



## DHV TESTREPORT EN926-2:2014

## GIN SPRINT 3 S

**Type designation** GIN Sprint 3 S  
**Type test reference no** DHV GS-01-2234-16  
**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 (75KG)

Test pilots



Beni Stocker

## BEHAVIOUR AT MAX WEIGHT IN FLIGHT (95KG)



Harald Buntz

Inflation/take-off

A

A

**Rising behaviour** Smooth, easy and constant rising  
**Special take off technique required** No

**Rising behaviour** Smooth, easy and constant rising  
**Special take off technique required** No

Landing

A

A

**Special landing technique required** No

No

Speeds in straight flight

A

A

**Trim speed more than 30 km/h** Yes  
**Speed range using the controls larger than 10 km/h** Yes  
**Minimum speed** Less than 25 km/h

**Trim speed more than 30 km/h** Yes  
**Speed range using the controls larger than 10 km/h** Yes  
**Minimum speed** Less than 25 km/h

Control movement

A

A

**Symmetric control pressure** Increasing  
**Symmetric control travel** Greater than 55 cm

**Symmetric control pressure** Increasing  
**Symmetric control travel** Greater than 60 cm

Pitch stability exiting accelerated flight

A

A

**Dive forward angle on exit** Dive forward less than 30°  
**Collapse occurs** No

**Dive forward angle on exit** Dive forward less than 30°  
**Collapse occurs** 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

B

B

**en : Erstes Ansprechen des Gleitschirms (die ersten 180°)** en : keine unmittelbare Reaktion

en : keine unmittelbare Reaktion

**Tendency to return to straight flight** en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)

**Tendency to return to straight flight** en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)

**Turn angle to recover normal flight** 720° to 1 080°, spontaneous recovery

**Turn angle to recover normal flight** Less than 720°, spontaneous recovery

<u>Symmetric front collapse</u>	A	A
<b>Entry</b> Rocking back less than 45°		Rocking back less than 45°
<b>Recovery</b> Spontaneous in less than 3 s		Spontaneous in less than 3 s
<b>Dive forward angle on exit</b> Dive forward 0° to 30°		Dive forward 0° to 30°
<b>Change of course</b> Keeping course		Keeping course
<b>Cascade occurs</b> No		No
<b>en : Faltleinen wurden benutzt</b> no		no
<u>en : Symmetrischer Frontklapper mindestens 50% Flügeltiefe</u>	B	A
<b>Entry</b> Rocking back less than 45°		Rocking back less than 45°
<b>Recovery</b> Spontaneous in 3 s to 5 s		Spontaneous in less than 3 s
<b>Dive forward angle on exit</b> Dive forward 30° to 60°		Dive forward 0° to 30°
<b>Change of course</b> Entering a turn of less than 90°		Keeping course
<b>Cascade occurs</b> No		No
<b>en : Faltleinen wurden benutzt</b> no		no
<u>en : Symmetrischer Frontklapper im beschleunigten Flug</u>	B	A
<b>Entry</b> Rocking back less than 45°		Rocking back less than 45°
<b>Recovery</b> Spontaneous in 3 s to 5 s		Spontaneous in less than 3 s
<b>Dive forward angle on exit</b> Dive forward 30° to 60°		Dive forward 0° to 30°
<b>Change of course</b> Entering a turn of less than 90°		Keeping course
<b>Cascade occurs</b> No		No
<b>en : Faltleinen wurden benutzt</b> no		no
<u>Exiting deep stall (parachutal stall)</u>	A	A
<b>Deep stall achieved</b> Yes		Yes
<b>Recovery</b> Spontaneous in less than 3 s		Spontaneous in less than 3 s
<b>Dive forward angle on exit</b> Dive forward 0° to 30°		Dive forward 0° to 30°
<b>Change of course</b> Changing course less than 45°		Changing course less than 45°
<b>Cascade occurs</b> No		No
<u>High angle of attack recovery</u>	A	A
<b>Recovery</b> Spontaneous in less than 3 s		Spontaneous in less than 3 s
<b>Cascade occurs</b> No		No
<u>Recovery from a developed full stall</u>	A	A
<b>Dive forward angle on exit</b> Dive forward 0° to 30°		Dive forward 0° to 30°
<b>Collapse</b> No collapse		No collapse
<b>Cascade occurs (other than collapses)</b> No		No
<b>Rocking back</b> Less than 45°		Less than 45°
<b>Line tension</b> Most lines tight		Most lines tight
<u>en : Kleiner einseitiger Klapper</u>	A	A
<b>Change of course until re-inflation</b> Less than 90°		Less than 90°
<b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°		Dive or roll angle 15° to 45°
<b>Re-inflation behaviour</b> Spontaneous re-inflation		Spontaneous re-inflation
<b>Total change of course</b> Less than 360°		Less than 360°
<b>Collapse on the opposite side occurs</b> 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)
<b>Twist occurs</b> No		No
<b>Cascade occurs</b> No		No
<b>en : Faltleinen wurden benutzt</b> no		no
<u>en : Großer einseitiger Klapper</u>	A	B
<b>Change of course until re-inflation</b> Less than 90°		90° to 180°
<b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°		Dive or roll angle 15° to 45°
<b>Re-inflation behaviour</b> Spontaneous re-inflation		Spontaneous re-inflation
<b>Total change of course</b> Less than 360°		Less than 360°
<b>Collapse on the opposite side occurs</b> 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)
<b>Twist occurs</b> No		No
<b>Cascade occurs</b> No		No
<b>en : Faltleinen wurden benutzt</b> no		no
<u>en : Kleiner einseitiger Klapper im beschleunigten Flug</u>	A	B
<b>Change of course until re-inflation</b> Less than 90°		90° to 180°
<b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°		Dive or roll angle 15° to 45°
<b>Re-inflation behaviour</b> Spontaneous re-inflation		Spontaneous re-inflation
<b>Total change of course</b> Less than 360°		Less than 360°
<b>Collapse on the opposite side occurs</b> 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)
<b>Twist occurs</b> No		No
<b>Cascade occurs</b> No		No
<b>en : Faltleinen wurden benutzt</b> no		no
<u>en : Großer einseitiger Klapper im beschleunigten Flug</u>	B	B
<b>Change of course until re-inflation</b> 90° to 180°		90° to 180°
<b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°		Dive or roll angle 15° to 45°

