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DHV TESTREPORT LTF

SWING NYOS 2 RS ML

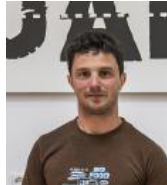
Type designation Swing Nyos 2 RS ML
Type test reference no DHV GS-01-2679-22
Holder of certification [Swing Flugsportgeräte GmbH](#)
Manufacturer [Swing Flugsportgeräte GmbH](#)
Classification B
Winch towing No
Number of seats min / max 1 / 1
Accelerator Yes
Trimmers No



BEHAVIOUR AT MIN WEIGHT IN FLIGHT (90KG)

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (110KG)

Test pilots



Josef Bauer

Sebastian Mackrodt

No release

No release

Inflation/take-off

Rising behaviour	Easy rising, some pilot correction is required	Smooth, easy and constant rising
Special take off technique required	No	No

Landing

Special landing technique required	No	No
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Speeds in straight flight

Trim speed more than 30 km/h	Yes	Yes
Speed range using the controls larger than 10 km/h	Yes	Yes
Minimum speed	Less than 25 km/h	Less than 25 km/h

Control movement

Symmetric control pressure	Increasing	Increasing
Symmetric control travel	Greater than 60 cm	Greater than 65 cm

Pitch stability exiting accelerated flight

Dive forward angle on exit	Dive forward less than 30°	Dive forward less than 30°
Collapse occurs	No	No

Pitch stability operating controls during accelerated flight

Collapse occurs	No	No
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Roll stability and damping

Oscillations	Reducing	Reducing
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Stability in gentle spirals

Tendency to return to straight flight	Spontaneous exit	Spontaneous exit
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Behaviour exiting a fully developed spiral dive

Initial response of glider (first 180°)	Immediate reduction of rate of turn	Immediate reduction of rate of turn
Tendency to return to straight flight	Spontaneous exit (g force decreasing, rate of turn decreasing)	Spontaneous exit (g force decreasing, rate of turn decreasing)
Turn angle to recover normal flight	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery

Symmetric front collapse

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

Unaccelerated collapse (at least 50 % chord)

A

Entry Rocking back less than 45°	B	Rocking back less than 45°	B
Recovery Spontaneous in less than 3 s		Spontaneous in 3 s to 5 s	
Dive forward angle on exit Dive forward 0° to 30°		Dive forward 0° to 30°	
Change of course Keeping course		Keeping course	
Cascade occurs No		No	
Folding lines used no		no	
Accelerated collapse (at least 50 % chord)			
Entry Rocking back less than 45°	B	Rocking back less than 45°	B
Recovery Spontaneous in less than 3 s		Spontaneous in 3 s to 5 s	
Dive forward angle on exit Dive forward 30° to 60°		Dive forward 0° to 30°	
Change of course Keeping course		Entering a turn of less than 90°	
Cascade occurs No		No	
Folding lines used no		no	
Exiting deep stall (parachutal stall)			
Deep stall achieved Yes	B	Yes	A
Recovery Spontaneous in less than 3 s		Spontaneous in less than 3 s	
Dive forward angle on exit Dive forward 30° to 60°		Dive forward 0° to 30°	
Change of course Changing course less than 45°		Changing course less than 45°	
Cascade occurs No		No	
High angle of attack recovery			
Recovery Spontaneous in less than 3 s	A	Spontaneous in less than 3 s	A
Cascade occurs No		No	
Recovery from a developed full stall			
Dive forward angle on exit Dive forward 30° to 60°	B	Dive forward 30° to 60°	B
Collapse No collapse		No collapse	
Cascade occurs (other than collapses) No		No	
Rocking back Less than 45°		Less than 45°	
Line tension Most lines tight		Most lines tight	
Small asymmetric collapse			
Change of course until re-inflation Less than 90°	A	Less than 90°	A
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 No (or only a small number of collapsed cells with a spontaneous re inflation)		No (or only a small number of collapsed cells with a spontaneous re inflation)	
Twist occurs No		No	
Cascade occurs No		No	
Folding lines used no		no	
Large asymmetric collapse			
Change of course until re-inflation 90° to 180°	B	90° to 180°	B
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 No (or only a small number of collapsed cells with a spontaneous re inflation)		No (or only a small number of collapsed cells with a spontaneous re inflation)	
Twist occurs No		No	
Cascade occurs No		No	
Folding lines used no		no	
Small asymmetric collapse accelerated			
Change of course until re-inflation Less than 90°	A	Less than 90°	A
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 No (or only a small number of collapsed cells with a spontaneous re inflation)		No (or only a small number of collapsed cells with a spontaneous re inflation)	
Twist occurs No		No	
Cascade occurs No		No	
Folding lines used no		no	
Large asymmetric collapse accelerated			
Change of course until re-inflation 90° to 180°	B	90° to 180°	B
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 No (or only a small number of collapsed cells with a spontaneous re inflation)		No (or only a small number of collapsed cells with a spontaneous re inflation)	
Twist occurs No		No	
Cascade occurs No		No	
Folding lines used no		no	
Directional control with a maintained asymmetric collapse			
Able to keep course Yes	A	Yes	A
180° turn away from the collapsed side possible in 10 s Yes		Yes	
Amount of control range between turn and stall or spin More than 50 % of the symmetric control travel		More than 50 % of the symmetric control travel	

Trim speed spin tendency	A	A
Spin occurs	No	No
Low speed spin tendency	A	A
Spin occurs	No	No
Recovery from a developed spin	A	A
Spin rotation angle after release	Stops spinning in less than 90°	Stops spinning in less than 90°
Cascade occurs	No	No
B-line stall	A	A
Change of course before release	Changing course less than 45°	Changing course less than 45°
Behaviour before release	Remains stable with straight span	Remains stable with straight span
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Cascade occurs	No	No
Big ears	A	A
Entry procedure	Standard technique	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Big ears in accelerated flight	A	A
Entry procedure	Standard technique	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Behaviour immediately after releasing the accelerator while maintaining big ears	Stable flight	Stable flight
Alternative means of directional control	A	A
180° turn achievable in 20 s	Yes	Yes
Stall or spin occurs	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		