



DHV-tested Equipment

Flying Equipment Database

Manufacturers / Dealers

Flying Schools

Clubs

DHV Databases

TECHNICAL DATA

DHV TESTREPORT LTF

DATASHEET

PARTS LIST

OPERATING INSTRUCTION



TEST REPORT LTF 2024-2-785 / EN 926-2:2013+A1:2021

UP TORRE L

Type designation UP Torre L
Type test reference no DHV GS-01-3050-26
Holder of certification [UP International GmbH](#)
Manufacturer [UP International GmbH](#)
Classification C
Winch towing Yes
Number of seats min / max 1 / 1
Accelerator Yes
Trimmers No



BEHAVIOUR AT MIN WEIGHT IN FLIGHT (95KG)

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (115KG)

Test pilots



Harald Buntz

No release



Mario Eder

No release

Inflation/take-off

C

C

Rising behaviour Overshoots, shall be slowed down to avoid a front collapse

Overshoots, shall be slowed down to avoid a front collapse

Special take off technique required No

No

Landing

A

A

Special landing technique required No

No

Speeds in straight flight

B

B

Trim speed more than 30 km/h Yes

Yes

Speed range using the controls larger than 10 km/h Yes

Yes

Minimum speed 25 km/h to 30 km/h

25 km/h to 30 km/h

Control movement

C

C

Symmetric control pressure Increasing

Increasing

Symmetric control travel 45 cm to 60 cm

50 cm to 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	B	B
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 720° to 1 080°, spontaneous recovery		720° to 1 080°, spontaneous recovery
Symmetric front collapse	C	C
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 yes		yes
Unaccelerated collapse (at least 50 % chord)	C	C
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 yes		yes
Accelerated collapse (at least 50 % chord)	C	C
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 Entering a turn of less than 90°		Entering a turn of less than 90°
Cascade occurs No		No
Folding lines used yes		yes
Exiting deep stall (parachutal stall)	B	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 30° to 60°		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	C	C
Recovery Spontaneous in 3 s to 5 s		Spontaneous in 3 s to 5 s
Cascade occurs No		No
Recovery from a developed full stall	B	B
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	C	C
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 yes		yes

Large asymmetric collapse	C	C
Change of course until re-inflation	180° to 360°	180° to 360°
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	yes	yes

Small asymmetric collapse accelerated	C	C
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	yes	yes

Large asymmetric collapse accelerated	C	C
Change of course until re-inflation	180° to 360°	180° to 360°
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	yes	yes

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
Not carried out because the manoeuvre is excluded in the user's manual

Big ears	B	B
Entry procedure	Standard technique	Standard technique
Behaviour during big ears	Stable flight	Stable flight
Recovery	Recovery through pilot action in less than a further 3 s	Recovery through pilot action in less than a further 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°

Big ears in accelerated flight	B	B
Entry procedure	Standard technique	Standard technique
Behaviour during big ears	Stable flight	Stable flight
Recovery	Recovery through pilot action in less than a further 3 s	Recovery through pilot action in less than a further 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