DHV TESTREPORT EN 926-2:2013+A1:2021

UP MERU 2 SM

Type designation	UP Meru 2 SM
Type test reference no	DHV GS-01-2850-24
Holder of certification	UP International GmbH
Manufacturer	UP International GmbH
Classification	D
Winch towing	Yes
Number of seats min / max	1 / 1
Accelerator	Yes
Trimmers	No

	BEHAVIOUR AT MIN WEIGHT IN FLIGHT (88KG)	BEHAVIOUR AT MAX WEIGHT IN FLIGHT (101KG)
Test pilots	 **Josef Bauer**	 **Mario Eder**
	No release	No release
Inflation/take-off	**C**	**C**
Rising behaviour	Overshoots, shall be slowed down to avoid a front collapse	Overshoots, shall be slowed down to avoid a front collapse
Special take off technique required	No	No
Landing	**A**	**A**
Special landing technique required	No	No
Speeds in straight flight	**A**	**B**
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	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	**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
Behaviour exiting a fully developed spiral dive	**A**	**C**
Initial response of glider (first 180°)	Immediate reduction of rate of turn	en : keine unmittelbare Reaktion
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	en : 1080° bis 1440°, selbstständige Rückkehr in den Normalflug
Symmetric front collapse	**C**	**C**
Entry	Rocking back less than 45°	Rocking back less than 45°
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	Entering a turn of less than 90°
Cascade occurs	No	No
Folding lines used	yes	yes
Unaccelerated collapse (at least 50 % chord)	**C**	**D**
Entry	Rocking back less than 45°	Rocking back less than 45°
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°
Change of course	Keeping course	Entering a turn of 90° to 180°
Cascade occurs	No	No
Folding lines used	yes	yes
Accelerated collapse (at least 50 % chord)	**C**	**C**
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 30° to 60°	Dive forward 30° to 60°
Change of course	Entering a turn of less than 90°	Entering a turn of less than 90°
Cascade occurs	No	No
Folding lines used	yes	yes
Exiting deep stall (parachutal stall)	**B**	**B**
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 30° to 60°	Dive forward 30° to 60°
Change of course	Changing course less than 45°	Changing course less than 45°
Cascade occurs	No	No
High angle of attack recovery	**A**	**A**
Recovery	Spontaneous in less than 3 s	Spontaneous in less than 3 s
Cascade occurs	No	No
Recovery from a developed full stall	**B**	**B**
Dive forward angle on exit	Dive forward 30° to 60°	Dive forward 30° to 60°
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	**C**	**C**
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	Inflates in less than 3 s from start of pilot action	Inflates in less than 3 s from start of pilot action
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	yes	yes
Large asymmetric collapse	**C**	**C**
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	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	yes	yes
Small asymmetric collapse accelerated	**C**	**C**
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	Inflates in less than 3 s from start of pilot action	Inflates in less than 3 s from start of pilot action
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	yes	yes
Large asymmetric collapse accelerated	**C**	**C**
Change of course until re-inflation	180° to 360°	180° to 360°
Maximum dive forward or roll angle	Dive or roll angle 45° to 60°	Dive or roll angle 45° to 60°
Re-inflation behaviour	Inflates in less than 3 s from start of pilot action	Inflates in less than 3 s from start of pilot action
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	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**	**A**
Entry procedure	Standard technique	Standard technique
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	Standard technique
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		