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Route du Pré-au-Compte 8 • CH-1844 Villeneuve • +41 (0)21 965 65 65

test laboratory for paragliders, paraglider harnesses and paraglider reserve parachutes



## Flight test report: EN 926-2:2013+A1:2021\* and NfL 2-565-20

ManufacturerDavinci Products IncAddress53 sinchon-gil, Okched12505 Gyeonggi-do			Certification num Flight test	ber	PG_2207.2023 13.03.2024	
Glider model Serial number Trimmer Folding lines used	Korea, Republic of POPERA M PPR-M55008-RD no yes		<b>Classification</b> Representative Place of test		<b>D</b> None Villeneuve	
Test pilot		Claude Thurnheer			Alexandre Jofresa	
Harness Harness to risers distance [cm] Distance between risers [cm]		Advance Thun AG Success 4 M 43 44			Advance Thun AG Success 4 M 43 48	
Total weight in flight [kg]		95		115		
1. Inflation/Take-off Rising behaviour		C Overshoots, shall be slowed down to avoid a front C collapse			Overshoots, shall be slowed down to avoid a front collapse	
Special take off technique required		No		A	No	A
2. Landing Special landing technique required		<b>A</b> No		A	No	A
<b>3. Speed in straight flight</b> Trim speed more than 30 km/h		B Yes A		A	Yes	A
Speed range using the controls larger than 10 km/h		Yes A		А	Yes	A
Minimum speed		25 km/h to 30 km/h		В	25 km/h to 30 km/h	В
<ul> <li>4. Control movement</li> <li>Max. weight in flight up to 80 kg</li> <li>Symmetric control pressure / travel</li> </ul>		C not available		0	not available	0
Max. weight in flight 80 kg to 100 kg Symmetric control pressure / travel		Increasing / 45 cm to	60 cm	С	not available	0
Max. weight in flight greater than 100 kg Symmetric control pressure / travel		not available		0	Increasing / 50 cm to 65 cm	С
5. Pitch stability exiting accelerated flight Dive forward angle on exit		A Dive forward less than	n 30°	A	Dive forward less than 30°	A
Collapse occurs		No		A	No	A
6. Pitch stability operating controls during accelerated flight		A				
Collapse occurs		No		A	No	A
7. Roll stability and damping Oscillations		<b>A</b> Reducing		A	Reducing	A
8. Stability in gentle spirals Tendency to return to straight flight		A Spontaneous exit		A	Spontaneous exit	A

\*This standard is NOT covered by accreditation D-IS-19457-01

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9. Behaviour exiting a fully developed spiral dive	В			
Initial response of glider (first 180°)	No immediate reaction	В	No immediate reaction	В
Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	A	Spontaneous exit (g force decreasing, rate of turn decreasing)	A
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	A	720° to 1 080°, spontaneous recovery	В
10. Symmetric front collapse Approximately 30 % chord	D			
Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Recovery through pilot action in less than a further 3 s	D	Spontaneous in less than 3 s	A
Dive forward angle on exit Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	А
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
At least 50% chord Entry	Rocking back less than 45°	A	Rocking back less than 45°	A
Recovery	Recovery through pilot action in less than a further 3 s	D	Spontaneous in 3 s to 5 s	В
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	A
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
With accelerator				
Entry	Rocking back less than 45°	A	Rocking back less than 45°	А
Recovery	Recovery through pilot action in less than a further 3 s	D	Spontaneous in 3 s to 5 s	В
Dive forward angle on exit / Change of course	Dive forward 0° to 30° / Keeping course	A	Dive forward 0° to 30° / Keeping course	А
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
11. Exiting deep stall (parachutal stall)	Α	•		
Deep stall achieved	Yes		Yes	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Change of course	Changing course less than 45°	A	Changing course less than 45°	A
Cascade occurs	No	A	No	A
<b>12. High angle of attack recovery</b> Recovery	A Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs	No	A	No	A
<b>13. Recovery from a developed full stall</b> Dive forward angle on exit	<b>C</b> Dive forward 30° to 60°	В	Dive forward 0° to 30°	A
Collapse	No collapse	A	No collapse	А
Cascade occurs (other than collapses)	Νο	A	Νο	A

