## BGA glider data sheet - LS 8 15 & 18 Meter

Data source Manufacturers' flight & maintenance manuals. Date of issue: Jan 2000.

Manufacturer: Rolladen-Schneider

UK Agent: UK Agent: Navboys Web site www.Navboys.com Tel:- 01264 981934

Link to mandatory mods: http://www.dg-flugzeugbau.de/tech-mitteilungen-e.html

All data is the same for 15 and 18 meter spans.

### Weighing Data:

	Kg	Pounds
Max weight (dry)	412	908
BGA concession non-aerobatic max weight (dry) [+3%]	424	936
Max weight with water	525	1158
Max water	190	419
Max weight of non lifting components (everything except wings & water) see maintenance manual page 2-4 for details	239 -249	527 - 549
BGA concession non-aerobatic max lifting components is +5%.	weight	of non-
Max pilot weight (seat load)	110	242
	mm	Inches
Forward C of G limit (aft of datum)	280	11.02
Aft C of G limit (aft of datum)	400	15.75
Pilot position (forward of datum) 143 lb pilot. See handbook for details	513	20.20
Longitudinal datum: Wing root LE		Horizo

## Control deflections in mm

	Up	Down	Distance - hinge to measuring point	Max free play
Ailerons	38 to 40	19 to 22	85	2.5mm
Elevator	35 to 37	27 to 32	72	2.5mm
Rudder	Left & right 178 to 204		395	
Airbrakes open	Fully extended minimum average 150mm.			

Free play is measured with the stick fixed central.

The control surface seals must be in good condition to maintain the required friction to prevent flutter.

Aileron friction 200-500 grams. With trim neutral there should be at least 50mm hysteresis in the elevator system. Both measured 30mm below the top of the stick.

Rudder friction - up to 500 grams at TE bottom.

Longitudinal datum: Wing root LE

Horizontal datum: Rear fuselage bottom horizontal.

For each 10 kg of pilot weight above min cockpit weight 1.5 litres of water may be put in the tail tank.

For every 25 kg of water in the wings 1 litre may be put in the tail tank. Max baggage weight 5 kg (11 lb).

The three 2,5 kg (5.5 lb) nose weights each reduce min cockpit weight by 5 kg (11 lb).

The rear trim weight weighs 2.5 kg (5.5) lb). The fin battery max weight is 2,6 kg (5.7 lb).

#### Maximum speeds

# Maximum speeds at altitude

#### **Control weights & moments**

	Knots	Kph
VNE	151	280
Rough air	103	190
Manoeuvre	103	190
Aerotow	103	190
Winch tow	76	140
Airbrakes open	151	280
U/C operation	151	280

Height feet	VNE Knots	Height meters	VNE Kph
0-6600	151	0-2000	280
To 10 000	144	To 3 000	266
To 13 100	137	To 4 000	253
To 20 000	122	To 6 000	227
To 26 000	109	To 8 000	202
To 33 000	97	To 10 000	179
To 39 400	84	To 12 000	156
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	Weight Kg	Moment KgCm
Inner aileron	3.4 to 4.4	2.04 to 3.87
Outer aileron	.42 to .70	.81 to 1.38
Rudder	4.3 to 5.4	-1.02 to 1.6
Elevator	1.3 to 1.65	3.48 to 4.60
100% Elevator mass balance is achieved with weight in the fin push rod		

Max winch weak link: 825 Kg (Tost red)

Tyre pressure: main 3 - 3,5 bar (44 - 51 psi). 4 bar (58 psi) with full water. Tail 2,5 - 3,5 bar (36 - 50 psi) Semi aerobatic and cloud flying permitted without water-ballast.

LBA Type certificate No 402

This sheet compiled by: Tim Macfadyen Date: 17 April 2007

Last update 18 Oct 2021: UK agent changed