

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

Manufacturer	AirDesign GmbH	Certification number	PG_2517.2025
Address	Rhombergstraße 9, 4.Stock 6067 Absam Austria	Flight test	29.01.2025
Glider model	HERO XPED S	Classification	D
Serial number	XD59S1KPP2450016P	Representative	None
Trimmer	no	Place of test	Villeneuve
Folding lines used	yes		

Test pilot	Victor Chinen Cirilli	Alexandre Jofresa
Harness	Advance Thun AG Success 4 M	Advance Thun AG Success 4 M
Harness to risers distance [cm]	43	43
Distance between risers [cm]	44	44
Total weight in flight [kg]	84	98
1. Inflation/Take-off	C	
Rising behaviour	Overshoots, shall be slowed down to avoid a front collapse	C Easy rising, some pilot correction is required B
Special take off technique required	No	A No A
2. Landing	A	
Special landing technique required	No	A No A
3. Speed in straight flight	B	
Trim speed more than 30 km/h	Yes	A Yes A
Speed range using the controls larger than 10 km/h	Yes	A Yes A
Minimum speed	Less than 25 km/h	A 25 km/h to 30 km/h B
4. Control movement	C	
Max. weight in flight up to 80 kg		
Symmetric control pressure / travel	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	C Increasing / 45 cm to 60 cm C
Max. weight in flight greater than 100 kg		
Symmetric control pressure / travel	not available	0 not available 0
5. Pitch stability exiting accelerated flight	A	
Dive forward angle on exit	Dive forward less than 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	A	
Oscillations	Reducing	A Reducing A
8. Stability in gentle spirals	A	
Tendency to return to straight flight	Spontaneous exit	A Spontaneous exit A

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

Rocking back	Greater than 45°	C	Less than 45°	A
Line tension	Most lines tight	A	Most lines tight	A

14. Asymmetric collapse

D

Small asymmetric collapse

Change of course until re-inflation / Maximum dive forward or roll angle	Less than 90° / Dive or roll angle 0° to 15°	A	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
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 re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	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

Large asymmetric collapse

Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
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 re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	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	Less than 90° / Dive or roll angle 15° to 45°	A
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
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 re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	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

Large asymmetric collapse with fully activated accelerator

Change of course until re-inflation / Maximum dive forward or roll angle	90° to 180° / Dive or roll angle 15° to 45°	B	90° to 180° / Dive or roll angle 15° to 45°	B
Re-inflation behaviour	Spontaneous re-inflation	A	Spontaneous re-inflation	A
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 re-inflation)	A	No (or only a small number of collapsed cells with a spontaneous re-inflation)	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 asymmetric collapse	A			
Able to keep course	Yes	A	Yes	A
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	A			
Spin occurs	No	A	No	A
17. Low speed spin tendency	A			
Spin occurs	No	A	No	A
18. Recovery from a developed spin	A			
Spin rotation angle after release	Stops spinning in less than 90°	A	Stops spinning in less than 90°	A
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	B			
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in 3 s to 5 s	B
Dive forward angle on exit	Dive forward 0° to 30°	A	Dive forward 0° to 30°	A
21. Big ears in accelerated flight	A			
Entry procedure	Dedicated controls	A	Dedicated controls	A
Behaviour during big ears	Stable flight	A	Stable flight	A
Recovery	Spontaneous in less than 3 s	A	Spontaneous in 3 s to 5 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	A			
180° turn achievable in 20 s	Yes	A	Yes	A
Stall or spin occurs	No	A	No	A
23. Any other flight procedure and/or configuration described in the user's manual	0			
Procedure works as described	not available	0	not available	0
Procedure suitable for novice pilots	not available	0	not available	0
Cascade occurs	not available	0	not available	0