

**SKYWALK MINT 105 Type designation** Skywalk Mint 105 Type test reference no DHV GS-01-2796-23 Holder of certification Skywalk GmbH & Co. KG Manufacturer Skywalk GmbH & Co. KG **Classification** C Winch towing Yes Number of seats min / max 1/1**Accelerator** Yes **Trimmers** No **BEHAVIOUR AT MIN WEIGHT IN BEHAVIOUR AT MAX WEIGHT** FLIGHT (85KG) IN FLIGHT (105KG) **Test pilots Josef Bauer Mario Eder** No release No release Inflation/take-off В ¦Β **Rising behaviour** Easy rising, some pilot correction is required Easy rising, some pilot correction is required Special take off technique required No No Landing Α **Special landing technique required No** No Speeds in straight flight Trim speed more than 30 km/h Yes Yes **Speed range using the controls larger than 10** Yes Yes km/h **Minimum speed** Less than 25 km/h 25 km/h to 30 km/h C **Control movement Symmetric control pressure** Increasing Increasing Symmetric control travel Greater than 60 cm 50 cm to 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 Roll stability and damping **Oscillations** Reducing Reducing Α Α <u>Stability in gentle spirals</u> Tendency to return to straight flight Spontaneous exit Spontaneous exit Behaviour exiting a fully developed spiral dive B en: keine unmittelbare Reaktion Initial response of glider (first 180°) en : keine unmittelbare Reaktion Tendency to return to straight flight Spontaneous exit (g force decreasing, rate of Spontaneous exit (g force decreasing, rate of turn decreasing) 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 yes yes Unaccelerated collapse (at least 50 % chord) | 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** Keeping course Keeping course Cascade occurs No No Folding lines used yes yes C Accelerated collapse (at least 50 % chord) **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 yes yes Exiting deep stall (parachutal stall) **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 Spontaneous in less than 3 s **Recovery** Spontaneous in less than 3 s No Cascade occurs No Recovery from a developed full stall **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** Less than 90° Change of course until re-inflation Less than 90° Maximum dive forward or roll angle Dive or roll angle 0° to 15° Dive or roll angle 0° to 15° **Re-inflation behaviour** Inflates in less than 3 s from start of pilot Inflates in less than 3 s from start of action 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 No (or only a small number of collapsed cells with a spontaneous re with a spontaneous re inflation) inflation) No Twist occurs No Cascade occurs No No Folding lines used yes yes C Large asymmetric collapse 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 Inflates in less than 3 s from start of pilot action 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 No (or only a small number of collapsed cells with a spontaneous re with a spontaneous re inflation) inflation) Twist occurs No No No Cascade occurs No Folding lines used yes yes **Small asymmetric collapse accelerated** 90° to 180° **Change of course until re-inflation** 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 Inflates in less than 3 s from start of action 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 No (or only a small number of collapsed cells with a spontaneous re with a spontaneous re inflation) inflation) No Twist occurs No No Cascade occurs No Folding lines used yes yes Large asymmetric collapse accelerated Change of course until re-inflation 90° to 180° 90° to 180° Dive or roll angle 15° to 45° **Maximum dive forward or roll angle** Dive or roll angle 15° to 45° **Re-inflation behaviour** Inflates in less than 3 s from start of pilot Inflates in less than 3 s from start of action 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 No (or only a small number of collapsed cells with a spontaneous re with a spontaneous re inflation) inflation) No Twist occurs No Cascade occurs No No Folding lines used yes yes **Directional control with a maintained** A Α asymmetric collapse **Able to keep course** Yes Yes 180° turn away from the collapsed side possible in Yes Yes Amount of control range between turn and stall or More than 50 % of the symmetric control More than 50 % of the symmetric spin travel control travel Trim speed spin tendency No Spin occurs No Low speed spin tendency No Spin occurs No A A Recovery from a developed spin 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 Entry procedure Standard technique Standard technique **Behaviour during big ears** Stable flight Stable flight **Recovery** Recovery through pilot action in less than a Spontaneous in 3 s to 5 s further 3 s **Dive forward angle on exit** Dive forward 0° to 30° Dive forward 0° to 30°

Big ears

Α Big ears in accelerated flight B **Entry procedure** Standard technique Standard technique

Stable flight **Behaviour during big ears** Stable flight **Recovery** Recovery through pilot action in less than a

Spontaneous in 3 s to 5 s further 3 s Dive forward angle on exit Dive forward 0° to 30° Dive forward 0° to 30° Behaviour immediately after releasing the Stable flight Stable flight accelerator while maintaining big ears

Alternative means of directional control A Α 180° turn achievable in 20 s Yes Yes No Stall or spin occurs No

No other flight procedure or configuration described in the user's manual

Any other flight procedure and/or configuration described in the user's manual