

**DHV TESTREPORT EN926-2:2005**

**NOVA MENTOR3 L**

**Type designation** NOVA Mentor3 L  
**Type test reference no** DHV GS-01-2029-13  
**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 / 1  
**Accelerator** Yes  
**Trimmers** No



**BEHAVIOUR AT MIN WEIGHT IN FLIGHT (100KG)**

**BEHAVIOUR AT MAX WEIGHT IN FLIGHT (130KG)**




Test pilots

















**Harry Buntz**



**Sebastian Mackrodt**

<b>Inflation/take-off</b>	<b>A</b>	<b>A</b>
<b>Rising behaviour</b>	Smooth, easy and constant rising	Smooth, easy and constant rising
<b>Special take off technique required</b>	No	No
<b>Landing</b>	<b>A</b>	<b>A</b>
<b>Special landing technique required</b>	No	No
<b>Speeds in straight flight</b>	<b>A</b>	<b>A</b>
<b>Trim speed more than 30 km/h</b>	Yes	Yes
<b>Speed range using the controls larger than 10 km/h</b>	Yes	Yes
<b>Minimum speed</b>	Less than 25 km/h	Less than 25 km/h
<b>Control movement</b>	<b>A</b>	<b>A</b>
<b>Symmetric control pressure</b>	Increasing	Increasing
<b>Symmetric control travel</b>	Greater than 60 cm	Greater than 65 cm
<b>Pitch stability exiting accelerated flight</b>	<b>A</b>	<b>A</b>
<b>Dive forward angle on exit</b>	Dive forward less than 30°	Dive forward less than 30°
<b>Collapse occurs</b>	No	No
<b>Pitch stability operating controls during accelerated flight</b>	<b>A</b>	<b>A</b>
<b>Collapse occurs</b>	No	No
<b>Roll stability and damping</b>	<b>A</b>	<b>A</b>
<b>Oscillations</b>	Reducing	Reducing
<b>Stability in gentle spirals</b>	<b>A</b>	<b>A</b>
<b>Tendency to return to straight flight</b>	Spontaneous exit	Spontaneous exit
<b>Behaviour in a steeply banked turn</b> 	<b>A</b>	<b>B</b>
<b>Sink rate after two turns</b>	Up to 12 m/s	More than 14 m/s
<b>Symmetric front collapse</b>	<b>B</b> 	<b>B</b> 
<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>	Entering a turn of less than 90°	Entering a turn of less than 90°
<b>Cascade occurs</b>	No	No

