

DHV TESTREPORT EN926-2:2014

MAC PARA PARADIS 22

Type designation MAC Para Paradis 22
Type test reference no DHV GS-01-2307-17
Holder of certification MAC Para Technology Ges.m.b.H.
Manufacturer [MAC Para Technology](#)
Classification B
Winch towing Yes
Number of seats min / max 1 / 1
Accelerator Yes
Trimmers No



BEHAVIOUR AT MIN WEIGHT IN FLIGHT (55KG)

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (75KG)

Test pilots



Sophia Putzer
Expert Reiner Brunn



Beni Stocker

Inflation/take-off	A	A
Rising behaviour Smooth, easy and constant rising		Smooth, easy and constant rising
Special take off technique required No		No
Landing	A	A
Special landing technique required No		No
Speeds 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		Less than 25 km/h
Control movement	A	A
Symmetric control pressure Increasing		Increasing
Symmetric control travel Greater than 55 cm		Greater than 55 cm
Pitch stability exiting accelerated flight	A	A
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	A	A
Collapse occurs No		No
Roll stability and damping	A	A
Oscillations Reducing		Reducing
Stability in gentle spirals	A	A
Tendency to return to straight flight Spontaneous exit		Spontaneous exit
en : Verhalten beim Verlassen einer vollständigen Steilspirale	A	A
en : Erstes Ansprechen des Gleitschirms (die ersten 180°) en : unmittelbare Verringerung der Drehgeschwindigkeit		en : unmittelbare Verringerung der Drehgeschwindigkeit
Tendency to return to straight flight en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)		en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)
Turn angle to recover normal flight Less than 720°, spontaneous recovery		Less than 720°, spontaneous recovery

Symmetric front collapse	B	A
Entry Rocking back less than 45° Recovery Spontaneous in less than 3 s Dive forward angle on exit Dive forward 30° to 60° Change of course Keeping course Cascade occurs No en : Faltleinen wurden benutzt no		Rocking back less than 45° Spontaneous in less than 3 s Dive forward 0° to 30° Entering a turn of less than 90° No no
en : Symmetrischer Frontklapper mindestens 50% Flügeltiefe	B	B
Entry Rocking back less than 45° Recovery Spontaneous in less than 3 s Dive forward angle on exit Dive forward 30° to 60° Change of course Keeping course Cascade occurs No en : Faltleinen wurden benutzt no		Rocking back less than 45° Spontaneous in 3 s to 5 s Dive forward 0° to 30° Entering a turn of less than 90° No no
en : Symmetrischer Frontklapper im beschleunigten Flug	B	B
Entry Rocking back less than 45° Recovery Spontaneous in less than 3 s Dive forward angle on exit Dive forward 30° to 60° Change of course Entering a turn of less than 90° Cascade occurs No en : Faltleinen wurden benutzt no		Rocking back less than 45° Spontaneous in 3 s to 5 s Dive forward 30° to 60° Entering a turn of less than 90° No no
Exiting deep stall (parachutal stall)	A	A
Deep stall achieved Yes Recovery Spontaneous in less than 3 s Dive forward angle on exit Dive forward 0° to 30° Change of course Changing course less than 45° Cascade occurs No		Yes Spontaneous in less than 3 s Dive forward 0° to 30° Changing course less than 45° No
High angle of attack recovery	A	A
Recovery Spontaneous in less than 3 s Cascade occurs No		Spontaneous in less than 3 s No
Recovery from a developed full stall	A	B
Dive forward angle on exit Dive forward 0° to 30° Collapse No collapse Cascade occurs (other than collapses) No Rocking back Less than 45° Line tension Most lines tight		Dive forward 30° to 60° No collapse No Less than 45° Most lines tight
en : Kleiner einseitiger Klapper	A	A
Change of course until re-inflation Less than 90° Maximum dive forward or roll angle Dive or roll angle 0° to 15° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) Twist occurs No Cascade occurs No en : Faltleinen wurden benutzt no		Less than 90° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) No No no
en : Großer einseitiger Klapper	B	B
Change of course until re-inflation 90° to 180° Maximum dive forward or roll angle Dive or roll angle 15° to 45° Re-inflation behaviour Spontaneous re-inflation Total change of course Less than 360° Collapse on the opposite side occurs en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) Twist occurs No Cascade occurs No en : Faltleinen wurden benutzt no		90° to 180° Dive or roll angle 15° to 45° Spontaneous re-inflation Less than 360° en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung) No No no
en : Kleiner einseitiger Klapper im beschleunigten Flug	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 behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs	No	No
Cascade occurs	No	No
en : Faltleinen wurden benutzt	no	no

en : Großer einseitiger Klapper im beschleunigten Flug

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 behaviour	Spontaneous re-inflation	Spontaneous re-inflation
Total change of course	Less than 360°	Less than 360°
Collapse on the opposite side occurs	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)	en : Nein (oder nur eine kleine Anzahl von eingeklappten Zellen mit selbstständiger Wiederöffnung)
Twist occurs	No	No
Cascade occurs	No	No
en : Faltleinen wurden benutzt	no	no

Directional control with a maintained asymmetric collapse

A

A

Able to keep course	Yes	Yes
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
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Low speed spin tendency

A

A

Spin occurs	No	No
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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

B

Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Spontaneous in less than 3 s	Recovery through pilot action in less than a further 3 s
Dive forward angle on exit	Dive forward 0° to 30°	Dive forward 0° to 30°

Big ears in accelerated flight

A

B

Entry procedure	Dedicated controls	Dedicated controls
Behaviour during big ears	Stable flight	Stable flight
Recovery	Spontaneous in less than 3 s	Recovery through pilot action in less than a further 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