



DHV-tested Equipment

Flying Equipment Database

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TECHNICAL DATA

DHV TESTREPORT LTF

DHV TESTREPORT EN

DATASHEET



TESTREPORT LTF 2014

ZOOM XA LT 105

Type designation ZOOM XA LT 105
Type test reference no DHV GS-01-2978-25
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 FLIGHT (85KG)

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (120KG)

Test pilots



Josef Bauer

No release



Mario Eder

No release

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 60 cm

Greater than 65 cm

Pitch stability exiting accelerated flight

A

A

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

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

Immediate reduction of rate of turn

Tendency to return to straight flight Spontaneous exit (g force decreasing, rate of turn decreasing)

Spontaneous exit (g force decreasing, rate of turn decreasing)

Turn angle to recover normal flight Less than 720°, spontaneous recovery

Less than 720°, spontaneous recovery

Symmetric front collapse

A

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 |
| 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) :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 |
| Exiting deep stall (parachutal stall) :A | | |
| 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 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 | | |
| Recovery | Spontaneous in less than 3 s | Spontaneous in less than 3 s |
| Cascade occurs | No | 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 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 |
| Large 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 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 |
| 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° |
| 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 |
| Large 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° |
| 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 | 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 | A | A |
| Entry procedure | Standard technique | Standard technique |
| 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° |
| Big ears in accelerated flight | A | A |
| Entry procedure | Standard technique | Standard technique |
| 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 accelerator while maintaining big ears | Stable flight | Stable flight |
| 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 | |