

ICARO GRAVIS² M

Brand / Type	ICARO Gravis ² M
Certification number	DHV GS-01-2529-20
Company	<u>ICARO paragliders - Fly & more GmbH</u>
Producer	<u>ICARO paragliders - Fly & more GmbH</u>
Classification	B
Winch	Ja
Seats	1 / 1
Accelerator	Ja
Trimmer	Nein



VERHALTEN BEI MIN.
STARTGEWICHT (80KG)

Testpiloten



Beni Stocker

VERHALTEN BEI MAX.
STARTGEWICHT (105KG)



Sebastian Mackrodt

1. Inflation/Take-off	A	A
	Easy rising, some pilot correction is not required	Easy rising, some pilot correction is not required
Special take off technique required	No	No
2. Landing	A	A
Special landing technique required	No	No
3. Speed in straight flight	A	A
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	Yes	Yes
4. Control movement	A	A
Symmetric control pressure / travel Increasing	greater than 60cm / increasing	greater than 65cm
5. Pitch stability exiting accelerated flight	A	A
Dive forward angle on exit	Dive forward less than 30°	A Dive forward less than 30°
Collapse occurs	No	No
6.Pitch stability operating controls during accelerated flight	A	A
Collapse occurs	No	No
7. Roll stability and damping	A	A
Oscillations	Reducing	Reducing
8. Stability in gentle spirals	A	A
Tendency to return to straight flight	Spontaneous exit	Spontaneous exit
9. Behavior exiting a fully developed spiral dive	A	A
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
10. Symmetric front collapse approximately 30 % chord	A	A
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
11.Symmetric front collapse approximately 50% chord	A	A
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

12.Symmetric front collapse approximately 50% chord with accelerator	A	A
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
13. Exiting deep stall (parachute stall)	A	A
Deep stall achieved	Yes	Yes
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	Changing course less than 45°	Changing course less than 90°
Cascade occurs	No	No
14. High angle of attack recovery	A	A
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Cascade occurs	No	No
15. Recovery from a developed full stall	A	A
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Collapse	No collapse	No collapse
Cascade occurs (other than collapses)	No	No
16.Small asymmetric collapse	A	A
Change of course until re-inflation	Less than 90°	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 behavior	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 reinflation)	No (or only a small number of collapsed cells with a spontaneous reinflation)
Twist occurs	No	No
Cascade occurs	No	No
Folding lines used	No	No
17.Large asymmetric collapse	A	A
Change of course until re-inflation	Less than 90°	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 behavior	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 reinflation)	No (or only a small number of collapsed cells with a spontaneous reinflation)
Twist occurs	No	No
Cascade occurs	No	No
Folding lines used	No	No

18.Small asymmetric collapse with fully activated accelerator	A	A
Change of course until re-inflation	Less than 90°	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 behavior	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 reinflation)	No (or only a small number of collapsed cells with a spontaneous reinflation)
Twist occurs	No	No
Cascade occurs	No	No
Folding lines used	No	No
19.Large asymmetric collapse with fully activated accelerator	B	B
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°	Dive or roll angle 15° to 45°
Re-inflation behavior	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 reinflation)	No (or only a small number of collapsed cells with a spontaneous reinflation)
Twist occurs	No	No
Cascade occurs	No	No
Folding lines used	No	No
20.Direction control with a maintained asymmetric collapse	A	A
Able to keep course	Yes	Yes
180° turn away from the collapsed side possible in 10s	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
21.Trim speed spin tendency	A	A
Spin occurs	No	No
22.Low speed spin tendency	A	A
Spin occurs	No	No
23.Recovery from a developed spin	A	A
Spin rotation angle after release	Stops less than 90°	Stops less than 90°
Cascade occurs	No	No
24.B-line stall	A	A
Change of course before release	Changing course less than 45°	Changing course less than 45°
Behavior before release	Remains stable with straight span	Remains stable with straight span
Recovery	Spontaneous in less than 3 s	Changing course less than 45°
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°
Cascade occurs	No	No
25.Big ears	A	A
Entry procedure	Dedicated controls	Dedicated controls
Behavior 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°
26.Big ears in accelerated flight	A	A
Entry procedure	Dedicated controls	Dedicated controls
Behavior 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°
Behavior after releasing the accelerator while maintaining big ears	Stabil flight	Stabil flight
27.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 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