DH

DHV Databases

GIN AVID XS Type designation		
Type test reference no Holder of certification Manufacturer Classification	GIN Gliders Inc. GIN Gliders Inc.	
Winch towing Number of seats min / max	Yes	
Accelerator Trimmers	Yes	Parties of the same of the sam
	BEHAVIOUR AT MIN WEIGHT IN FLIGHT (65KG)	BEHAVIOUR AT MAX WEIGHT IN FLIGHT (85KG)
Test pilots	Beni Stocker	Josef Bauer
inflation/take-off	No release	No release
Rising behaviour Special take off technique required	Easy rising, some pilot correction is required No	Smooth, easy and constant rising No
Special landing technique required	No	No
	.	A
Trim speed more than 30 km/h Speed range using the controls larger than 10		Yes Yes
km/h		Less than 25 km/h
Control movement	A	A
Symmetric control pressure Symmetric control travel	-	Increasing Greater than 60 cm
		A
Dive forward angle on exit	Dive forward less than 30°	Dive forward less than 30°
Collapse occurs		No
accelerated flight	No.	No.
Collapse occurs		No
Roll stability and damping Oscillations	<u>.</u>	LA 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
Initial response of glider (first 180°) Tendency to return to straight flight	Immediate reduction of rate of turn Spontaneous exit (g force decreasing, rate of turn decreasing)	Immediate reduction of rate of turn Spontaneous exit (g force decreasing, rate of turn decreasing)
Turn angle to recover normal flight		Less than 720°, spontaneous recovery
- /	<u>.</u>	Α
Recovery	Rocking back less than 45° Spontaneous in 3 s to 5 s	Rocking back less than 45° Spontaneous in less than 3 s
	Entering a turn of less than 90°	Dive forward 0° to 30° Keeping course
Cascade occurs Folding lines used		No no
Unaccelerated collapse (at least 50 % chord)	В	A
_	Rocking back less than 45° Spontaneous in 3 s to 5 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° Entering a turn of less than 90°	Dive forward 0° to 30° Keeping course
Cascade occurs Folding lines used		No no
Accelerated collapse (at least 50 % chord)	В	A
	Rocking back less than 45° Spontaneous in 3 s to 5 s	Rocking back less than 45° Spontaneous in less than 3 s
Dive forward angle on exit Change of course	Dive forward 30° to 60° Entering a turn of less than 90°	Dive forward 0° to 30° Keeping course
Cascade occurs Folding lines used	-	No no
Exiting deep stall (parachutal stall)	A	В
Deep stall achieved Recovery	Yes Spontaneous in less than 3 s	Yes Spontaneous in less than 3 s
Dive forward angle on exit	•	Dive forward 30° to 60° Changing course less than 45°
Cascade occurs		No
	Constant in land the 2 and	Constant in land the second
Cascade occurs	Spontaneous in less than 3 s No	Spontaneous in less than 3 s No
Recovery from a developed full stall	A	В
	No collapse	Dive forward 30° to 60° No collapse
Cascade occurs (other than collapses) Rocking back	Less than 45°	No Less than 45°
	Most lines tight	Most lines tight
Change of course until re-inflation	*	Less than 90°
Maximum dive forward or roll angle Re-inflation behaviour	Dive or roll angle 15° to 45° Spontaneous re-inflation	Dive or roll angle 0° to 15° Spontaneous re-inflation
Total change of course Collapse on the opposite side occurs	No (or only a small number of collapsed cells	
Twist occurs		collapsed cells with a spontaneous re inflation) No
Cascade occurs Folding lines used		No no
<u>arge asymmetric collapse</u>	В	В
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)	No (or only a small number of collapsed cells with a spontaneous re
		inflation) No No
Twist occurs Cascade occurs	No	no
Cascade occurs Folding lines used Small asymmetric collapse accelerated	no A	
Cascade occurs Folding lines used Small asymmetric collapse accelerated Change of course until re-inflation Maximum dive forward or roll angle	no A Less than 90° Dive or roll angle 15° to 45°	Less than 90° Dive or roll angle 15° to 45°
Cascade occurs Folding lines used Small asymmetric collapse accelerated Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course	no A Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360°	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360°
Cascade occurs Folding lines used Small asymmetric collapse accelerated Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation)	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation)
Cascade occurs Folding lines used Small asymmetric collapse accelerated Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs Twist occurs Cascade occurs	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No
Cascade occurs Folding lines used Small asymmetric collapse accelerated Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs Twist occurs Cascade occurs Folding lines used	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No no	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No no
Cascade occurs Folding lines used Small asymmetric collapse accelerated Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs Twist occurs Cascade occurs Folding lines used Large asymmetric collapse accelerated Change of course until re-inflation	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No No no B 90° to 180°	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No no B 90° to 180°
Cascade occurs Folding lines used Small asymmetric collapse accelerated Change of course until re-inflation Maximum dive forward or roll angle Re-inflation behaviour Total change of course Collapse on the opposite side occurs Twist occurs Cascade occurs Folding lines used Large asymmetric collapse accelerated Change of course until re-inflation Maximum dive forward or roll angle	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No No no B 90° to 180°	Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° No (or only a small number of collapsed cells with a spontaneous re inflation) No No no

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 No (or only a small number of with a spontaneous re inflation) collapsed cells with a spontaneous re inflation) Twist occurs No No Cascade occurs No No Folding lines used no no

Α

Spin rotation angle after release Stops spinning in less than 90°

Cascade occurs No

No other flight procedure or configuration described in the user's manual

Directional control with a maintained

asymmetric collapse

Able to keep course Yes Yes **180° turn away from the collapsed side possible in** Yes 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 Α Α Trim speed spin tendency **Spin occurs** No No Low speed spin tendency ¦A ¦A **Spin occurs** No No Α Recovery from a developed spin ¦Α

A

No

Stops spinning in less than 90°

B-line stall 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 Spontaneous in less than 3 s **Recovery** Spontaneous in less than 3 s Dive forward 0° to 30° **Dive forward angle on exit** Dive forward 0° to 30° Cascade occurs No No Big ears Standard technique **Entry procedure** Dedicated controls Behaviour during big ears Stable flight Stable flight Recovery through pilot action in less than a further 3 s **Recovery** 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 Standard technique **Entry procedure** Dedicated controls **Behaviour during big ears** Stable flight Stable flight Recovery through pilot action in less than a further 3 s **Recovery** Recovery through pilot action in less than a further 3 s Dive forward 0° to 30° **Dive forward angle on exit** Dive forward 0° to 30° Behaviour immediately after releasing the Stable flight Stable flight accelerator while maintaining big ears

Α **Alternative means of directional control** ¦**A 180° turn achievable in 20 s** Yes Yes No **Stall or spin occurs** No Any other flight procedure and/or configuration described in the user's manual