

BGA glider data sheet - Diamant 16.5 meter

Data source: Manufacturers flight manual

Manufacturer: Flug-und Fahrzeugwerke AG, Alternrhein 9422, Staad SG, Switzerland

Link to mandatory mods:

Weighing Data:

	Kg	Pounds
Max weight with water	408	900
Max weight dry	390	860
BGA concession non-aerobatic max weight (dry) [+3%]	402	886
Water capacity		
Max weight of non lifting components (everything except wings)	220	485
BGA concession non-aerobatic max weight of non lifting components [+5%]	231	509
Max pilot weight (seat load)		
	mm	Inches
Forward C of G limit (aft of datum)	241	9.5
Aft C of G limit (aft of datum)	406	16
Pilot position (forward of datum)	610	24.0

Control deflections in mm

	Up	Down	Measuring point
Elevator	63.5± 5	63.5±5	TE at centre
Rudder	196 ± 10 left & right		TE at top
Ailerons			Outer ends
Flaps neutral	44 ± 4	19 ± 4	
Flaps full + (+15°)	31 ± 4	31 ± 4	
Flaps full - (-12°)	48 ± 4	8 ± 4	
Flaps set	Ailerons set	Flap travel	
+15°	Neutral	43 ± 3 Down	
- 12°	Neutral	35 ± 3 Up	
0°	Up	13 ± 2 Up	
0°	Down	17 ± 2 Down	

Measure flaps at their inboard ends.

Longitudinal datum: Wing root LE

Horizontal datum: Fuselage top immediately behind the canopy tail down 35 mm over first meter.

Nose weights are 65 inches (1650mm) forward of datum

Maximum speeds

	Knots	Kph		Knots	Kph
VNE	130	240	U/C down	130	240
Rough air	90	165	U/C operation	81	150
Manoeuvre	90	165	Airbrakes open	130	240
Aerotow	84	155	Flaps fully positive	84	155
Winch / auto tow	65	120			
Always use full negative flaps above 110 Knots (204 Kph)					

Max winch weak link: 923 Kg (Brown)

Tyre pressure: 2 bar (30 psi).

Semi aerobatic. Cloud flying is permitted.

The rudder hydraulic damper must always be completely full of hydraulic fluid - ESSO UNIVIS J43

This sheet compiled by Tim Macfadyen Date 7 May 2003