

# BGA glider data sheet - ASW 27A & B

Span: -15 meters

Data source Schleicher Manual Date of issue: 1997

Manufacturer: A Schleicher GmbH & Co, Segelflugzeugbau, 36161 Poppenhausen, Germany

UK Agent: Peter Wells

E Mail: [office@zulu-glasstek.co.uk](mailto:office@zulu-glasstek.co.uk) Phone: 01844 208 157

URL : [http://www.as-segelflugzeuge.de/englisch/e\\_main.htm](http://www.as-segelflugzeuge.de/englisch/e_main.htm)

## Weighing Data:

	Kg	Pounds
Max weight with water	500	1102
Max weight dry	395	871
BGA concession non-aerobatic max weight (dry) [+3%]	407	897
Max weight of non lifting components (everything except wings)	280	617
BGA concession non-aerobatic max weight of non lifting components [+5%]	294	648
Max pilot weight (seat load)	115	254
Max luggage compartment load	15	33
	mm	Inches
Forward C of G limit (aft of datum)	210	8.27
Aft C of G limit (aft of datum)	320	12.60
Pilot position (fwd) - 55 kg pilot	575	22.64
Pilot position (fwd) - 115 kg pilot	550	21.65

## Control deflections in mm

	Up	Down	Distance - hinge to measuring point	Max free play
Ailerons	See table on next page.		70	1,5 total
Elevator	20±2	20 ± 2	72	2,0 total
Rudder	Left & Right 150 ± 10		280	3,5 total normally zero
Flaps	See table on next page.		109	2,0 total
	Mass kg		Moment kg cm	
Rudder	3.4 - 4.2		1.94 - 2.34	
Elevators including actuator	1.6 - 1.9		3.16 - 3.87	
Aileron	1.55 - 1.90		1.78 - 2.19	
Flap	2.6 - 3.2		3.36 - 4.18	

Longitudinal datum: Wing root LE (not the fairing). Horizontal datum: Rear fuselage top 1000:54 tail down

Each 1 Kg nose weight reduces min cockpit weight by 2.5 Kg (5.5 lb). Weights are 1730mm (68.1") fwd.

The trim ballast (battery) in the fin weighs 2.8 kg (6.2 lb) & is 4132mm (162.7") aft of datum.

Fin water is 4280mm (168.5") aft of datum

## Maximum speeds

	Knots	Kph
VNE Flaps positions 1 & 2	154	285
Manoeuvre	116	215
Winch / auto tow	70	130
Rough air	116	215

	Knots	Kph
Aerotow	92	170
U/C down	100	185
Flap pos 3A & 3B	108	200
Flap pos A	116	215
Flap pos 4 & 5	97	180
Landing flaps	81	150

Height feet	Height meters	VNE knots	VNE Kph
10 000	3 000	151	280
16 500	5 000	133	247
23 000	7 000	119	221
29 500	9 000	106	197
36 000	11 000	93	172
40 000	12 000	85	159

Max winch weak link: 660 daN (Blue). Tyre pressure: Main 36 psi (2,5 bar). Tail 38 psi (2,6 bar).

Semi aerobatic (without water, flaps "A"). Cloud flying is permitted. Water must be dumped before landing.

The Hydraulic brake fluid is Aeroshell Fluid 4 or Esso Univas J-13. These fluids are mineral based and are very corrosive.

Min brake disc thickness 4.24 mm (0.167 ") min brake lining thickness 2.54 mm (0.10").

The brake cap top is to be approximately 150mm above wing top surface when wheel brake starts to operate.

This sheet compiled by Tim Macfadyen Date 19 Aug 2004 Update 24 April 2011 Left wing flap & aileron settings headings corrected  
Last update 4 June 2023 UK agent Email changed