TECHNICAL DATA DHV TESTREPORT LTF DHV TESTREPORT EN DATASHEET PARTS LIST OPERATING INSTRUCTION PRINT





## DHV TESTREPORT EN926-2:2005

## NOVA TONS S

Inflation/take-off

Type designation NOVA Ion3 S

Type test reference no DHV GS-01-2057-13

Holder of certification NOVA Vertriebsgesellschaft m.b.H.

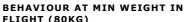
Manufacturer NOVA Vertriebsgesellschaft m.b.H.

**Classification** B

Winch towing Yes

Number of seats min / max 1/1

**Accelerator** Yes Trimmers No



Test pilots



Rising behaviour Smooth, easy and constant rising

Special take off technique required No

Special landing technique required No

Speeds in straight flight

<u>Landing</u> 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

Control movement A Symmetric control pressure Increasing

Symmetric control travel Greater than 60 cm

Pitch stability exiting accelerated flight A

Dive forward angle on exit Dive forward less than 30°

Oscillations Reducing

Collapse occurs No

Pitch stability operating controls during accelerated flight

Collapse occurs No

Roll stability and damping

Stability in gentle spirals A Tendency to return to straight flight Spontaneous exit

Behaviour in a steeply banked turn 🎩

Sink rate after two turns 12 m/s to 14 m/s

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 Entering a turn of less than 90°

Cascade occurs No



BEHAVIOUR AT MAX WEIGHT IN FLIGHT (100KG)



Smooth, easy and constant rising

Yes Yes

Less than 25 km/h

Increasing

Greater than 60 cm

Dive forward less than 30°

Reducing

12 m/s to 14 m/s

Rocking back less than 45° Spontaneous in less than 3 s Dive forward 0° to 30° Entering a turn of less than 90°

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Symmetric front collapse in accelerated flight	Δ	В
	4	4
-	Rocking back less than 45°	Rocking back less than 45°
	Spontaneous in less than 3 s	Spontaneous in 3 s to 5 s
Dive forward angle on exit		Dive forward 0° to 30°
_	Entering a turn of less than 90°	Entering a turn of less than 90°
Cascade occurs	s No	No
Exiting deep stall (parachutal stall)	A	A
Deep stall achieved	l Voc	Yes
•	r Spontaneous in less than 3 s	Spontaneous in less than 3 s
_		Dive forward 0° to 30°
Dive forward angle on exit		
Cascade occurs	Changing course less than 45°	Changing course less than 45°
Cascade occurs	S NO	No
High angle of attack recovery	А	A
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Cascade occurs		No
Recovery from a developed full stall	А	A
Dive forward angle on exit	: Dive forward 0° to 30°	Dive forward 0° to 30°
_	No collapse	No collapse
Cascade occurs (other than collapses)		No
	Less than 45°	Less than 45°
	Most lines tight	Most lines tight
Line tension	Those lines light	Most inles tight
Asymmetric collapse 45-50%	A	A
Change of course until re-inflation	Lass than 90°	Less than 90°
_		Dive or roll angle 15° to 45°
Maximum dive forward or roll angle		
	Spontaneous re-inflation	Spontaneous re-inflation Less than 360°
Total change of course		
Collapse on the opposite side occurs		No
Twist occurs		No
Cascade occurs	s NO	No
Asymmetric collapse 70-75%	В	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	s No	No
Twist occurs	s No	No
Cascade occurs	: No	No
Asymmetric collapse 45-50% in accelerated flight	A	A
l	Loca than 000	Loca than 000
Change of course until re-inflation		Less than 90°
Maximum dive forward or roll angle		Dive or roll angle 15° to 45°
	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course		Less than 360°
Collapse on the opposite side occurs		No
Twist occurs		No
Cascade occurs	S NO	No
Asymmetric collapse 70-75% in accelerated flight	В	В
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°
	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	•	Less than 360°
Collapse on the opposite side occurs		No
Twist occurs		No
Cascade occurs		No
Cascage occurs	) NO	INO
Directional control with a maintained asymmetric collapse	А	А
Able to keep course	Yes	Yes
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180° turn away from the collapsed side possible in		Yes
Amount of control range between turn and stall or		More than 50 % of the symmetric control travel
Trim speed spin tendency	А	A
Spin occurs	No	No
Low speed spin tendency	Α	Α
Spin occurs	: No	No
Recovery from a developed spin	А	A
Spin rotation angle after release Cascade occurs		Stops spinning in less than 90° No
B-line stall	A	A
	Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30°	Changing course less than 45° Remains stable with straight span Spontaneous in less than 3 s Dive forward 0° to 30° No
<u>Big ears</u>	В	В
Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Recovery through pilot action in less than a further 3 s	Spontaneous in 3 s to 5 s
Dive forward angle on exit	: Dive forward 0° to 30°	Dive forward 0° to 30°
Big ears in accelerated flight	Α	A
Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
-	Spontaneous in 3 s to 5 s	Spontaneous in less than 3 s
Dive forward angle on exit Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Dive forward 0° to 30° Stable flight
Behaviour exiting a steep spiral	A	A
Tendency to return to straight flight	: Spontaneous exit	Spontaneous exit
	: Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery
Sink rate when evaluating spiral stability [m/s]	14	14
Alternative means of directional control	A	A
180° turn achievable in 20 s	; Yes	Yes
Stall or spin occurs	s No	No
Any other flight procedure and/or configuratio	n described in the user's manual	

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