

## DHV TESTREPORT EN 926-2:2013+A1:2021

UP KIBO X S

**Type designation** UP Kibo X S  
**Type test reference no** DHV GS-01-2886-24  
**Holder of certification** [UP International GmbH](#)  
**Manufacturer** [UP International GmbH](#)  
**Classification** B  
**Winch towing** Yes  
**Number of seats min / max** 1 / 1  
**Accelerator** Yes  
**Trimmers** No



## BEHAVIOUR AT MIN WEIGHT IN FLIGHT (70KG)

## BEHAVIOUR AT MAX WEIGHT IN FLIGHT (90KG)

Test pilots



Josef Bauer

No release



Beni Stocker

No release

Inflation/take-off

A

A

**Rising behaviour** Smooth, easy and constant rising  
**Special take off technique required** No

Smooth, easy and constant rising  
 No

Landing

A

A

**Special landing technique required** No

No

Speeds in straight flight

A

A

**Trim speed more than 30 km/h** Yes  
**Speed range using the controls larger than 10 km/h** Yes  
**Minimum speed** Less than 25 km/h

Yes  
 Yes  
 Less than 25 km/h

Control movement

A

A

**Symmetric control pressure** Increasing  
**Symmetric control travel** Greater than 55 cm

Increasing  
 Greater than 60 cm

Pitch stability exiting accelerated flight

A

A

**Dive forward angle on exit** Dive forward less than 30°  
**Collapse occurs** No

Dive forward less than 30°  
 No

Pitch stability operating controls during accelerated flight

A

A

**Collapse occurs** No

No

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

Behaviour exiting a fully developed spiral dive

A

A

**Initial response of glider (first 180°)** Immediate reduction of rate of turn  
**Tendency to return to straight flight** Spontaneous exit (g force decreasing, rate of turn decreasing)  
**Turn angle to recover normal flight** Less than 720°, spontaneous recovery

Immediate reduction of rate of turn  
 Spontaneous exit (g force decreasing, rate of turn decreasing)  
 Less than 720°, spontaneous recovery

Symmetric front collapse

A

A

**Entry** Rocking back less than 45°  
**Recovery** Spontaneous in less than 3 s  
**Dive forward angle on exit** Dive forward 0° to 30°  
**Change of course** Keeping course

Rocking back less than 45°  
 Spontaneous in less than 3 s  
 Dive forward 0° to 30°  
 Entering a turn of less than 90°

**Cascade occurs** No  
**Folding lines used** no

No  
no

**Unaccelerated collapse (at least 50 % chord)** :A

:A

**Entry** Rocking back less than 45°  
**Recovery** Spontaneous in less than 3 s  
**Dive forward angle on exit** Dive forward 0° to 30°  
**Change of course** Keeping course  
**Cascade occurs** No  
**Folding lines used** no

Rocking back less than 45°  
Spontaneous in less than 3 s  
Dive forward 0° to 30°  
Entering a turn of less than 90°  
No  
no

**Accelerated collapse (at least 50 % chord)** :A

:B

**Entry** Rocking back less than 45°  
**Recovery** Spontaneous in less than 3 s  
**Dive forward angle on exit** Dive forward 0° to 30°  
**Change of course** Keeping course  
**Cascade occurs** No  
**Folding lines used** no

Rocking back less than 45°  
Spontaneous in less than 3 s  
Dive forward 30° to 60°  
Entering a turn of less than 90°  
No  
no

**Exiting deep stall (parachutal stall)** :A

:A

**Deep stall achieved** Yes  
**Recovery** Spontaneous in less than 3 s  
**Dive forward angle on exit** Dive forward 0° to 30°  
**Change of course** Changing course less than 45°  
**Cascade occurs** No

Yes  
Spontaneous in less than 3 s  
Dive forward 0° to 30°  
Changing course less than 45°  
No

**High angle of attack recovery** :A

:A

**Recovery** Spontaneous in less than 3 s  
**Cascade occurs** No

Spontaneous in less than 3 s  
No

**Recovery from a developed full stall** :A

:A

**Dive forward angle on exit** Dive forward 0° to 30°  
**Collapse** No collapse  
**Cascade occurs (other than collapses)** No  
**Rocking back** Less than 45°  
**Line tension** Most lines tight

