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DHV TESTREPORT EN926-2:2014

GRADIENT GO 24

Type designation	Gradient GO 24	
Type test reference no	DHV GS-01-2489-19	
Holder of certification	<a href="#">Gradient s.r.o.</a>	
Manufacturer	<a href="#">Gradient s.r.o.</a>	
Classification	A	
Winch towing	Yes	
Number of seats min / max	1 / 1	
Accelerator	Yes	
Trimmers	No	

BEHAVIOUR AT MIN WEIGHT IN FLIGHT (60KG)

BEHAVIOUR AT MAX WEIGHT IN FLIGHT (80KG)

Test pilots	 Sophia Putzer	 Harald Buntz
	Expert Reiner Brunn	

	No release	No release
<b>Inflation / take-off</b>	A	A
<b>Rising behaviour</b>	Smooth, easy and constant rising	Smooth, easy and constant rising
<b>Special take off technique required</b>	No	No
<b>Landing</b>	A	A
<b>Special landing technique required</b>	No	No
<b>Speeds in straight flight</b>	A	A
<b>Trim speed more than 30 km/h</b>	Yes	Yes
<b>Speed range using the controls larger than 10 km/h</b>	Yes	Yes
<b>Minimum speed</b>	Less than 25 km/h	Less than 25 km/h
<b>Control movement</b>	A	A
<b>Symmetric control pressure</b>	Increasing	Increasing
<b>Symmetric control travel</b>	Greater than 55 cm	Greater than 60 cm
<b>Pitch stability exiting accelerated flight</b>	A	A
<b>Dive forward angle on exit</b>	Dive forward less than 30°	Dive forward less than 30°
<b>Collapse occurs</b>	No	No
<b>Pitch stability operating controls during accelerated flight</b>	A	A
<b>Collapse occurs</b>	No	No
<b>Roll stability and damping</b>	A	A
<b>Oscillations</b>	Reducing	Reducing
<b>Stability in gentle spirals</b>	A	A
<b>Tendency to return to straight flight</b>	Spontaneous exit	Spontaneous exit
<b>en : Verhalten beim Verlassen einer vollständigen Steilspirale</b>	A	A
<b>en : Erstes Ansprechen des Gleitschirms (die ersten 180°)</b>	en : unmittelbare Verringerung der Drehgeschwindigkeit	en : unmittelbare Verringerung der Drehgeschwindigkeit
<b>Tendency to return to straight flight</b>	en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)	en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)
<b>Turn angle to recover normal flight</b>	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery

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

<b>en : GroÙer einseitiger Klapper im beschleunigten Flug</b>	<b>A</b>	<b>A</b>
<b>Change of course until re-inflation</b>	Less than 90°	Less than 90°
<b>Maximum dive forward or roll angle</b>	Dive or roll angle 15° to 45°	Dive or roll angle 15° to 45°
<b>Re-inflation behaviour</b>	Spontaneous re-inflation	Spontaneous re-inflation
<b>Total change of course</b>	Less than 360°	Less than 360°
<b>Collapse on the opposite side occurs</b>	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)
<b>Twist occurs</b>	No	No
<b>Cascade occurs</b>	No	No
<b>en : Faltleinen wurden benutzt</b>	no	no

<b>Directional control with a maintained asymmetric collapse</b>	<b>A</b>	<b>A</b>
<b>Able to keep course</b>	Yes	Yes
<b>180° turn away from the collapsed side possible in 10 s</b>	Yes	Yes
<b>Amount of control range between turn and stall or spin</b>	More than 50 % of the symmetric control travel	More than 50 % of the symmetric control travel

<b>Trim speed spin tendency</b>	<b>A</b>	<b>A</b>
<b>Spin occurs</b>	No	No

<b>Low speed spin tendency</b>	<b>A</b>	<b>A</b>
<b>Spin occurs</b>	No	No

<b>Recovery from a developed spin</b>	<b>A</b>	<b>A</b>
<b>Spin rotation angle after release</b>	Stops spinning in less than 90°	Stops spinning in less than 90°
<b>Cascade occurs</b>	No	No

<b>B-line stall</b>	<b>A</b>	<b>A</b>
<b>Change of course before release</b>	Changing course less than 45°	Changing course less than 45°
<b>Behaviour before release</b>	Remains stable with straight span	Remains stable with straight span
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b>Cascade occurs</b>	No	No

<b>Big ears</b>	<b>A</b>	<b>A</b>
<b>Entry procedure</b>	Dedicated controls	Dedicated controls
<b>Behaviour during big ears</b>	Stable flight	Stable flight
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°

<b>Big ears in accelerated flight</b>	<b>A</b>	<b>A</b>
<b>Entry procedure</b>	Dedicated controls	Dedicated controls
<b>Behaviour during big ears</b>	Stable flight	Stable flight
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in 3 s to 5 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b>Behaviour immediately after releasing the accelerator while maintaining big ears</b>	Stable flight	Stable flight

<b>Alternative means of directional control</b>	<b>A</b>	<b>A</b>
<b>180° turn achievable in 20 s</b>	Yes	Yes
<b>Stall or spin occurs</b>	No	No

<b>Any other flight procedure and/or configuration described in the user's manual</b>		
No other flight procedure or configuration described in the user's manual		