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DHV TESTREPORT EN926-2:2014

GRADIENT GO 30

Type designation	Gradient GO 30	
Type test reference no	DHV GS-01-2491-19	
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 (95KG)	BEHAVIOUR AT MAX WEIGHT IN FLIGHT (140KG)
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Test pilots	 <b>Harald Buntz</b>	 <b>Sebastian Mackrodt</b>
	No release	No release

**Inflation/take-off** 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

**Landing** A A

<b>Special landing technique required</b>	No	No
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**Speeds in straight flight** 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

**Control movement** A A

<b>Symmetric control pressure</b>	Increasing	Increasing
<b>Symmetric control travel</b>	Greater than 60 cm	Greater than 65 cm

**Pitch stability exiting accelerated flight** 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

**Pitch stability operating controls during accelerated flight** A A

<b>Collapse occurs</b>	No	No
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**Roll stability and damping** A A

<b>Oscillations</b>	Reducing	Reducing
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**Stability in gentle spirals** A A

<b>Tendency to return to straight flight</b>	Spontaneous exit	Spontaneous exit
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**en : Verhalten beim Verlassen einer vollständigen Steilspirale** A A

<b>en : Erstes Ansprechen des Gleitschirms (die ersten 180°)</b>	en : unmittelbare Verringerung der Drehgeschwindigkeit	en : unmittelbare Verringerung der Drehgeschwindigkeit
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<b>Tendency to return to straight flight</b>	en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)	en : selbstständiges Ausleiten (G-Kraft abnehmend, Drehgeschwindigkeit abnehmend)
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<b>Turn angle to recover normal flight</b>	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery
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**Symmetric front collapse** A A

<b>Entry</b>	Rocking back less than 45°	Rocking back less than 45°
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<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
<b>en : Symmetrischer Frontklapper mindestens 50% Flügeltiefe</b>		
<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°	Keeping course
<b>Cascade occurs</b>	No	No
<b>en : Faltleinen wurden benutzt</b>	no	no
<b>en : Symmetrischer Frontklapper im beschleunigten Flug mindestens 50% Flügeltiefe</b>		
<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°	Keeping course
<b>Cascade occurs</b>	No	No
<b>en : Faltleinen wurden benutzt</b>	no	no
<b>Exiting deep stall (parachutal stall)</b>		
<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
<b>High angle of attack recovery</b>		
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Cascade occurs</b>	No	No
<b>Recovery from a developed full stall</b>		
<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
<b>en : Kleiner einseitiger Klapper</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 0° to 15°
<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 : Großer einseitiger Klapper</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>en : Kleiner einseitiger Klapper im beschleunigten Flug</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 0° to 15°
<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 : Großer einseitiger Klapper im beschleunigten Flug</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>
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<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>
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<b>Spin occurs</b>	No	No
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<b>Low speed spin tendency</b>	<b>A</b>	<b>A</b>
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<b>Spin occurs</b>	No	No
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<b>Recovery from a developed spin</b>	<b>A</b>	<b>A</b>
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<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>
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<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>
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<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>
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<b>Entry procedure</b>	Dedicated controls	Dedicated controls
<b>Behaviour during big ears</b>	Stable flight	Stable flight
<b>Recovery</b>	Spontaneous in 3 s to 5 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>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>
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<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>		
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No other flight procedure or configuration described in the user's manual