<b>Re-inflation behaviour</b>	Spontaneous re-inflation	Spontaneous re-inflation
<b>Total change of course</b>	Less than 360°	Less than 360°
<b>Collapse on the opposite side occurs</b>	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)
<b>Twist occurs</b>	No	No
<b>Cascade occurs</b>	No	No
<b>en : Falteinen wurden benutzt</b>	no	no

**Directional control with a maintained asymmetric collapse**

A

A

<b>Able to keep course</b>	Yes	Yes
<b>180° turn away from the collapsed side possible in 10 s</b>	Yes	Yes
<b>Amount of control range between turn and stall or spin</b>	More than 50 % of the symmetric control travel	More than 50 % of the symmetric control travel

**Trim speed spin tendency**

A

A

<b>Spin occurs</b>	No	No
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**Low speed spin tendency**

A

A

<b>Spin occurs</b>	No	No
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**Recovery from a developed spin**

A

A

<b>Spin rotation angle after release</b>	Stops spinning in less than 90°	Stops spinning in less than 90°
<b>Cascade occurs</b>	No	No

**B-line stall**

A

A

<b>Change of course before release</b>	Changing course less than 45°	Changing course less than 45°
<b>Behaviour before release</b>	Remains stable with straight span	Remains stable with straight span
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b>Cascade occurs</b>	No	No

**Big ears**

B

A

<b>Entry procedure</b>	Dedicated controls	Dedicated controls
<b>Behaviour during big ears</b>	Stable flight	Stable flight
<b>Recovery</b>	Spontaneous in 3 s to 5 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°

**Big ears in accelerated flight**

A

A

<b>Entry procedure</b>	Dedicated controls	Dedicated controls
<b>Behaviour during big ears</b>	Stable flight	Stable flight
<b>Recovery</b>	Spontaneous in 3 s to 5 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b>Behaviour immediately after releasing the accelerator while maintaining big ears</b>	Stable flight	Stable flight

**Alternative means of directional control**

A

A

<b>180° turn achievable in 20 s</b>	Yes	Yes
<b>Stall or spin occurs</b>	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