

BGA glider data sheet - Discus 2b

Data source: Flight Manual

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Manufacturer: Schempp Hirth, Flugzeugbau GmbH, Postfach 1443, D-73222 Kirchheim/Teck, Germany
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Weighing Data:

	Kg	Pounds
Max weight (with water)	525	1157
Max landing weight (with water)	525	1157
Max weight dry	370	816
BGA concession non-aerobatic max weight (dry) [+3%]	381	840
Max weight of non lifting components (everything except wings)	250	551
BGA concession non-aerobatic max weight of non lifting components [+5%]	262	579
Max pilot weight (seat load)	110	242

mm Inches

Forward C of G limit (aft of datum)	250	9.84
Aft C of G limit (aft of datum)	396	15.59
Pilot position (forward of datum)	500	19.69

Control deflections in mm

	Up	Down	Distance - hinge to measuring point	Max free play
Ailerons	63±3	30±3	152	±3
Elevator	44 +3 -2	44 +3 -2	138	±3
Rudder	Left & Right 155 ± 15		315	
			Weight kg	Moment kg cm
Rudder			3,90 to 4,80	-2,0 to 3,2
Elevator half			0,85 to 1,06	1,1 to 1,6
Inner ailerons				
S/N 1 to 11			4,00 to 4,90	0 to 1,27
S/N 12			3,00 to 3,70	3,40 to 4,40
Outer ailerons				
S/N 1 to 11			1,00 to 1,22	-0,30 to 0,08
S/N 12			0,95 to 1,16	-0,30 to 0,20

Longitudinal datum: Wing root LE

Horizontal datum: Rear fuselage top 1000:44 tail down.

Distance wheel behind datum (a) 128mm. Main wheel to tail wheel/skid (b) 4150mm

Max fore & aft play at the wing tip 30mm total. Max play between inner & outer ailerons ±1 mm.

Maximum speeds

	Knots	Kph
VNE	135	250
Rough air	108	200
Manoeuvre	108	200
Aerotow	97	180
Winch / auto tow	81	150
U/C down	97	180

VNE at height

Height (meters)	Height (feet)	Knots	Kph
4 - 5 000	13 - 16400	131	243
Up to 6 000	Up to 19680	124	230
Up to 7 000	Up to 22960	117	217
Up to 8 000	Up to 26240	111	205
Up to 9 000	Up to 29520	104	193
Up to 10 000	Up to 32800	98	182
Up to 12 000	Up to 39360	85	158

Max winch weak link: 683 Kg (Blue)

Tyre pressure: 4 bar (58 psi), tail wheel 2 Bar (29 psi).

Semi aerobatic, cloud flying permitted

Each (2.1 kg) lead weight mounted on the right hand side of the stick reduces min cockpit load by 5 kg.

Fill 1 litre of water in the tail tank for each 25 litres of water in the wings.

This sheet compiled by: Tim Macfadyen

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