



DHV TESTREPORT EN926-2:2014

GIN VANTAGE 2 29

Type designation	GIN Vantage 2 29
Type test reference no	DHV GS-01-2299-17
Holder of certification	GIN Gliders Inc.
Manufacturer	GIN Gliders Inc.
Classification	B
Winch towing	Yes
Number of seats min / max	1 / 1
Accelerator	Yes
Trimmers	No



BEHAVIOUR AT MIN WEIGHT IN FLIGHT (95KG)

Test pilots



Harald Buntz



Sebastian Mackrott

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (115KG)

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
en : Verhalten beim Verlassen einer vollständigen Steilspirale	A	A
en : Erstes Ansprechen des Gleitschirms (die ersten 180°)	en : unmittelbare Verringerung der Drehgeschwindigkeit	en : unmittelbare Verringerung der Drehgeschwindigkeit
Tendency to return to straight flight	en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)	en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery

<u>Symmetric front collapse</u>	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
en : Faltleinen wurden benutzt no		no
<u>en : Symmetrischer Frontklapper mindestens 50% Flügeltiefe</u>	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
en : Faltleinen wurden benutzt no		no
<u>en : Symmetrischer Frontklapper im beschleunigten Flug mindestens 50% Flügeltiefe</u>	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
en : Faltleinen wurden benutzt no		no
<u>Exiting deep stall (parachutal stall)</u>	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
<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
<u>Recovery from a developed full stall</u>	A	B
Dive forward angle on exit Dive forward 0° to 30°		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
<u>en : Kleiner einseitiger Klapper</u>	A	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 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 en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)		en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs No		No
Cascade occurs No		No
en : Faltleinen wurden benutzt no		no
<u>en : Großer einseitiger Klapper</u>	B	A
Change of course until re-inflation 90° to 180°		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 en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)		en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs No		No
Cascade occurs No		No
en : Faltleinen wurden benutzt no		no
<u>en : Kleiner einseitiger Klapper im beschleunigten Flug</u>	B	A
Change of course until re-inflation 90° to 180°		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 en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)		en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs No		No
Cascade occurs No		No
en : Faltleinen wurden benutzt no		no
<u>en : Großer einseitiger Klapper im beschleunigten Flug</u>	B	B
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	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs	No	No
Cascade occurs	No	No
en : Faltleinen wurden benutzt	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

B

Entry procedure Dedicated controls

Dedicated controls

Behaviour during big ears Stable flight

Stable flight

Recovery Spontaneous in less than 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

A

A

Entry procedure Dedicated controls

Dedicated controls

Behaviour during big ears Stable flight

Stable flight

Recovery Spontaneous in less than 3 s

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 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