

BGA glider data sheet - Discus 2cT

Data source: Flight & Maintenance Manuals

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

Phone: 00 49 7021 7298-0

Fax: 00 49 7021 7298-199 www.schempp-hirth.com

UK Agent: Southern Sailplanes

Phone: 0148 871774

Weighing Data:

	Kg	Pounds
Max weight 18 meter span	565	1246
Max weight 15 meter span	525	1157
Max weight of non lifting components (everything except wings)	305	671
Max in baggage compartement	2	4.4
Max pilot weight (seat load)	110	242

mm Inches

	mm	Inches
Forward C of G limit (aft of datum)	280	11.02
Aft C of G limit (aft of datum)	420	16.54
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	141	±3
Rudder	Left & Right 160 ± 20		330	
			Weight kg	Moment kg cm
Rudder			4,00 to 4,90	0 to 4
Elevator half without fitting with mass bal			0,7 to 0,83	1,1 to 1,6
Inner aileron with mass balance			2,07 to 2,63	5,30 to 7,20
18 Meter aileron with mass balance			1,12 to 1,38	0,72 to 1,38
Outboard aileron 15 Meter configuration			0,34 to 0,46	1,02 to 1,38
Exceeding the values of the above weights by up to 15% because of increased mass balance is acceptable, provided the moments remain in tolerance.				

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) 4145mm

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

Maximum speeds

	Knots	Kph
VNE	151	280
Rough air	103	190
Manoeuvre	103	190
Aerotow	97	180
Winch / auto tow	81	150
U/C extension or retraction	97	180
Engine out ignition on	81	150
Engine out ignition off	97	180
Extending or retracting engine	49 min 65 max	90 min 120 max

VNE at height

Height (meters)	Height (feet)	Knots	Kph
0 - 2000	0 - 6360	151	280
Up to 3000	Up to 9840	143	267
Up to 4000	Up to 13120	136	253
Up to 5 000	Up to 16400	130	240
Up to 6 000	Up to 19680	122	227
Up to 7 000	Up to 22960	115	215
Up to 8 000	Up to 26240	109	203
Up to 9 000	Up to 29520	102	191
Up to 10 000	Up to 32800	97	180

Max winch weak link: 735 daN Kg (Red)

Tyre pressure: 4 bar (58 psi), tail wheel 2,5 Bar (36 psi).

Semi aerobatic, without engine or water ballast, max AUW 410 Kg, 902 lb, otherwise non-aerobatic

Cloud flying permitted without water ballast at max AUW 410 Kg, 902 lb 18 meter and max AUW 455 Kg, 1001 lb 15 meter.

Each (2.2 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 27 litres of water in the wings.

This sheet compiled by: Tim Macfadyen

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