

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

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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 | 25±2 | 25 ± 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 | | Knots | Kph | Height feet | Height meters | VNE knots | VNE Kph |
|------------------------------|-------|-----|------------------|-------|-----|-------------|---------------|-----------|---------|
| VNE Flaps positions 1 & 2 | 154 | 285 | Aerotow | 92 | 170 | 10 000 | 3 000 | 151 | 280 |
| Manoeuvre | 116 | 215 | U/C down | 100 | 185 | 16 500 | 5 000 | 133 | 247 |
| Winch / auto tow | 70 | 130 | Flap pos 3A & 3B | 108 | 200 | 23 000 | 7 000 | 119 | 221 |
| Rough air | 116 | 215 | Flap pos A | 116 | 215 | 29 500 | 9 000 | 106 | 197 |
| | | | Flap pos 4 & 5 | 97 | 180 | 36 000 | 11 000 | 93 | 172 |
| | | | Landing flaps | 81 | 150 | 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 Univis 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
Update 4 June 2023 UK agent Email changed.

Updated 2 May 2026 Elevator deflections corrected as per TN 22