Dive forward 0° to 30°  
No collapse  
No  
Less than 45°  
Most lines tight

**Small asymmetric collapse** :A

:A

**Change of course until re-inflation** Less than 90°  
**Maximum dive forward or roll angle** Dive or roll angle 15° to 45°  
**Re-inflation behaviour** Spontaneous re-inflation  
**Total change of course** Less than 360°  
**Collapse on the opposite side occurs** No (or only a small number of collapsed cells with a spontaneous re inflation)  
**Twist occurs** No  
**Cascade occurs** No  
**Folding lines used** no

Less than 90°  
Dive or roll angle 15° to 45°  
Spontaneous re-inflation  
Less than 360°  
No (or only a small number of collapsed cells with a spontaneous re inflation)  
No  
No  
no

**Large asymmetric collapse** :B

:B

**Change of course until re-inflation** 90° to 180°  
**Maximum dive forward or roll angle** Dive or roll angle 15° to 45°  
**Re-inflation behaviour** Spontaneous re-inflation  
**Total change of course** Less than 360°  
**Collapse on the opposite side occurs** No (or only a small number of collapsed cells with a spontaneous re inflation)  
**Twist occurs** No  
**Cascade occurs** No  
**Folding lines used** no

90° to 180°  
Dive or roll angle 15° to 45°  
Spontaneous re-inflation  
Less than 360°  
No (or only a small number of collapsed cells with a spontaneous re inflation)  
No  
No  
no

**Small asymmetric collapse accelerated** :A

:A

**Change of course until re-inflation** Less than 90°  
**Maximum dive forward or roll angle** Dive or roll angle 15° to 45°  
**Re-inflation behaviour** Spontaneous re-inflation  
**Total change of course** Less than 360°  
**Collapse on the opposite side occurs** No (or only a small number of collapsed cells with a spontaneous re inflation)  
**Twist occurs** No  
**Cascade occurs** No  
**Folding lines used** no

Less than 90°  
Dive or roll angle 15° to 45°  
Spontaneous re-inflation  
Less than 360°  
No (or only a small number of collapsed cells with a spontaneous re inflation)  
No  
No  
no

<b>Large asymmetric collapse accelerated</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
<b>Directional control with a maintained asymmetric collapse</b>	<b>A</b>	<b>A</b>
<b>Able to keep course</b>	Yes	Yes
<b>180° turn away from the collapsed side possible in 10 s</b>	Yes	Yes
<b>Amount of control range between turn and stall or spin</b>	More than 50 % of the symmetric control travel	More than 50 % of the symmetric control travel
<b>Trim speed spin tendency</b>	<b>A</b>	<b>A</b>
<b>Spin occurs</b>	No	No
<b>Low speed spin tendency</b>	<b>A</b>	<b>A</b>
<b>Spin occurs</b>	No	No
<b>Recovery from a developed spin</b>	<b>B</b>	<b>A</b>
<b>Spin rotation angle after release</b>	Stops spinning in 90° to 180°	Stops spinning in less than 90°
<b>Cascade occurs</b>	No	No
<b>B-line stall</b>	<b>A</b>	<b>A</b>
<b>Change of course before release</b>	Changing course less than 45°	Changing course less than 45°
<b>Behaviour before release</b>	Remains stable with straight span	Remains stable with straight span
<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>Cascade occurs</b>	No	No
<b>Big ears</b>	<b>A</b>	<b>A</b>
<b>Entry procedure</b>	Standard technique	Dedicated controls
<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°
<b>Big ears in accelerated flight</b>	<b>A</b>	<b>A</b>
<b>Entry procedure</b>	Standard technique	Dedicated controls
<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°
<b>Behaviour immediately after releasing the accelerator while maintaining big ears</b>	Stable flight	Stable flight
<b>Alternative means of directional control</b>	<b>A</b>	<b>A</b>
<b>180° turn achievable in 20 s</b>	Yes	Yes
<b>Stall or spin occurs</b>	No	No
<b>Any other flight procedure and/or configuration described in the user's manual</b>		
No other flight procedure or configuration described in the user's manual		