  |
| <b>Cascade occurs</b> No   |          | No   |
| <b>High angle of attack recovery</b>   | <b>A</b> | <b>B</b>   |
| <b>Recovery</b> Spontaneous in less than 3 s   |          | Spontaneous in less than 3 s   |
| <b>Cascade occurs</b> No   |          | No   |
| <b>Recovery from a developed full stall</b>  | <b>A</b> | <b>B</b>   |
| <b>Dive forward angle on exit</b> Dive forward 0° to 30°   |          | Dive forward 30° to 60°  |
| <b>Collapse</b> No collapse  |          | No collapse  |
| <b>Cascade occurs (other than collapses)</b> No  |          | No   |
| <b>Rocking back</b> Less than 45°  |          | Less than 45°  |
| <b>Line tension</b> Most lines tight   |          | Most lines tight   |
| <b>Small asymmetric collapse</b>   | <b>A</b> | <b>A</b>   |
| <b>Change of course until re-inflation</b> Less than 90°   |          | Less than 90°  |
| <b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°  |          | Dive or roll angle 15° to 45°  |
| <b>Re-inflation behaviour</b> Spontaneous re-inflation   |          | Spontaneous re-inflation   |
| <b>Total change of course</b> Less than 360°   |          | Less than 360°   |
| <b>Collapse on the opposite side occurs</b> No (or only a small number of collapsed cells with a spontaneous re inflation) |          | No (or only a small number of collapsed cells with a spontaneous re inflation) |
| <b>Twist occurs</b> No   |          | No   |
| <b>Cascade occurs</b> No   |          | No   |
| <b>Folding lines used</b> no   |          | no   |
| <b>Large asymmetric collapse</b>   | <b>B</b> | <b>B</b>   |
| <b>Change of course until re-inflation</b> 90° to 180°   |          | 90° to 180°  |
| <b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°  |          | Dive or roll angle 15° to 45°  |
| <b>Re-inflation behaviour</b> Spontaneous re-inflation   |          | Spontaneous re-inflation   |
| <b>Total change of course</b> Less than 360°   |          | Less than 360°   |
| <b>Collapse on the opposite side occurs</b> No (or only a small number of collapsed cells with a spontaneous re inflation) |          | No (or only a small number of collapsed cells with a spontaneous re inflation) |
| <b>Twist occurs</b> No   |          | No   |
| <b>Cascade occurs</b> No   |          | No   |
| <b>Folding lines used</b> no   |          | no   |

### **Small asymmetric collapse accelerated**

Not carried out because the glider is not equipped with an accelerator

### **Large asymmetric collapse accelerated**

Not carried out because the glider is not equipped with an accelerator

#### **Directional control with a maintained asymmetric collapse**

|  |  |  |
|--|--|--|
| <b>Able to keep course</b> Yes                                       | <b>A</b>                                       | Yes  |
| <b>180° turn away from the collapsed side possible in 10 s</b>       |  | Yes  |
| <b>Amount of control range between turn and stall or spin travel</b> | More than 50 % of the symmetric control travel | More than 50 % of the symmetric control travel |

#### **Trim speed spin tendency**

|                       |          |    |
|-----------------------|----------|----|
| <b>Spin occurs</b> No | <b>A</b> | No |
|-----------------------|----------|----|

#### **Low speed spin tendency**

|                       |          |    |
|-----------------------|----------|----|
| <b>Spin occurs</b> No | <b>A</b> | No |
|-----------------------|----------|----|

#### **Recovery from a developed spin**

|  |          |                                 |
|--|----------|---------------------------------|
| <b>Spin rotation angle after release</b> Stops spinning in less than 90° | <b>A</b> | Stops spinning in less than 90° |
| <b>Cascade occurs</b> No   |          | No                              |

#### **B-line stall**

Not carried out because the manoeuvre is excluded in the user's manual

#### **Big ears**

|  |          |                              |
|--|----------|------------------------------|
| <b>Entry procedure</b> Standard technique                | <b>A</b> | Standard technique           |
| <b>Behaviour during big ears</b> Stable flight           |          | Stable flight                |
| <b>Recovery</b> Spontaneous in less than 3 s             |          | Spontaneous in less than 3 s |
| <b>Dive forward angle on exit</b> Dive forward 0° to 30° |          | Dive forward 0° to 30°       |

#### **Big ears in accelerated flight**

Not carried out because the glider is not equipped with an accelerator

#### **Alternative means of directional control**

|   |          |     |
|---|----------|-----|
| <b>180° turn achievable in 20 s</b> Yes | <b>A</b> | Yes |
| <b>Stall or spin occurs</b> No          |          | No  |

#### **Any other flight procedure and/or configuration described in the user's manual**

No other flight procedure or configuration described in the user's manual