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

UP KIBO X XS

Type designation UP Kibo X XS Type test reference no DHV GS-01-2887-24 Holder of certification UP International GmbH Manufacturer UP International GmbH **Classification** B Winch towing Yes Number of seats min / max 1/1Accelerator Yes Trimmers No



FLIGHT (60KG) Test pilots



Expert Reiner Brunn



No release No release Inflation/take-off Α Α -----**Rising behaviour** Smooth, easy and constant rising Smooth, easy and constant rising Special take off technique required No No <u>Landing</u> A Α Special landing technique required No No <u>Speeds in straight flight</u> Α Α Trim speed more than 30 km/h Yes Yes Speed range using the controls larger than 10 Yes Yes km/h Minimum speed Less than 25 km/h Less than 25 km/h Α Α_____ Control movement _____ Symmetric control pressure Increasing Increasing Symmetric control travel Greater than 55 cm Greater than 55 cm Pitch stability exiting accelerated flight A Α **Dive forward angle on exit** Dive forward less than 30° Dive forward less than 30° Collapse occurs No No Pitch stability operating controls during Δ A accelerated flight Collapse occurs No No Roll stability and damping Α Α **Oscillations** Reducing Reducing Stability in gentle spirals A Α Tendency to return to straight flight Spontaneous exit Spontaneous exit Behaviour exiting a fully developed spiral dive A Α _____ Initial response of glider (first 180°) Immediate reduction of rate of turn Immediate reduction of rate of turn Tendency to return to straight flight Spontaneous exit (g force decreasing, Spontaneous exit (g force rate of turn decreasing) decreasing, rate of turn decreasing)

Symmetric front collapse	A	A
Entry	r Rocking back less than 45°	Rocking back less than 45°
-	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	•	Dive forward 0° to 30°
Change of course		Entering a turn of less than 90°
Cascade occurs		No
Folding lines used		no
<u>Unaccelerated collapse (at least 50 % chord)</u>	Α	В
Entry	Rocking back less than 45°	Rocking back less than 45°
Recovery	\prime Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	t Dive forward 0° to 30°	Dive forward 30° to 60°
Change of course	Entering a turn of less than 90°	Entering a turn of less than 90°
Cascade occurs	s No	No
Folding lines used	no	no
Accelerated collapse (at least 50 % chord)	A	В
·	Rocking back less than 45°	Rocking back less than 45°
	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit		Dive forward 30° to 60°
	Entering a turn of less than 90°	Entering a turn of less than 90°
Cascade occurs		No
Folding lines used		no
r ording mes used	10	10
Exiting deep stall (parachutal stall)	Α	A
Deep stall achieved	Yes	Yes
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	t Dive forward 0° to 30°	Dive forward 0° to 30°
Change of course	Changing course less than 45°	Changing course less than 45°
Cascade occurs	No	No
High angle of attack recovery	A	A
<u></u>	. <u>.</u>	······································
<u>,</u>	Spontaneous in less than 3 s	A Spontaneous in less than 3 s No
Recovery Cascade occurs	Spontaneous in less than 3 s No	Spontaneous in less than 3 s No
Recovery Cascade occurs <u>Recovery from a developed full stall</u>	Spontaneous in less than 3 s No	Spontaneous in less than 3 s No B
Recovery Cascade occurs <u>Recovery from a developed full stall</u> Dive forward angle on exit	 Spontaneous in less than 3 s No B t Dive forward 30° to 60° 	Spontaneous in less than 3 s No B Dive forward 30° to 60°
Recovery Cascade occurs <u>Recovery from a developed full stall</u> Dive forward angle on exit Collapse	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse
Recovery Cascade occurs <u>Recovery from a developed full stall</u> Dive forward angle on exit Collapse Cascade occurs (other than collapses)	 Spontaneous in less than 3 s No B t Dive forward 30° to 60° No collapse No 	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No
Recovery Cascade occurs <u>Recovery from a developed full stall</u> Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back	 Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° 	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45°
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Recovery Cascade occurs Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tensior	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight
Recovery Cascade occurs <u>Recovery from a developed full stall</u> Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension <u>Small asymmetric collapse</u> Change of course until re-inflation	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90°	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90°
Recovery Cascade occurs <u>Recovery from a developed full stall</u> Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension <u>Small asymmetric collapse</u> Change of course until re-inflation Maximum dive forward or roll angle	 Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90° Dive or roll angle 0° to 15° 	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90° Dive or roll angle 15° to 45°
Recovery Cascade occurs Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension Small asymmetric collapse Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour	 Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90° Dive or roll angle 0° to 15° Spontaneous re-inflation 	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation
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Recovery Cascade occurs Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension Small asymmetric collapse Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs Cascade occurs Folding lines used	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90° Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No No No No No No Ino B	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A 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
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Recovery Cascade occurs Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension Small asymmetric collapse Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs Cascade occurs Folding lines used Large asymmetric collapse Change of course until re-inflation Maximum dive forward or roll angle	 Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90° Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No No No Ino B 90° to 180° Dive or roll angle 15° to 45° 	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A 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 no B 90° to 180° Dive or roll angle 15° to 45°
Recovery Cascade occurs Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension Small asymmetric collapse Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs Collapse on the opposite side occurs Twist occurs Cascade occurs Folding lines used Large asymmetric collapse Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour	 Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90° Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No No No Ino B 90° to 180° Dive or roll angle 15° to 45° Spontaneous re-inflation 	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A 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 No No No Dive or roll angle 15° to 45° Spontaneous re-inflation
Recovery Cascade occurs Recovery from a developed full stall Dive forward angle on exit Collapse Cascade occurs (other than collapses) Rocking back Line tension Small asymmetric collapse Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs Cascade occurs Folding lines used Large asymmetric collapse Change of course until re-inflation Maximum dive forward or roll angle	 Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A Less than 90° Dive or roll angle 0° to 15° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No No No Ino B 90° to 180° Dive or roll angle 15° to 45° Spontaneous re-inflation 	Spontaneous in less than 3 s No B Dive forward 30° to 60° No collapse No Less than 45° Most lines tight A 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 no B 90° to 180° Dive or roll angle 15° to 45°