<p><b>Symmetric front collapse in accelerated flight</b></p>	<p><b>B</b> </p>	<p><b>B</b> </p>
<p><b>Entry</b> Rocking back less than 45°  <b>Recovery</b> Spontaneous in 3 s to 5 s  <b>Dive forward angle on exit</b> Dive forward 30° to 60°  <b>Change of course</b> Entering a turn of less than 90°  <b>Cascade occurs</b> No</p>		<p>Rocking back less than 45°                  Spontaneous in 3 s to 5 s                  Dive forward 30° to 60°                  Entering a turn of less than 90°                  No</p>
<p><b>Exiting deep stall (parachutal stall)</b></p>	<p><b>A</b></p>	<p><b>A</b></p>
<p><b>Deep stall achieved</b> Yes  <b>Recovery</b> Spontaneous in less than 3 s  <b>Dive forward angle on exit</b> Dive forward 0° to 30°  <b>Change of course</b> Changing course less than 45°  <b>Cascade occurs</b> No</p>		<p>Yes                  Spontaneous in less than 3 s                  Dive forward 0° to 30°                  Changing course less than 45°                  No</p>
<p><b>High angle of attack recovery</b></p>	<p><b>A</b></p>	<p><b>A</b></p>
<p><b>Recovery</b> Spontaneous in less than 3 s  <b>Cascade occurs</b> No</p>		<p>Spontaneous in less than 3 s                  No</p>
<p><b>Recovery from a developed full stall</b></p>	<p><b>B</b></p>	<p><b>B</b></p>
<p><b>Dive forward angle on exit</b> Dive forward 30° to 60°  <b>Collapse</b> No collapse  <b>Cascade occurs (other than collapses)</b> No  <b>Rocking back</b> Less than 45°  <b>Line tension</b> Most lines tight</p>		<p>Dive forward 30° to 60°                  No collapse                  No                  Less than 45°                  Most lines tight</p>
<p><b>Asymmetric collapse 45-50%</b></p>	<p><b>A</b></p>	<p><b>A</b></p>
<p><b>Change of course until re-inflation</b> Less than 90°  <b>Maximum dive forward or roll angle</b> Dive or roll angle 0° to 15°  <b>Re-inflation behaviour</b> Spontaneous re-inflation  <b>Total change of course</b> Less than 360°  <b>Collapse on the opposite side occurs</b> No  <b>Twist occurs</b> No  <b>Cascade occurs</b> No</p>		<p>Less than 90°                  Dive or roll angle 0° to 15°                  Spontaneous re-inflation                  Less than 360°                  No                  No                  No</p>
<p><b>Asymmetric collapse 70-75%</b></p>	<p><b>B</b> </p>	<p><b>B</b> </p>
<p><b>Change of course until re-inflation</b> 90° to 180°  <b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°  <b>Re-inflation behaviour</b> Spontaneous re-inflation  <b>Total change of course</b> Less than 360°  <b>Collapse on the opposite side occurs</b> No  <b>Twist occurs</b> No  <b>Cascade occurs</b> No</p>		<p>90° to 180°                  Dive or roll angle 15° to 45°                  Spontaneous re-inflation                  Less than 360°                  No                  No                  No</p>
<p><b>Asymmetric collapse 45-50% in accelerated flight</b></p>	<p><b>B</b></p>	<p><b>B</b></p>
<p><b>Change of course until re-inflation</b> 90° to 180°  <b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°  <b>Re-inflation behaviour</b> Spontaneous re-inflation  <b>Total change of course</b> Less than 360°  <b>Collapse on the opposite side occurs</b> No  <b>Twist occurs</b> No  <b>Cascade occurs</b> No</p>		<p>90° to 180°                  Dive or roll angle 15° to 45°                  Spontaneous re-inflation                  Less than 360°                  No                  No                  No</p>
<p><b>Asymmetric collapse 70-75% in accelerated flight</b></p>	<p><b>B</b> </p>	<p><b>B</b> </p>
<p><b>Change of course until re-inflation</b> 90° to 180°  <b>Maximum dive forward or roll angle</b> Dive or roll angle 15° to 45°  <b>Re-inflation behaviour</b> Spontaneous re-inflation  <b>Total change of course</b> Less than 360°  <b>Collapse on the opposite side occurs</b> No  <b>Twist occurs</b> No  <b>Cascade occurs</b> No</p>		<p>90° to 180°                  Dive or roll angle 15° to 45°                  Spontaneous re-inflation                  Less than 360°                  No                  No                  No</p>

<b><u>Directional control with a maintained asymmetric collapse</u></b>	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
<b><u>Trim speed spin tendency</u></b>	A	A
<b>Spin occurs</b>	No	No
<b><u>Low speed spin tendency</u></b>	A	A
<b>Spin occurs</b>	No	No
<b><u>Recovery from a developed spin</u></b>	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><u>B-line stall</u></b>	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
<b><u>Big ears</u></b>	A 	B 
<b>Entry procedure</b>	Standard technique	Standard technique
<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°
<b><u>Big ears in accelerated flight</u></b>	A 	A 
<b>Entry procedure</b>	Standard technique	Standard technique
<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°
<b>Behaviour immediately after releasing the accelerator while maintaining big ears</b>	Stable flight	Stable flight
<b><u>Behaviour exiting a steep spiral</u></b>	A	A
<b>Tendency to return to straight flight</b>	Spontaneous exit	Spontaneous exit
<b>Turn angle to recover normal flight</b>	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery
<b>Sink rate when evaluating spiral stability [m/s]</b>	14	14
<b><u>Alternative means of directional control</u></b>	A	A
<b>180° turn achievable in 20 s</b>	Yes	Yes
<b>Stall or spin occurs</b>	No	No
<b><u>Any other flight procedure and/or configuration described in the user's manual</u></b>		
No other flight procedure or configuration described in the user's manual		