Rocking back	Less than 45°	A	Greater than 45°	С
Line tension	Most lines tight		Most lines tight	A
14. Asymmetric collapse Small asymmetric collapse	D			
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45° $$	A	Less than 90° / Dive or roll angle 15° to 45° $$	A
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action		Inflates in 3 s to 5 s from start of pilot action	D
Total change of course	Less than 360°		Greater than 360° with tendency to recover (g force decreasing, rate of turn decreasing)	С
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with A a spontaneous reinflation)		No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	А
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
Large asymmetric collapse				
Change of course until re-inflation / Maximum dive forward or roll angle	$90^\circ$ to $180^\circ$ / Dive or roll angle $15^\circ$ to $45^\circ$	В	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	С	Inflates in 3 s to 5 s from start of pilot action	D
Total change of course	Less than 360°	A	Greater than 360° with tendency to recover (g force decreasing, rate of turn decreasing)	С
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
Small asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 15° to 45° $$	A	$90^\circ$ to $180^\circ$ / Dive or roll angle $15^\circ$ to $45^\circ$	В
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	С	Inflates in 3 s to 5 s from start of pilot action	D
Total change of course	Less than 360°	A	Less than 360°	A
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	A	No (or only a small number of collapsed cells with a spontaneous reinflation)	A
Twist occurs	No	A	No	А
Cascade occurs	No	A	No	A
Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
Large asymmetric collapse with fully activated accelerator				
Change of course until re-inflation / Maximum dive forward or roll angle	$90^\circ$ to $180^\circ$ / Dive or roll angle $15^\circ$ to $45^\circ$	В	$90^\circ$ to $180^\circ$ / Dive or roll angle $15^\circ$ to $45^\circ$	В
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	С	Inflates in 3 s to 5 s from start of pilot action	D
Total change of course	Less than 360°	A	Greater than 360° with tendency to recover (g force decreasing, rate of turn decreasing)	С
Collapse on the opposite side occurs	No (or only a small number of collapsed cells with a spontaneous reinflation)	o (or only a small number of collapsed cells with A No (or only a small number of collapsontaneous reinflation) A spontaneous reinflation		A
Twist occurs	No	A	No	A
Cascade occurs	No	A	No	A

Folding lines used	Yes (Only if asked)	D	Yes (Only if asked)	D
15. Directional control with a maintained	Α			
asymmetric collapse Able to keep course	Yes	A	Yes	А
180° turn away from the collapsed side possible in 10 s	Yes	A	Yes	A
Amount of control range between turn and stall or spin	More than 50 % of the symmetric control travel	A	More than 50 % of the symmetric control travel	A
16. Trim speed spin tendency	Α			
Spin occurs	No	A	No	A
17. Low speed spin tendency	D			
Spin occurs	Yes	D	No	A
18. Recovery from a developed spin	D			
Spin rotation angle after release	Stops spinning in 180° to 360°	D	Stops spinning in 180° to 360°	D
Cascade occurs	No	A	No	A
19. B-line stall	0			
Change of course before release	not available	0	not available	0
Behaviour before release	not available	0	not available	0
Recovery	not available	0	not available	0
Dive forward angle on exit	not available	0	not available	0
Cascade occurs	not available	0	not available	0
20. Big ears	A			
Entry procedure	Standard technique	A	Standard technique	А
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	А
21. Big ears in accelerated flight	Α			
Entry procedure	Standard technique	A	Standard technique	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	A	Stable flight	A
22. Alternative means of directional control	Α			
180° turn achievable in 20 s	Yes	A	Yes	А
Stall or spin occurs	No	А	No	А
23. Any other flight procedure and/or configuration described in the user's manual	A			
Procedure works as described	Yes	A	Yes	А
Procedure suitable for novice pilots	Yes	A	Yes	А
Procedure suitable for novice pilots Cascade occurs	Yes No		Yes No	A A

24. Comments of test pilot

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