

BGA glider data sheet - Diamant 18 meter

Data source: Manufacturers flight manual Date of issue: Jan 1969

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

Link to mandatory mods:

Weighing Data:

	Kg	Pounds
Max weight with water	440	970
Max weight dry	408	900
BGA concession non-aerobatic max weight (dry) [+3%]	420	927
Water capacity 50 -60 litres	50 - 60	110 - 132
Max weight of non lifting components (everything except wings)	240	530
BGA concession non-aerobatic max weight of non lifting components [+5%]	252	556
Max pilot weight (seat load)		
	mm	Inches
Forward C of G limit (aft of datum)	267	10.5
Aft C of G limit (aft of datum)	345	13.8
Pilot position (forward of datum)	610	24.0

Control deflections in mm

	Up	Down	Measuring point
Elevator	65 ± 5	65 ± 5	TE at Centre
Rudder	225 ± 10 left & right		TE at top
Ailerons			Outer ends
Flaps neutral	44 ± 4	19 ± 4	
Flaps full +	31 ± 4	31 ± 4	
Flaps full -	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.

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	81	150	Flaps fully positive	81	150
Winch / auto tow	81	150			
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

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