

BGA glider data sheet - Twin Astir & Twin Astir Trainer

Data source: Manufacturer's flight manual

Date of issue: May 1978

Manufacturer: Grob Present Type Certificate holder: LTB Lindner, website www.ltb-lindner.com.

UK Agent: Soaring Oxford Email: soaring.oxford@virgin.net Phone: 01636 525318 Fax: 01636 525287

Link to mandatory mods: www.ltb-lindner.com/g-103-ad-sb.html

Weighing Data:

| | Kg | Pounds |
|---|-----|--------|
| Max weight (with or without water) | 650 | 1435 |
| BGA concession non-aerobatic max weight (dry) [+3%] | 669 | 1478 |
| Max baggage | 10 | 22 |
| Max weight of non lifting components (everything except wings) | 470 | 1036 |
| BGA concession non-aerobatic max weight of non lifting components [+5%] | 493 | 1088 |
| Max pilot weight (seat load) | 110 | 242 |

mm Inches

| | | |
|-------------------------------------|------|-------|
| Forward C of G limit (aft of datum) | 260 | 10.24 |
| Aft C of G limit (aft of datum) | 460 | 18.11 |
| Front pilot position (forward) | 1150 | 45.28 |
| Rear pilot position (aft of datum) | 40 | 1.57 |

Control deflections in mm

| | Up | Down | Distance - hinge to measuring point |
|---|----------------------------|----------------------|-------------------------------------|
| Ailerons | 90 ±10 | 45 ± 8 | 208 |
| Elevator | 91 ± 6 | 71 ± 5 | 222 |
| Rudder | Left & Right 233 ± 10 | | 450 |
| Airbrakes | Fully extended 170 ± 10 | | Measure at outboard end |
| Controls Moments & weights [all ± 12%] | | Moments cm Kg | Weights Kg |
| Elevator | | 25,8 | 5,2 |
| Rudder to serial 3072 | | 24,9 | 6,5 |
| Rudder serial 3073 on | | 0 - 10 | 8,0 |
| Aileron to serial 3072 | | 23,0 | 5,7 |
| Aileron serial 3073 on | | 0 - 6 | 8,0 |

Elevators without mass balance, weighing 3,1 - 4, 4 Kg, are acceptable with moments of 19 - 29 cm Kg.

Longitudinal datum: Wing root LE at rib

Horizontal datum: Top of rear fuselage 1000: 40 tail down.

Maximum speeds

| | Knots | Kph |
|-----------|-------|-----|
| VNE | 135 | 250 |
| Rough air | 108 | 200 |
| Manoeuvre | 92 | 170 |

| | Knots | Kph |
|------------------|-------|-----|
| Aerotow | 92 | 170 |
| Winch / auto tow | 65 | 120 |
| Airbrakes open | 135 | 250 |

| VNE at altitude | Knots | Kph |
|-----------------|-------|-----|
| 0-6500 feet | 135 | 250 |
| 6500-10 000 | 128 | 237 |
| 10 000-13 000 | 121 | 225 |
| 13 000-16 500 | 115 | 213 |
| 16 500-19 000' | 109 | 202 |

Max winch weak link: 850 Kg (Tost brown)

Tyre pressure: Main 2.5 - 2,8 atm 36 - 40 psi , rear 36 psi

Semi aerobatic, cloud flying permitted

Notes: -

The "Trainer" is a version of the Twin Astir with a fixed undercarriage, no water and a disk wheel brake.

This sheet compiled by: Tim Macfadyen

Date: 10 September 2002

Last update 21 April 2011 Type Certificate holder changed