

BGA glider data sheet - Discus BT

Data source: Flight Manual

Date of issue: Dec 1984

Span 15 meters

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

Fax:

Weighing Data:

Control deflections in mm

	Kg	Pounds
Max weight (with water) without engine or fuel tank installed	525	1157
Max weight (with water) with engine & fuel tank installed	450	992
Max landing weight = max take off weight		
Max weight of non lifting components (everything except wings) With engine & fuel tank installed	290	639
Max weight of non lifting components (everything except wings) Without engine & fuel tank installed	255	562
Max pilot weight (seat load)	110	242

	Up	Down	Distance - hinge to measuring point	Max free play
Ailerons	65±5	35±5	162	±3
Elevator	47±4	47±4	157	±3
Rudder	Left 160 ±20	Right 160 ±20	340	

	mm	Inches
Forward C of G limit (aft of datum)	260	10.24
Aft C of G limit (aft of datum)	400	15.75
Pilot position (forward of datum)	450	17.72

	Weight kg	Moment kg cm
Ailerons	3,71 - 4,21	1,7 - 3,7
Elevator	0,67 - 0,85	2,6 - 3,3
Rudder	4,43 - 4,97	0 - 2,4

Longitudinal datum: Wing root LE

Horizontal datum: Rear fuselage top 1000:44 tail down

Max fore & aft play at the wing tip 35mm total.

For every 28 litres of water in the wings put 1 litre in the fin tank.

Each standard 2.2 kg nose weight reduces minimum pilot weight by 5 kg.

Maximum speeds

VNE at altitude

	Knots	Kph
VNE	135	250
Rough air	97	180
Manoeuvre	97	180
Aerotow	97	180
Winch / auto tow	81	150
Engine extended	86	160

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: 680 Kg (Blue)

Tyre pressure: Up to 360 Kg (794 lb) AUW 50 psi, 3,5 bar. Higher AUW, 64 psi, 4,5 bar.

Tail tyre pressure 29 psi, 2 Bar

With engine installed - non aerobatic, non cloud flying

Without engine installed & without water ballast - semi aerobatic & cloud flying permitted

This sheet compiled by: Tim Macfadyen

Date: 29 May 2003