	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)
Twist occurs		No
Cascade occurs		No
Folding lines used	no	no
	1_	1
Small asymmetric collapse accelerated	¦A	A
Change of course until re-inflation	Less than 90°	Less than 90°
Maximum dive forward or roll angle	Dive or roll angle 0° to 15°	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 (or only a small number of collapsed	No (or only a small number of
	cells with a spontaneous re inflation)	collapsed cells with a spontaneous re inflation)
Twist occurs	No	No
Cascade occurs	No	No
Folding lines used	no	no
Large asymmetric collapse accelerated	В	В
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 (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)
Twist occurs	No	No
Cascade occurs	No	No
Folding lines used	no	no
Directional control with a maintained asymmetric collapse	A	A
Able to keep course		Yes
180° turn away from the collapsed side possible in 10 s		Yes
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control	More than 50 % of the symmetric control travel
This should be be denote	A	
Trim speed spin tendency	£	A
Spin occurs	No	No
li any analah anin bandanan	in the second	
Low speed spin tendency	¦A	<u>A</u>
Spin occurs	No	No
<u>Recovery from a developed spin</u>	A	Α
Spin rotation angle after release		
Cascade occurs	Stops spinning in less than 90°	Stops spinning in less than 90°
Cascade occurs		Stops spinning in less than 90° No
B-line stall	No	
	No A	No
<u>B-line stall</u> Change of course before release	No A Changing course less than 45°	No A Changing course less than 45°
<u>B-line stall</u> Change of course before release Behaviour before release	No A	No
<u>B-line stall</u> Change of course before release Behaviour before release Recovery	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s	No A Changing course less than 45° Remains stable with straight span
<u>B-line stall</u> Change of course before release Behaviour before release	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s
<u>B-line stall</u> Change of course before release Behaviour before release Recovery Dive forward angle on exit	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°
<u>B-line stall</u> Change of course before release Behaviour before release Recovery Dive forward angle on exit	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°
B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No
B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs Big ears Entry procedure	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Standard technique	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls
B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs Big ears Entry procedure Behaviour during big ears	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Standard technique Stable flight	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight
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B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs Big ears Entry procedure Behaviour during big ears Recovery Dive forward angle on exit	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Standard technique Stable flight Spontaneous in less than 3 s Dive forward 0° to 30°	No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No A Dedicated controls Stable flight Spontaneous in less than 3 s Dive forward 0° to 30°

Behaviour during big ears Stable flight	Stable flight
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°
Behaviour immediately after releasing the Stable flight accelerator while maintaining big ears	Stable flight
Alternative means of directional control A	A
Alternative means of directional control A 180° turn achievable in 20 s Yes	A Yes
L	

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