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Deutscher Hängegleiterverband e.V.

TECHNICAL DATA DHY TESTREPORT LTF DHY TESTREPORT EN DATASHEET PRINT

TESTREPORT LTF 2014



ZOOM XA LT 85

Inflation/take-off

Type designation ZOOM XA LT 85 Type test reference no DHV GS-01-2976-25 Holder of certification Papesh GmbH Manufacturer Papesh GmbH Classification A Winch towing Yes

Number of seats min / max 1/1**Accelerator** Yes

Trimmers No.



BEHAVIOUR AT MIN WEIGHT IN BEHAVIOUR AT MAX FLIGHT (65KG)

Test pilots

No release Α

Mario Eder No release

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

Smooth, easy and constant rising

Landing

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 Symmetric control travel Greater than 55 cm

Collapse occurs No

Increasing

Greater than 60 cm

Pitch stability exiting accelerated flight

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

Dive forward less than 30° No

Pitch stability operating controls during

Roll stability and damping Oscillations Reducing

Reducina

Stability in gentle spirals Α

Tendency to return to straight flight Spontaneous exit

Spontaneous exit

Behaviour exiting a fully developed spiral dive A 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) Less than 720°, spontaneous Turn angle to recover normal flight Less than 720°, spontaneous recovery 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 Folding lines used 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 Folding lines used no Accelerated 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. Folding lines used no Exiting deep stall (parachutal stall) Deep stall achieved 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 0° to 30° Changing course less than 45° Change of course Changing course less than 45° Cascade occurs No High angle of attack recovery A Recovery Spontaneous in less than 3 s Spontaneous in less than 3 s Cascade occurs No. Recovery from a developed full stall A Dive forward angle on exit Dive forward 0° to 30° Dive forward 0° to 30° 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 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 0° to 15° 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 Nο No Cascade occurs No Folding lines used no Large asymmetric collapse A 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 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 nο Small asymmetric collapse accelerated A Change of course until re-inflation Less than 90° 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 Total change of course Less than 360° Less than 360°

.25, 11:34	Testreport LTF 2014 :: ZOOM XA LT 85	
	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
Large 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 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°
	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
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
Trim speed spin tendency	A	A
Spin occurs	No	No
Low speed spin tendency	Α	Α
Spin occurs	No	No
Recovery from a developed spin	A	A
Recovery from a developed spin Spin rotation angle after release	i	A Stops spinning in less than 90°
	Stops spinning in less than 90°	i
Spin rotation angle after release	Stops spinning in less than 90° No	Stops spinning in less than 90°
Spin rotation angle after release Cascade occurs	Stops spinning in less than 90° No	Stops spinning in less than 90° No
Spin rotation angle after release Cascade occurs B-line stall Change of course before release	Stops spinning in less than 90° No	Stops spinning in less than 90° No
Spin rotation angle after release Cascade occurs B-line stall Change of course before release Behaviour before release	Stops spinning in less than 90° No A Changing course less than 45°	Stops spinning in less than 90° No A Changing course less than 45°
Spin rotation angle after release Cascade occurs B-line stall Change of course before release Behaviour before release	Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s	Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span
Spin rotation angle after release Cascade occurs B-line stall Change of course before release Behaviour before release Recovery	Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s
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Spin rotation angle after release Cascade occurs B-line stall Change of course before release Behaviour before release Recovery Dive forward angle on exit Cascade occurs	Stops spinning in less than 90° 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	Stops spinning in less than 90° No A Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No
Spin rotation angle after release Cascade occurs 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	Stops spinning in less than 90° 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	Stops spinning in less than 90° 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
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No other flight procedure or configuration described in the user's manual