

BGA glider data sheet - ASK 21

Data source Manufacturer's manuals

Date of issue: 1980

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

UK Agent: Peter Wells

E Mail: office@zulu-glasstek.co.uk

Phone: 01844 208 157

URL : http://www.as-segelflugzeuge.de/englisch/e_main.htm

Weighing Data:

| | Kg | Pounds |
|---|-----|--------|
| Max weight | 600 | 1320 |
| BGA concession non-aerobatic max weight (+3%) | 618 | 1363 |
| Max weight of non lifting components (everything except wings) | 410 | 904 |
| BGA concession non-aerobatic max weight of non lifting components [+5%] | 430 | 949 |
| Max pilot weight (seat load) | 110 | 242 |
| | | |

mm Inches

| | | |
|-------------------------------------|------|-------|
| Forward C of G limit (aft of datum) | 234 | 9.21 |
| Aft C of G limit (aft of datum) | 469 | 18.46 |
| Front pilot position (forward) | 1185 | 46.65 |
| Rear pilot position (forward) | 80 | 3.15 |

Control deflections in mm

| | Up | Down | Distance - hinge to measuring point | Max free play total |
|--|--------------------------|--------------|-------------------------------------|---------------------|
| Ailerons | 110 ± 10 | 45 ± 5 | 240 | 3.01 |
| Elevator | 90 ± 5 | 65 ± 5 | 230 | 2.84 |
| Rudder | Left & Right 180 ± 20 | | 375 | 3.88 |
| Airbrakes 25 - 35mm gap between airbrake and wing when fully open. | | | | |
| Controls weights | Moments & | Moment cm Kg | Weights Kg | |
| Ailerons | | 17,4-22,9 | 2,85-3,75 | |
| Elevator | | 13,9-18,4 | 3,15-4,10 | |
| Rudder | | 17,1-22,3 | 1,75-2,59 | |
| | | | | |
| | | | | |

Weighing Longitudinal datum: Wing root LE. Horizontal datum: Top of rear fuselage 1000: 52 tail down.

Each lead disk in the nose weighs 1 kg but reduces min front cockpit load by 1,25 Kg (2.76lb).

Maximum speeds

| | Knots | Kph |
|------------------|-------|-----|
| VNE | 151 | 280 |
| Rough air | 108 | 200 |
| Manoeuvre | 97 | 180 |
| Aerotow | 97 | 180 |
| Winch / auto tow | 81 | 150 |

| VNE at altitude meters | Kph |
|------------------------|-----|
| 0 - 2000 | 280 |
| 2000 - 3000 | 267 |
| 3000 - 4000 | 255 |
| 4000 - 5000 | 239 |
| 5000 - 6000 | 226 |

| VNE at altitude feet | Knots |
|----------------------|-------|
| 0-5000 | 151 |
| 5000-10 000 | 144 |
| 10 000-15 000 | 132 |
| 15 000-20 000 | 121 |
| | |

Notes: -

Span 17 meters

Max winch weak link: 1000 Kg (black)

Tyre pressures Nose wheel 2.0 bar, 28 psi. Main wheel 2.7 bar, 38 psi. Tail wheel 2.5 bar, 36 psi

Fully aerobatic, cloud flying permitted

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

CAIR Aviation "Ottfur" hook(s) may be fitted in place of the original hooks.

This sheet compiled by: Tim Macfadyen

Updated: 27 April 2009 (CAIR Aviation hooks added)

Last update 4 June 2023 UK agent Email changed