

# 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: McLean Aviation www.mcleanaviation.co.uk e.mail: mcleanaviation@aol.com Tel:-01904 738653

## 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

Last update 5 May 2012: UK agent changed Rudder mass balance updated 9 April 2019 as per MM May 2011