

TECHNICAL DATA

DHV TESTREPORT LTF

DATASHEET

**DHV**

DHV TEST REPORT LTF 2003

ADVANCE SIGMA 7 31

Type designation	Advance Sigma 7 31
Type test reference no	DHV GS-01-1780-08
Holder of certification	ADVANCE Thun AG
Manufacturer	ADVANCE Thun AG
Classification	2 GH
Winch towing	Yes
Number of seats min / max	1 / 1
Accelerator	Yes
Trimmers	No



	BEHAVIOUR AT MIN WEIGHT IN FLIGHT (100KG)	BEHAVIOUR AT MAX WEIGHT IN FLIGHT (130KG)
	The manufacturer does not want the videos of this test flight to be published.	The manufacturer does not want the videos of this test flight to be published.
Take off	1-2	1-2
Inflation	evenly, immediately	evenly, immediately
Rising behaviour	immediately comes over pilot	immediately comes over pilot
Take off speed	average	average
Take off handling	average	average
Straight flight	1-2	1-2
Roll damping	average	average
Turn handling	2	2
Spin tendency	slight	slight
Control travel	average	average
Agility	high	high
Symmetric stall	2	1-2
Deep-stall limit	average 60 cm - 75 cm	average 60 cm - 75 cm
Full stall limit	average 65 cm - 80 cm	average 65 cm - 80 cm
Increase in steering power	high	high
Front collapse	2	2
Pre-acceleration	average	average
Opening behaviour	spontaneous, delayed symmetrically activating the controls	spontaneous, delayed symmetrically activating the controls
Asymmetric collapse	2	2
Turn tendency	90 - 180 degrees	90 - 180 degrees
Change of course	180 - 360 degrees	180 - 360 degrees
Rate of turn	high	average
Max. roll/pitch angle	greater than 45 degrees	greater than 45 degrees
Loss of altitude	high	high
Stabilization	spontaneous	spontaneous
Opening behaviour	spontaneous	spontaneous
Countersteering an asymmetric collapse	1-2	1-2
Stabilization	countersteering easy	countersteering easy
Control travel	high	high
Control pressure increase	high	high
Turn in opposite direction	easy, no tendency to stall	easy, no tendency to stall
Opening behaviour	spontaneous, delayed	spontaneous, delayed

Full stall, symm. exit	1-2	1-2
Spin out of straight flight	2	1-2
Spin out of turn	1-2	1-2
Spiral dive	2	2
Entry	easy	easy
Spin tendency	slight	slight
Exit	turn continues through > 360 degrees	turn continues through > 360 degrees
Sink rate after 720 ° [m/s]	14	14
B-line stall	1	1
Entry	easy	easy
Exit	spontaneous	spontaneous
Big ears	1-2	1-2
Entry	easy	easy
Recovery	not spontaneously	delayed acceleration < 4 sec
Landing	1-2	1-2
Landing behaviour	average	average
Front collapse (accelerated)	2	2
Pre-acceleration	slight	slight
Opening behaviour	not spontaneously symmetrically activating the controls	not spontaneously symmetrically activating the controls
Asymmetric collapse (accelerated)	2	2
Turn tendency	90 - 180 degrees	180 - 360 degrees
Change of course	180 - 360 degrees	180 - 360 degrees
Rate of turn	high	average
Max. roll/pitch angle	greater than 45 degrees	greater than 45 degrees
Loss of altitude	high	high
Stabilization	spontaneous	spontaneous
Opening behaviour	spontaneous	spontaneous
Big ears accelerated	1-2	1-2
Entry	easy	easy
Recovery	not spontaneously	delayed acceleration < 4 sec
Supplementary remarks	Asymmetric Tuck: Tendency to collapse on the opposite side, without change of flight direction	