TESTREPORT EN926-2:2005

UP K2 ³ ML

Type designation	UP K2 ³ ML
Type test reference no	DHV GS-01-2068-13
Holder of certification	UP International GmbH
Manufacturer	UP International GmbH
Classification	B
Winch towing	Yes
Number of seats min / max	2 / 2
Accelerator	No
Trimmers	Yes

	BEHAVIOUR AT MIN WEIGHT IN FLIGHT (140KG)	BEHAVIOUR AT MAX WEIGHT IN FLIGHT (230KG)
Test pilots	 **Beni Stocker**	 **Harald Buntz**
Inflation/take-off	**A**	**A**
Rising behaviour	Smooth, easy and constant rising	Smooth, easy and constant rising
Special take off technique required	No	No
Landing	**A**	**A**
Special landing technique required	No	No
Speeds in straight flight	**A**	**A**
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	Less than 25 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
Behaviour in a steeply banked turn ⚠	**A**	**B**
Sink rate after two turns	Up to 12 m/s	More than 14 m/s
Symmetric front collapse	**A**	**B**
Entry	Rocking back less than 45°	Rocking back less than 45°
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 30° to 60°
Change of course	Keeping course	Keeping course

Cascade occurs	No	No

Symmetric front collapse in accelerated flight

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

Exiting deep stall (parachutal stall)	**A**	**B**
Deep stall achieved	Yes	Yes
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 30° to 60°
Change of course	Changing course less than 45°	Changing course less than 45°
Cascade occurs	No	No

High angle of attack recovery	**A**	**A**
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Cascade occurs	No	No

Recovery from a developed full stall	**A**	**B**
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 30° to 60°
Collapse	No collapse	No collapse
Cascade occurs (other than collapses)	No	No
Rocking back	Less than 45°	Greater than 45°
Line tension	Most lines tight	Most lines tight

Asymmetric collapse 45-50%	**A**	**B**
Change of course until re-inflation	Less than 90°	90° to 180°
Maximum dive forward or roll angle	Dive or roll angle 15° to 45°	Dive or roll angle 15° to 45°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	No	No
Twist occurs	No	No
Cascade occurs	No	No

Asymmetric collapse 70-75%	**B**	**B**
Change of course until re-inflation	90° to 180°	90° to 180°
Maximum dive forward or roll angle	Dive or roll angle 15° to 45°	Dive or roll angle 15° to 45°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	No	No
Twist occurs	No	No
Cascade occurs	No	No

Asymmetric collapse 45-50% in accelerated flight

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

Asymmetric collapse 70-75% in accelerated flight

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

Directional control with a maintained asymmetric collapse	**A**	**A**
Able to keep course	Yes	Yes
180° turn away from the collapsed side possible in 10 s	Yes	Yes
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel	More than 50 % of the symmetric control travel

Trim speed spin tendency	**A**	**A**
Spin occurs	No	No

Low speed spin tendency	**A**	**A**
Spin occurs	No	No

Recovery from a developed spin	**A**	**A**

Spin rotation angle after release	Stops spinning in less than 90°	Stops spinning in less than 90°
Cascade occurs	No	No

B-line stall	**A**	**A**
Change of course before release	Changing course less than 45°	Changing course less than 45°
Behaviour before release	Remains stable with straight span	Remains stable with straight span
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Cascade occurs	No	No

Big ears	**B**	**A**
Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Spontaneous in 3 s to 5 s	Spontaneous in less than 3 s
Dive forward angle on exit	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

Behaviour exiting a steep spiral	**A**	**A**
Tendency to return to straight flight	Spontaneous exit	Spontaneous exit
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery
Sink rate when evaluating spiral stability [m/s]	14	14

Alternative means of directional control	**A**	**A**
180° turn achievable in 20 s	Yes	Yes
Stall or spin occurs	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