

BGA glider data sheet - DG 300 & DG 300 /303 Elan

Data source: Manufacturer's Handbook

Date of issue: May 1984

Manufacturer: Glaser-Dirks Flugzeugbau GmbH

Web site dgflugzeugbau.de

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

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

AD 2007-0100-E & TN359/24 reduce the speed and weight limits pending structural inspections. The new limits are given in red where they differ from the original figures. BGA extended weight concessions are also withdrawn unless these inspections have been carried out. The inspections are not mandatory so these gliders may continue to fly indefinitely at the lower speeds and weights if the inspections are not carried out.

Weighing Data:

	Kg	Pounds
Max weight with water	525 450	1157 992
Max weight dry - only applies to models without water ballast	385	849
BGA concession non-aerobatic max weight dry (+3%)	396 N/A	874 N/A
Max weight of non lifting components (everything except wings)	246 240	542 529
BGA concession non-aerobatic max weight of non lifting components [+5%]	258 N/A	570 N/A
Max pilot weight (seat load)	110	242
Water ballast capacity	190	419

mm Inches

Forward C of G limit (aft of datum)	160	6.3
Aft C of G limit (aft of datum)	325	12.8
Pilot position (forward)	549	21.6

Control deflections in mm

	Up	Down	Distance - hinge to measuring point	Controls mass & moments
Ailerons	62±3	31±3	120	3 - 5,7 Kg 8 - 9,9 Kg cm
Elevator	63±1	36±1	150	1,6 - 2,2 Kg 6,7 - 8,7 Kg cm without pushrod
The elevator is neutral with a straight edge on top of the elevator and rear part of the TP.				
Rudder	215 ± 5 left and right		414	2,5 - 4 Kg 4 - 6 Kg cm (with mass ball)
Controls max free play (controls central)				
With the elevator & both ailerons fixed 3 mm total at the top of the stick, fore & aft and side to side.				
2 mm at one aileron with the other fixed.				
Negligible play in the elevator connector.				
Rudder axial play at top hinge 0,5mm.				

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

With a standard 2.16 Kg weights on the right of the panel, min cockpit weight is reduced 3.6 Kg per weight.

Maximum fin ballast 5.5 Kg (12 lb). Fin ballast is 4180mm aft of datum. Max baggage 15 Kg (33 lb).

Put a maximum of 1 Kg of water in the fin tank for every 28 Kg in the wings.

Maximum speeds

	Knots	Kph		Knots	Kph
VNE	146 135	270 250	Manoeuvre	108 95	200 175
Rough air	108 95	200 175	Aerotow	108 95	200 175
Rough air DG303 ELAN	96 95	178 175	Wheel down	108	200
			Winch / auto tow	70	130

VNE at altitude

Feet	Meters	Knots	Kph
6-10 000	2 - 3 000	138	256
10-13 000	3 - 4 000	131	243
13-16 000	4 - 5 000	124	230
16-20 000	5 - 6 000	117	218

Max winch weak link: 680 daN (Tost blue)

Tyre pressure: Main 49 psi (3.5 bar), rear 28 psi (2 bar)

Semi aerobatic without water **Non-aerobatic (see note above)** Cloud flying permitted, without water.

This sheet compiled by: Tim Macfadyen

Updated 6 Feb 2008 AD 2007-0100-E & TN359/24 reduced the speeds and weights added

Updated with new UK agent 23 October 2021