DHV TESTREPORT LTF

GIN FUSE 4 41

Type designation	GIN Fuse 4 41
Type test reference no	DHV GS-01-2898-24
Holder of certification	GIN Gliders Inc.
Manufacturer	GIN Gliders Inc.
Classification	B
Winch towing	No
Number of seats min / max	1 / 2
Accelerator	No
Trimmers	Yes

	BEHAVIOUR AT MIN WEIGHT IN FLIGHT (90KG)	BEHAVIOUR AT MAX WEIGHT IN FLIGHT (220KG)
Test pilots	 **Harald Buntz**	**Torsten Siegel**
Expert		**Mario Eder**
	No release	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**	**B**
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	25 km/h to 30 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		
Not carried out because the glider is not equipped with an accelerator		
Pitch stability operating controls during accelerated flight		
Not carried out because the glider is not equipped with an accelerator		
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**	**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)		
Not carried out because the glider is not equipped with an accelerator		
Exiting deep stall (parachutal stall)	**A**	**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**	**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**	**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**	**A**
Change of course until re-inflation	90° to 180°	90° to 180°
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**	**B**
Change of course until re-inflation	180° to 360°	90° to 180°
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 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		
Not carried out because the glider is not equipped with an accelerator		
Large asymmetric collapse accelerated		
Not carried out because the glider is not equipped with an accelerator		
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		
Not carried out because the glider is not equipped with an accelerator		
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		