

BGA glider data sheet - DG 100G Elan (Fixed tailplane and elevator)

Data source: Manufacturer's Handbook

Date of issue: Oct 1975

Manufacturer: Glaser-Dirks Flugzeugbau GmbH

Web site dgflugzeugbau.de

UK Agent: UK Agent: Navboys www.Navboys.com Tel:- 01264 981934

Link to mandatory mods: <http://www.dg-flugzeugbau.de/tech-mitteilungen-e.html>

Weighing Data:

	Kg	Pounds
Max weight with water	418	922
Max weight of non lifting components (everything except wings)	270	595
BGA concession non-aerobatic max weight of non lifting components [+5%]	283	625
Max pilot weight (seat load)	117	258

mm

Forward C of G limit (aft of datum)	220
Aft C of G limit (aft of datum)	357
Pilot position (forward of datum)*	
Min weight pilot	492
Max weight pilot	537

Control deflections in mm

	Up	Down	Distance - hinge to measuring point	Max moment. Gram meters
Ailerons	102±5	46±5	188	70
Elevator	61±2	29±1	150	97.5
The elevator is neutral with a straight edge on top of the elevator and the TP trailing edge.				
Rudder	243 ± 10 left and right		460	90
Controls max free play (controls central)				
With the stick fixed neutral ±1.5 mm at each aileron 188mm from the hinge.				
With elevator fixed neutral ±3mm total at top of stick.				
Rudder axial play at top hinge 0,5mm.				

*Pilot positions vary considerably. When the in-flight C of G is near the aft limit it is best to weigh the glider with the pilot in, to determine the exact in-flight position..

The maximum dry weight limit was effectively removed by TN 301-24 which redefined the max dry weight as the max weight of the non lifting components (including pilot) + the weight of the wings.

Longitudinal datum: Wing root LE Horizontal datum: Rear fuselage sloping rear down 36.7: 1000

Maximum speeds

	Knots	Kph		VNE at altitude	Knots	Kph		
VNE	140	260						
Rough air	140	260						
Manoeuvre	89	165						
Wheel down	89	165						
			Aerotow	89	165	6-9000 feet	133	246
			Winch / auto tow	70	130	9-12000 feet	126	233
			Airbrakes open	140	260	12-15000 feet	120	222
						15-18000 feet	113	209

Max winch weak link: 600 Kg (Blue)

Tyre pressure: Main 36 psi (2.5 bar), rear 28 psi (2 bar)

Semi aerobatic without water. Cloud flying permitted.

With a standard 2.2 Kg weight on the right of the panel, min cockpit weight is reduced 3.6 Kg (8 lb).

The DG 100 has an all moving tailplane. The DG 100G has a fixed tailplane and elevator.

This sheet compiled by: Tim Macfadyen

Updated (TN301-24 non lifting parts weight increased): 2 Oct 2007

Various clarifications 31 Dec 2007

Last update 18 Oct 2021: UK agent changed