

# BGA glider data sheet - Ventus a & b (15 & 16.6 meter)

Data source: Flight Manuals

Date of issue: 1986

Manufacturer: Schempp Hirth, Flugzeugbau GmbH, Postfach 1443, D-73222 Kirchheim/Teck, Germany  
Phone: 00 49 7021 7298-0 www.schempp-hirth.com

UK Agent: Southern Sailplanes

Phone: 0148 871774 email office@southern sailplanes.com

## Weighing Data:

|                                                                                                                                                                                             | Kg            | Pounds |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------|
| <b>AUW and Max weight of non-lifting components (MWNLC)</b>                                                                                                                                 |               |        |
| The AUW and MWNLC vary with serial No, Mod standard and hook type, see EASA TCDS A274. The MWNLC may be increased by 5% if the category is downgraded from semi-aerobatic to non-aerobatic. |               |        |
| Max pilot weight (seat load)                                                                                                                                                                | 110           | 242    |
|                                                                                                                                                                                             | mm            |        |
| Forward C of G limit (aft of datum)                                                                                                                                                         | 200           |        |
| Aft C of G limit (aft of datum)                                                                                                                                                             | 340           |        |
| Pilot position (forward of datum)"                                                                                                                                                          | "a" model 440 |        |
| Pilot position (forward of datum)                                                                                                                                                           | "b" model 518 |        |

## Control deflections in mm

|                          | Up                  | Down        | Distance - hinge to measuring point | Max free play |
|--------------------------|---------------------|-------------|-------------------------------------|---------------|
| Ailerons                 | 44±4                | 25±4        | 132                                 | ±3            |
| Elevator                 | 40±4                | 47±4        | 157                                 | ±3            |
| Rudder                   | Left & right 160±20 |             | 340                                 |               |
| Flaps                    | 28±2                | 30±2        | 141                                 |               |
| Brakes                   | 100±2               |             | 120                                 | ±3            |
|                          |                     | Weight kg   | Moment kg cm                        |               |
| Elevator                 |                     | 0.67 - 0.85 |                                     |               |
| Rudder                   |                     | 4.43 - 4.97 |                                     |               |
| Flap                     |                     | 2.31 - 2.95 |                                     |               |
| Inner ailerons           |                     | 1.10 - 1.40 |                                     |               |
| Outer ailerons           |                     | 1.02 - 1.30 |                                     |               |
| Tip ailerons 16.6 meters |                     | 0.14 - 0.18 |                                     |               |

Longitudinal datum: Wing root LE

Horizontal datum: Rear fuselage top tail down 1000:31 "a" model, 1000:44 "b" model

Each 2 Kg nose weight reduces the minimum cockpit load by 5 Kg.

## Maximum speeds "a" model/"b" model

|                     | Knots | Kph |
|---------------------|-------|-----|
| VNE                 | 135   | 250 |
| Rough air "a" model | 108   | 200 |
| Rough air "b" model | 102   | 190 |
| Manoeuvre "a" model | 108   | 200 |
| Manoeuvre "a" model | 102   | 190 |
| Aerotow             | 97    | 180 |
| Winch / auto tow    | 81    | 150 |
| Flaps 0, +1, +2 & L | 86    | 160 |
| U/C extension       | 97    | 180 |

Max winch weak link: 650 Kg (Tost blue)

Tyre pressure: Up to 330 Kg (727 lb) AUW 3,5 bar (50 psi). Over 330 Kg (727 lb) AUW 4,7 bar 67 psi

Semi aerobatic, cloud flying permitted, without water.

## VNE at altitude

| Height (meters) | Height (feet) | Knots | Kph |
|-----------------|---------------|-------|-----|
| Up to 5 000     | Up to 16 400  | 135   | 250 |
| 5 000           | 16 400        | 135   | 250 |
| 6 000           | 19 680        | 134   | 249 |
| 7 000           | 22 960        | 127   | 235 |
| 8 000           | 26 240        | 120   | 222 |
| 9 000           | 29 520        | 113   | 209 |
| 10 000          | 32 800        | 106   | 197 |
| 12 000          | 39 360        | 92    | 171 |
|                 |               |       |     |

Max fore & aft play at the wing tip 30mm.

This sheet compiled by: Tim Macfadyen Updated: 18 Aug 2009 Control surface weights headings corrected

Updated 7 June 2025 Various minor corrections and "a" Model data added.