

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

Data source: Manufacturers' Manual

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## Weighing Data:

## Control deflections in mm

	Kg	Pounds
Max weight (with water)	450	992
Max water	125	275
Max pilot weight (seat load)	110	242
Max weight of non lifting components (everything except wings)	230	507
BGA concession non-aerobatic max weight of non lifting components [+5%]	241	533
	mm	Inches
Forward C of G limit (aft of datum)	220	8.66
Aft C of G limit (aft) A model	355	13.98
Aft C of G limit (aft) B & C models	380	14.96
Pilot (forward of datum)	550	21.65

	Up	Down	Distance - hinge to measuring point	Max free play
Ailerons (Flaps 0)	28 - 38	13 - 17	82	±4
Elevator A model	45 - 65	50 - 65	287 measure to fin TE top	±3
Elevator B model	44 - 54	44 - 54	162	
Flaps	24 - 34	40 - 50	235	±5
Rudder	Left & right 125 to 155		350	±5
Airbrake			120	±2 brakes fully 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 mm 30mm

## Maximum speeds

	Knots	Kph
VNE	135	250
Rough air	108	200
Manoeuvre	108	200
Aerotow	97	180
U/C down		
Winch / auto tow	81	150
Flaps +10, +6 & 0	97	180

VNE at altitude			
Height in meters	Height in feet	Knots	Kph
5000	16 500	130	240
6000	20 000	122	226
7000	23 000	115	214
8000	26 000	109	202
9000	29 500	103	191
10000	33 000	97	179
12000	39 500	86	159

## Controls weights & moments

	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 (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 varicos.

This sheet compiled by: Tim Macfadyen

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