BGA glider data sheet - Nimbus 15 A & B (Mini Nimbus) (single seat 15 meter span)

Data source: Manufacturers' Manual

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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

Weighing Data:

Max weight (with water)	Kg 450	Pounds 992		Up	Down	Distance - hinge to measuring point	Max free play
			Ailerons (Flaps 0)	28 - 34	13 - 17	82	±4
Max water	125	275	Elevator	45- 65	50 -65	287	±3
Max pilot weight (seat load)	110	242	A model			measure to fin TE top	
Max weight of non-lifting components (everything except wings)	230	507	Elevator B model	44 - 54	44 - 54	162	
BGA concession non-aerobatic max weight of non-lifting components [+5%]	241	533	Flaps	24 - 34	28 - 38	235	±5
	mm		Rudder	Left & right		350	±5
Forward C of G limit (aft of datum)	220			125 to 155			
Aft C of G limit (aft) A model	355		Airbrake			120	±2
Aft C of G limit (aft) B model	380						brakes fully
Pilot (forward of datum)	550						open

Longitudinal datum: Wing root LE root rib. Horizontal datum: Rear fuselage top 1000:51 tail down

The main wheel is 129 mm aft of datum (a). Main wheel to tail skid (b) 3930mm.

The maximum weight in the baggage compartment is 15 kg (33 lb) of which only 5 kg (11 lb) may be removable. Max fore & aft play of wing tip 30mm.

Maximum speeds

	Knots	Kph		VNE at a	
VNE	135	250		Height in meters	
Rough air	108	200			
Manoeuvre	108	200		5000	
Aerotow	97	180		6000	
U/C down				7000	
Winch / auto tow	81	150		8000	
				9000	
Flaps +10, +6 & 0	97	180		10000	
τυαυ				12000	

altitude Height in Knots Kph feet 16 500 130 240 20 000 122 226 23 000 115 214 26 000 109 202 29 500 103 191 33 000 97 179 39 500 86 159

Controls weights & moments

Control deflections in mm

	Weight kg	Balance cm Kg
Rudder	5.2 max	5.9 max
Elevator (A model)	7.1 max	14.3 max
Flap	4.3 max	17.7 max
Aileron	3.3 max	8.6 max

Max winch weak link: 630 kg (blue)

Tyre pressure: 50 psi (3.5 Bar)

Semi aerobatic (without water), cloud flying is permitted.

German (LBA) type certificate No 328.

Wing flexural frequency approximately 145/min.

The A model has an all moving tailplane (a balance tab is mandatory in UK). The B & C models have conventional tailplanes. The C model has higher weight limits and as an option can have (lighter) carbon fibre wings.

To check the flap gas strut. With the flaps in -7° push the flaps down to 0° . They should return to -7° . The force at the flap TE root to move the flaps from -7° to 0° should be 7.0 to 8.5 kg (15.4 to 18.7 lb).

Use the static vents under the wings for the ASI and the front and rear fuselage static vents for varios.

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