BGA glider data sheet - DG 100 (all moving tailplane)

Data source: Manufacturer's Handbook
Manufacturer: Glaser-Dirks Flugzeugbau GmbH

Date of issue: Oct 1975
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 dry weight	385	849
Max weight of non-lifting components (everything except wings)	265	584
BGA concession non-aerobatic max weight of non lifting components [+5%]	278	613
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)	365
Pilot position (forward of datum)* Min weight pilot Max weight pilot	492 537

Control deflections in mm

	Up	Down	Distance - hinge to measuring point	Max moment. Gram meters
Ailerons	97-107	41-51	188	70
Elevator	137-141	64-68	181	

Measure elevator deflection from a horizontal line 87mm below the top of TP bracket on the fin (see maintenance manual).

Rudder	233 - 253	460	90
	left and right		

Controls max free play (controls central)

With the stick fixed neutral ±1.5 mm at each aileron 188mm from the hinge.

Rudder axial play at top hinge 0,5mm.

Max tangential play at elevator tip ± 10mm

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

Maximum speeds

	Knots	Kph
VNE	140	260
Rough air	140	260
Manoeuvre	89	165
Wheel down	89	165

	Knots	Kph	VNE at altitude	Knots	Kph
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).

Span 15 meters

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

This sheet compiled by: Tim Macfadyen

Update 2 Oct 2007 TN301-24 non lifting parts weight increased. Clarifications & elevator deflection added 31 12 2007 Updated 23 Oct 2021 UK Agent changed.

Updated 14 June 2024 NLP weight decreased and max dry weight quoted as per TCDS EASA.A.239 6 April 2022

^{*}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.