

DHV TESTREPORT EN926-2:2014



MAC PARA MAGUS LXC 24

Type designation	MAC PARA Magus LXC 24
Type test reference no	DHV GS-01-2541-20
Holder of certification	MAC Para Technology
Manufacturer	MAC Para Technology
Classification	D
Winch towing	Yes
Number of seats min / max	1 / 1
Accelerator	Yes
Trimmers	No


BEHAVIOUR AT MIN WEIGHT IN FLIGHT (95KG)
BEHAVIOUR AT MAX WEIGHT IN FLIGHT (107KG)
Test pilots

Harald Buntz

No release


Sebastian Mackrodt

No release

Inflation/take-off
Rising behaviour en : einfaches Aufziehen, etwas Korrektur des Piloten erforderlich

en : einfaches Aufziehen, etwas Korrektur des Piloten erforderlich

Special take off technique required Yes

Yes

Landing
A
A
Special landing technique required No

No

Speeds in straight flight
B
B
Trim speed more than 30 km/h Yes

Yes

Speed range using the controls larger than 10 km/h Yes

Yes

Minimum speed 25 km/h to 30 km/h

25 km/h to 30 km/h

Control movement
C
C
Symmetric control pressure Increasing

Increasing

Symmetric control travel 45 cm to 60 cm

50 cm to 65 cm

Pitch stability exiting accelerated flight
C
A
Dive forward angle on exit Dive forward 30° to 60°

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
B
B
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 720° to 1 080°, spontaneous recovery

720° to 1 080°, spontaneous recovery

Symmetric front collapse

D

D

Entry Rocking back less than 45°
Recovery Spontaneous in less than 3 s
Dive forward angle on exit Dive forward 0° to 30°
Change of course Entering a turn of less than 90°
Cascade occurs No
en : Faltleinen wurden benutzt yes

Rocking back less than 45°
Spontaneous in less than 3 s
Dive forward 0° to 30°
Entering a turn of less than 90°
No
yes

en : Symmetrischer Frontklapper
mindestens 50% Flügeltiefe

D

D

Entry Rocking back less than 45°
Recovery Spontaneous in less than 3 s
Dive forward angle on exit Dive forward 0° to 30°
Change of course Entering a turn of less than 90°
Cascade occurs No
en : Faltleinen wurden benutzt yes

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
yes

en : Symmetrischer Frontklapper im
beschleunigten Flug mindestens 50%
Flügeltiefe

D

D

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 yes

Rocking back less than 45°
Recovery through pilot action in less than a further 3 s
Dive forward 30° to 60°
Entering a turn of 90° to 180°
No
yes

Exiting deep stall (parachutal stall)

D

B

Deep stall achieved Yes
Recovery Spontaneous in less than 3 s
Dive forward angle on exit Dive forward 60° to 90°
Change of course Changing course less than 45°
Cascade occurs No

Yes
Spontaneous in less than 3 s
Dive forward 30° to 60°
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

C

C

Dive forward angle on exit Dive forward 60° to 90°
Collapse No collapse
Cascade occurs (other than collapses) No
Rocking back Greater than 45°
Line tension Most lines tight

Dive forward 60° to 90°
No collapse
No
Greater than 45°
Most lines tight

en : Kleiner einseitiger Klapper

D

D

Change of course until re-inflation Less than 90°
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 yes

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
yes

en : Großer einseitiger Klapper

D

D

Change of course until re-inflation 90° to 180°
Maximum dive forward or roll angle Dive or roll angle 45° to 60°
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 yes

90° to 180°
Dive or roll angle 45° to 60°
Spontaneous re-inflation
Less than 360°
Yes, no turn reversal
No
No
yes

en : Kleiner einseitiger Klapper im beschleunigten Flug	D	D
Change of course until re-inflation	90° to 180°	90° to 180°
Maximum dive forward or roll angle	Dive or roll angle 45° to 60°	Dive or roll angle 45° to 60°
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	yes	yes
en : Großer einseitiger Klapper im beschleunigten Flug	D	D
Change of course until re-inflation	90° to 180°	90° to 180°
Maximum dive forward or roll angle	Dive or roll angle 60° to 90°	Dive or roll angle 60° to 90°
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)	Yes, causing turn reversal
Twist occurs	No	No
Cascade occurs	No	No
en : Faltleinen wurden benutzt	yes	yes
Directional control with a maintained asymmetric collapse	C	C
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	25 % to 50 % of the symmetric control travel	25 % to 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	Not carried out because the manoeuvre is excluded in the user's manual	
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	

