DHV TESTREPORT EN 926-2:2013+A1:2021 **UP KANGRI X 23** Type designation UP Kangri X 23 Type test reference no DHV GS-01-2854-24 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 BEHAVIOUR AT MAX **WEIGHT IN FLIGHT (100KG)** FLIGHT (75KG) Test pilots **Josef Bauer Mario Eder** No release No release B Inflation/take-off Rising behaviour Easy rising, some pilot correction is Easy rising, some pilot correction is required required Special take off technique required No No **Landing** Α No Special landing technique required No Speeds in straight flight 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 Control movement **Symmetric control pressure** Increasing Increasing **Symmetric control travel** Greater than 55 cm Greater than 60 cm Pitch stability exiting accelerated flight 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 accelerated flight Collapse occurs No No Roll stability and damping **Oscillations** Reducing Reducing Stability in gentle spirals Tendency to return to straight flight Spontaneous exit Spontaneous exit Behaviour exiting a fully developed spiral dive B Initial response of glider (first 180°) en : keine unmittelbare Reaktion en: keine unmittelbare Reaktion **Tendency to return to straight flight** Spontaneous exit (g force decreasing, Spontaneous exit (g force decreasing, rate of turn decreasing) rate of turn decreasing) **Turn angle to recover normal flight** Less than 720°, spontaneous recovery Less than 720°, spontaneous recovery Symmetric front collapse **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 0° to 30° **Change of course** Keeping course Keeping course Cascade occurs No No Folding lines used no no Unaccelerated collapse (at least 50 % chord) A **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 0° to 30° **Change of course** Keeping course Keeping course Cascade occurs No No Folding lines used no no Accelerated collapse (at least 50 % chord) **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 30° to 60° Dive forward 30° to 60° **Change of course** Keeping course Keeping course Cascade occurs No No Folding lines used no no <u> Exiting deep stall (parachutal stall)</u> **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 30° to 60° Dive forward 30° to 60° Change of course Changing course less than 45° Changing course less than 45° Cascade occurs No High angle of attack recovery Α **Recovery** Spontaneous in less than 3 s Spontaneous in less than 3 s Cascade occurs No No Recovery from a developed full stall **Dive forward angle on exit** Dive forward 30° to 60° Dive forward 30° to 60° Collapse No collapse No collapse Cascade occurs (other than collapses) No No **Rocking back** Less than 45° Less than 45° **Line tension** Most lines tight Most lines tight Small asymmetric collapse Less than 90° Change of course until re-inflation Less than 90° Dive or roll angle 15° to 45° Maximum dive forward or roll angle Dive or roll angle 15° to 45° **Re-inflation behaviour** Spontaneous re-inflation Spontaneous re-inflation Less than 360° **Total change of course** 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 90° to 180° Change of course until re-inflation 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 Less than 360° **Total change of course** 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) No Twist occurs No Cascade occurs No No Folding lines used no no Small asymmetric collapse accelerated Less than 90° Change of course until re-inflation Less than 90° 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 Less than 360° **Total change of course** Less than 360° Collapse on the opposite side occurs No (or only a small number of collapsed No (or only a small number of collapsed cells with a spontaneous cells with a spontaneous re inflation) re inflation) Twist occurs No No Cascade occurs No No Folding lines used no no Large asymmetric collapse accelerated 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 No (or only a small number of collapsed cells with a spontaneous cells with a spontaneous re inflation) re inflation) No Twist occurs No Cascade occurs No No Folding lines used no no **Directional control with a maintained** asymmetric collapse **Able to keep course** Yes Yes 180° turn away from the collapsed side Yes Yes possible in 10 s **Amount of control range between turn and** More than 50 % of the symmetric control More than 50 % of the symmetric **stall or spin** travel control travel Trim speed spin tendency No Spin occurs No Low speed spin tendency Spin occurs No No Recovery from a developed spin **Spin rotation angle after release** Stops spinning in less than 90° Stops spinning in less than 90° No Cascade occurs No **B-line stall** 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 Entry procedure** Standard technique Standard technique

Alternative means of directional control Α 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

Recovery Spontaneous in less than 3 s

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Stable flight

Stable flight

Stable flight

Spontaneous in less than 3 s

Spontaneous in less than 3 s

Dive forward 0° to 30°

Standard technique

Dive forward 0° to 30°

Behaviour during big ears Stable flight

Behaviour during big ears Stable flight

Behaviour immediately after releasing the Stable flight

accelerator while maintaining big ears

Big ears in accelerated flight

Dive forward angle on exit Dive forward 0° to 30°

Dive forward angle on exit Dive forward 0° to 30°

Entry procedure Standard technique