

BGA glider data sheet - LS 4

See separate data sheet for LS4A&B

Data source Manufacturers' handbooks Date of issue: 1981 Updated May 2011

Manufacturer: Rolladen-Schneider

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 with water | 472 | 1041 |
| Max landing weight | | |
| Max weight of non lifting components (everything except wings) | 230 | 507 |
| BGA concession non-aerobatic max weight of non lifting components [+5%] | 241 | 532 |
| Max pilot weight (seat load) | 110 | 242 |

mm Inches

| | | |
|---|-----|-------|
| Forward C of G limit (aft of datum) | 225 | 8.86 |
| Aft C of G limit (aft of datum) | 375 | 14.76 |
| Pilot position (forward of datum) 155 lb pilot | 553 | 21.8 |

Longitudinal datum: Wing root LE

Horizontal datum: Rear fuselage bottom horizontal

Control deflections in mm

| | Up | Down | Distance - hinge to measuring point | Max free play |
|--|------------------------|---------|-------------------------------------|---------------|
| Ailerons | 65±5 | 40±3 | 165mm | 3 total |
| Elevator | *364 ±5 | *245 ±5 | 148mm | 3 total |
| *Distance from TE to reference point on fin. Distance is 300mm with elevator neutral | | | | |
| Airbrakes | 150 min | | At inner end | |
| Rudder | Left & Right 150±10 | | 310mm | 1 at top |

Moments and weights of control surfaces

| | Weight at TE | Total weight |
|----------|-------------------|-----------------|
| Elevator | 0.33 to 0.44 kg | 1.41 to 1.90 kg |
| Rudder | -0.04 to +0.10 kg | 3.70 to 4.50 kg |
| Aileron | 0.60 to 0.80 kg | 3.50 to 5.00 kg |

Maximum speeds

| | Knots | Kph |
|-----------|-------|-----|
| VNE | 146 | 270 |
| Rough air | 97 | 180 |
| Manoeuvre | 97 | 180 |
| Aerotow | 97 | 180 |

| | Knots | Kph |
|------------------|-------|-----|
| Winch / auto tow | 70 | 130 |
| Airbrakes open | 146 | 270 |
| | | |
| | | |

| Height feet | VNE Knots | Height meters | VNE Kph |
|-------------|-----------|---------------|---------|
| 0-6500 | 146 | 0-2000 | 270 |
| To 10 000 | 139 | To 3000 | 257 |
| To 20 000 | 118 | To 6000 | 219 |
| To 33 000 | 93 | To 10000 | 173 |

Max winch weak link: 600 kg (Tost blue)

Tyre pressures: Main wheel 3 - 3.5 bar (43 - 50 psi) Tail wheel 2,5 bar (36 psi)

Semi aerobatic (without water-ballast). Cloud flying permitted

Note: -The trim weights in front of the rudder pedals weigh 2.45 kg (5.4 lb) each, they reduce min pilot weight by twice their own weight.

Load required to collapse undercarriage 12-15 Kg at joint above wheel. Replace gas strut if load is low.

A 2.7 kg battery can be fitted in the top of the fin.

This sheet compiled by: Tim Macfadyen Date: 27 March 2002

Rudder mass balance updated 9 April 2019 as per MM May 2011

Last update 18 Oct 2021: UK agent changed