



DHV-tested Equipment

Flying Equipment Database

Manufacturers / Dealers

Flying Schools

Clubs

DHV Databases

TECHNICAL DATA

DHV TESTREPORT LTF

DHV TESTREPORT EN

DATASHEET

PARTS LIST

OPERATING INSTRUCTION

PRINT



## DHV TESTREPORT EN926-2:2014

## NOVA BION 2 M

**Type designation** NOVA Bion 2 M  
**Type test reference no** DHV GS-01-2246-16  
**Holder of certification** [NOVA Vertriebsgesellschaft m.b.H.](#)  
**Manufacturer** [NOVA Vertriebsgesellschaft m.b.H.](#)  
**Classification** B  
**Winch towing** Yes  
**Number of seats min / max** 1 / 2  
**Accelerator** No  
**Trimmers** Yes



## BEHAVIOUR AT MIN WEIGHT IN FLIGHT (90KG)

## Test pilots



Harald Buntz

A

## BEHAVIOUR AT MAX WEIGHT IN FLIGHT (200KG)



Sebastian Mackrodt

A

Inflation/take-off

**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

**Special landing technique required** No

**Special landing technique required** No

Speeds in straight flight

**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

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

**Symmetric control pressure** Increasing  
**Symmetric control travel** 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

**Oscillations** Reducing

**Oscillations** Reducing

Stability in gentle spirals

**Tendency to return to straight flight** Spontaneous exit

**Tendency to return to straight flight** Spontaneous exit

en : Verhalten beim Verlassen einer vollständigen Steilspirale

**en : Erstes Ansprechen des Gleitschirms (die ersten 180°)** Drehgeschwindigkeit  
**Tendency to return to straight flight** en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)  
**Turn angle to recover normal flight** Less than 720°, spontaneous recovery

**en : unmittelbare Verringerung der Drehgeschwindigkeit**  
**en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)**  
**Less than 720°, spontaneous recovery**

Symmetric front collapse

**Entry** Rocking back less than 45°  
**Recovery** Spontaneous in less than 3 s  
**Dive forward angle on exit** Dive forward 0° to 30°  
**Change of course** Keeping course  
**Cascade occurs** No

**Entry** Rocking back less than 45°  
**Recovery** Spontaneous in less than 3 s  
**Dive forward angle on exit** Dive forward 0° to 30°  
**Change of course** Keeping course

**en : Fallleinen wurden benutzt** no

**en : Fallleinen wurden benutzt** no

en : Symmetrischer Frontklapper mindestens B

B

50% Flügeltiefe

<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 30° to 60°	Dive forward 30° to 60°
<b>Change of course</b> Keeping course	Keeping course
<b>Cascade occurs</b> No	No
<b>en : Faltleinen wurden benutzt</b> no	no

en : Symmetrischer Frontklapper im beschleunigten Flug

Not carried out because the glider is not equipped with an accelerator

Exiting deep stall (parachutal stall)

<b>A</b>	<b>B</b>
<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 30° to 60°
<b>Change of course</b> Changing course less than 45°	Changing course less than 45°
<b>Cascade occurs</b> No	No

High angle of attack recovery

<b>A</b>	<b>A</b>
<b>Recovery</b> Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Cascade occurs</b> No	No

Recovery from a developed full stall

<b>A</b>	<b>B</b>
<b>Dive forward angle on exit</b> Dive forward 0° to 30°	Dive forward 30° to 60°
<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

en : Kleiner einseitiger Klapper

<b>A</b>	<b>A</b>
<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 0° to 15°	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

en : Großer einseitiger Klapper

<b>B</b>	<b>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 : Faltleinen wurden benutzt</b> no	no

en : Kleiner einseitiger Klapper im beschleunigten Flug

Not carried out because the glider is not equipped with an accelerator

en : Großer einseitiger Klapper im beschleunigten Flug

Not carried out because the glider is not equipped with an accelerator

Directional control with a maintained asymmetric collapse

<b>A</b>	<b>A</b>
<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

<b>A</b>	<b>A</b>
<b>Spin occurs</b> No	No

Low speed spin tendency

<b>A</b>	<b>A</b>
<b>Spin occurs</b> No	No

Recovery from a developed spin

<b>A</b>	<b>A</b>
<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

<b>A</b>	<b>A</b>
<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 30° to 60°	Dive forward 30° to 60°
<b>Cascade occurs</b> No	No

Big ears

A

B

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

<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