

BGA glider data sheet - LS 4A & B

See separate data sheet for LS4

Data source Manufacturers' handbooks Date of issue: 198? 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 and max landing weight	525	1158
Max water	170	375
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

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

mm Inches

Moments and weights of control surfaces

	mm	Inches
Forward C of G limit (aft of datum)	225	8.86
Aft C of G limit (aft of datum)	400	15.75
Pilot position (fwd) 165 lb pilot	590	23.2

	Weight at TE	Total weight LS4A
Elevator	0.33 - 0.44 kg	1.41 - 1.90 kg
Rudder	-0.04 to +0.10 kg	3.70 to 4.50 kg
Aileron	0.60 - 0.80 kg	3.50 - 5.00 kg

Longitudinal datum: Wing root LE

Horizontal datum: Rear fuselage bottom horizontal

Maximum speeds

	Knots	Kph
VNE	151	280
Rough air	103	190
Manoeuvre	103	190
Aerotow	103	190

	Knots	Kph
Winch / auto tow	75	140
Airbrakes open	151	280
U/C down	151	280

Moments and weights of control surfaces LS4B		
	Hinge moment Kg cm	Total weight Kg
Elevator	4.88 to 6.50	1.41 - 1.90
Rudder	0 to 3.50	3.70 to 4.50
Aileron	10.00 to 13.70	3.50 - 5.00 kg

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: 13 May 2002

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