

BGA glider data sheet - DG 500/22 (22 meter flapped two seater)

Data source: Manufacturer's flight & maintenance manuals Date of issue: Dec 1990

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>

Weighing Data:

	Kg	Pounds
Max weight (take off & landing)	750	1653
Max weight of non lifting components (everything except wings)	460	1014
BGA concession non-aerobatic max weight of non lifting components [+5%]	483	1065
Max baggage	15	33
Water capacity	160	353
Max front pilot (seat load)	110	242
Max combined front and rear pilot weights (seat loads)	210	463

mm Inches

Forward C of G limit (aft of datum)	185	7.28
Aft C of G limit (aft of datum)	480	18.9
Front pilot position (forward)	1350	53.15
Rear pilot position (forward)	270	10.63

Control deflections in mm

	Up	Down	Distance - hinge to measuring point	Max free play
Ailerons (Flaps at 0°)	64 ± 3	32 ± 3	166	± 1.5
Elevator	99 ± 1	91 ± 1	227	± 2
Rudder	Left & Right 217 to 212		420	1 top hinge
Flaps -10° 0° +15°	-40 ± 3 0 ± 1 + 59 ± 3		228	± 2
The aileron free play is measured at the aileron root with the stick locked. The elevator play is measured at the stick with the elevator locked.				
Controls & weights	Moments	Moment Kg	cm	Weights Kg
Rudder		7 - 10		4.4 - 5.1
Elevator		13 - 16		4.3 - 5.1
Inner aileron		4.01 - 5.99		3.6 - 5.0
Outer aileron		2.95 - 3.86		0.8 - 1.1
Flaps		22.24 - 29.36		5.9 - 8.0

Weighing Longitudinal datum: Wing root LE.

Horizontal datum: Top of rear fuselage 1000: 33 tail down. The fin battery weighs 4,3 kg & is 5306mm aft of datum. The 4 nose ballast weights weigh 2,2 kg each and each reduces min front cockpit load by 3,7 kg.

Maximum speeds

	Knots	Kph
VNE	146	270
Rough air	106	197
Manoeuvre	106	197
Aerotow	106	197

	Knots	Kph
Winch / auto tow	76	140
U/C down	106	197
15° flap (landing)	81	150
+5° & +10° flap	106	197

VNE at altitude	Knots	Kph
0-6600 feet	146	270
6600-10 000	138	256
10 000-13 000	131	243
13 000-16 000	124	230
16 000-20 000	117	218

Notes :-

Max winch weak link: 1000 Kg (black)

Tyre pressures: Nose wheel 2.5 bar, 36 psi. Main wheel 3 bar, 44 psi. Tail wheel 4 bar, 58 psi

Semi aerobatic ("utility") & cloud flying permitted, without water.

Wing natural frequency (glider rigged and on its wheels) approximately 122/min.

Replace the elevator & flap rubber cord (bungee) every 5 years. Replace the brake fluid every 4 years with DOT 3, DOT 4 or SAE J 1703 fluid. Annual leak check of wheel brake system - hold full brake for 2 minutes.

German (LBA) Type certificate number 348

This sheet compiled by: Tim Macfadyen 23 Oct 2020

Updated 18 Oct 2021: UK agent changed