

DHV Databases

V Databases ECHNICAL DATA DHV TESTREPORT LTF DATASHEET PART	S LIST OPERATING INSTRUCTION PRINT	
IV TESTREPORT LTF		
GIN AVID M Type designation	GIN Avid M	
Type test reference no Holder of certification		
	GIN Gliders Inc.	
Winch towing	Yes	
Number of seats min / max Accelerator		
Trimmers	No	
	BEHAVIOUR AT MIN WEIGHT IN	BEHAVIOUR AT MAX WEIGHT
Test pilots	FLIGHT (85KG)	IN FLIGHT (105KG)
	Harald Buntz No release	Mario Eder No release
Inflation/take-off	A .	B
Rising behaviour	Smooth, easy and constant rising	Easy rising, some pilot correction is required
Special take off technique required	No	No
<u>Landing</u>	A	A
Special landing technique required	No	No
<u></u>	A	A
Trim speed more than 30 km/h Speed range using the controls larger than 10	Yes	Yes Yes
km/h		Less than 25 km/h
·	A	A
Symmetric control pressure	Increasing	Increasing
Symmetric control travel	Greater than 60 cm	Greater than 65 cm
	A Dive forward loss than 200	Dive femuland less than 200
Dive forward angle on exit Collapse occurs		Dive forward less than 30° No
Pitch stability operating controls during		
accelerated flight	No.	No.
Collapse occurs		No .
Roll stability and damping Oscillations	¦A Reducina	Reducing
	,	,
Stability in gentle spirals 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
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
	A 150	A 150
-	Rocking back less than 45° Spontaneous in less than 3 s	Rocking back less than 45° Spontaneous in less than 3 s
Dive forward angle on exit Change of course		Dive forward 0° to 30° Keeping course
Cascade occurs Folding lines used	No	No no
<u>Unaccelerated collapse (at least 50 % chord)</u> 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 30° to 60°
Dive forward angle on exit Change of course	Keeping course	Keeping course
Cascade occurs Folding lines used		No no
Accelerated collapse (at least 50 % chord)	В	В
Entry	Rocking back less than 45°	Rocking back less than 45°
Recovery Dive forward angle on exit	Spontaneous in less than 3 s Dive forward 30° to 60°	Spontaneous in less than 3 s Dive forward 30° to 60°
Change of course Cascade occurs	Entering a turn of less than 90°	Entering a turn of less than 90° No
Folding lines used		no
Exiting deep stall (parachutal stall)	A	A
Deep stall achieved	Yes Spontaneous in less than 3 s	Yes Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Change of course Cascade occurs	Changing course less than 45° No	Changing course less than 45° No
<u>High angle of attack recovery</u>	A	A
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Cascade occurs	No	No
	Bive few and 200 to C00	Bive ferminal 200 to 600
•	No collapse	Dive forward 30° to 60° No collapse
Cascade occurs (other than collapses) Rocking back		No Less than 45°
	Most lines tight	Most lines tight
Small asymmetric collapse	A	A
Change of course until re-inflation Maximum dive forward or roll angle		Less than 90° Dive or roll angle 0° to 15°
Re-inflation behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course Collapse on the opposite side occurs	No (or only a small number of collapsed cells	
	with a spontaneous re inflation)	collapsed cells with a spontaneous re inflation)
Twist occurs Cascade occurs	No	No No
Folding lines used	no	no
	A	B
Change of course until re-inflation Maximum dive forward or roll angle		90° to 180° Dive or roll angle 15° to 45°
	Spontaneous re-inflation	Spontaneous re-inflation Less than 360°
	No (or only a small number of collapsed cells with a spontaneous re inflation)	
	men a oponicanosas re nineemini	
Twist occurs	· · · · · · · · · · · · · · · · · · ·	inflation) No

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 cells No (or only a small number of collapsed cells with a spontaneous re with a spontaneous re inflation) inflation) **Twist occurs** No No Cascade occurs No No

No

no

Α

no

No

Α

No

Changing course less than 45°

Remains stable with straight span

Less than 90°

B

Cascade occurs No

Folding lines used no

Folding lines used no

Cascade occurs No

Spin occurs No

Change of course before release Changing course less than 45°

Behaviour before release Remains stable with straight span

Change of course until re-inflation 90° to 180°

Small asymmetric collapse accelerated

Trim speed spin tendency

B-line stall

В Large asymmetric collapse accelerated 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° Spontaneous re-inflation **Re-inflation behaviour** 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 No (or only a small number of collapsed cells with a spontane collapsed cells with a spontaneous re inflation) Twist occurs No No

Folding lines used no no Directional control with a maintained Α A asymmetric collapse Able to keep course Yes Yes Yes **180° turn away from the collapsed side possible in** Yes Amount of control range between turn and stall or More than 50 % of the symmetric control More than 50 % of the symmetric **spin** travel control travel

Low speed spin tendency **Spin occurs** No No Α Recovery from a developed spin Stops spinning in less than 90° Spin rotation angle after release Stops spinning in less than 90° **Cascade occurs** No No

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 <u>Big ears</u> Standard technique **Entry procedure** Standard technique **Behaviour during big ears** Stable flight Stable flight Spontaneous in less than 3 s **Recovery** Spontaneous in 3 s to 5 s Dive forward angle on exit Dive forward 0° to 30° Dive forward 0° to 30°

Big ears in accelerated flight **Entry procedure** Standard technique Standard technique **Behaviour during big ears** Stable flight Stable flight Spontaneous in 3 s to 5 s **Recovery** Spontaneous in 3 s to 5 s **Dive forward angle on exit** Dive forward 0° to 30° Dive forward 0° to 30° Behaviour immediately after releasing the Stable flight Stable flight accelerator while maintaining big ears

Α Α **Alternative means of directional control** 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