

BGA glider data sheet - Ventus 2cxt 15 & 18 meter Turbo

See separate Data sheet for Ventus 2ct

Data source: Flight Manuals

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

Phone: 00 49 7021 7298-0

www.schempp-hirth.com

UK Agent: Southern Sailplanes Phone: 0148 871774

Weighing Data:

	Kg	Pounds
Max weight with water 15 M	525	1157
Max weight with water 18 M	600	1323
Max weight of non-lifting components (everything except wings)	310	682
Max mass baggage compartment	2	4.4
Max water capacity (approximately)	174	383
Max pilot weight (seat load)	110	242

	mm	inches
Forward C of G limit (aft of datum)	260	10.24
Aft C of G limit (aft of datum)	380	14.96
Pilot position (forward of datum)	520	20.47

Control deflections in mm

	Up	Down	Distance - hinge to measuring point
Elevator	42 - 47	42 - 47	141 (Max free play ± 3)
Ailerons (flaps 0°)	31 - 37	23 - 29	131
Free-play - inboard ailerons ± 2 , between inboard and mid ailerons ± 2 , between mid and outboard ± 1 .			
Rudder	Left & Right 140 - 180		340
Flaps S1 0° L	29 - 33 up 0 \pm 2 22 - 262 down		131
	Weight kg	Moment kg cm	
Elevator half	0.72 - 0.88	2.5 - 3.5	
Rudder	4.0 - 5.0	-2.0 - 2.1	
Flap/inner aileron	1.4 - 1.85	6.5 - 8.5	
Mid aileron	2.0 - 2.5	2.7 - 3.5	
Outer ailerons 15m	0.54 - 0.66	1.5 - 1.9	
Outer ailerons 18m	0.7 - 0.9	2.1 - 2.7	
Tip ailerons 18m	0.18 - 0.23	0.45 - 0.55	

Longitudinal datum: Wing root LE

Horizontal datum: Rear fuselage top tail down 1000:44

Max fore & aft play at the wing tip 30mm. The water in the wings is 179mm aft of datum.

Distance datum to wheel (a) 100mm. Distance wheel to tail skid/wheel (b) 4145mm.

Fin water & battery are 4275mm aft, nose weights are 1740mm forward, battery at panel is 1095mm fwd.

The three nose weights each weigh 2.1 kg (4.6 lb). Each reduces minimum cockpit load by 5 kg (11 lb).

Maximum speeds

	Knots	Kph
VNE	154	285
Rough air	108	200
Manoeuvre	108	200
Aerotow	97	180
Winch / auto tow	81	150
Flaps 0, +1, +2 & L	108	200
U/C operating	97	180
Engine extended ignition on	81	150
Engine extended ignition off	97	180
Extending/retracting engine	65	120

VNE at altitude

Height (Meters)	Height (feet)	Knots	Kph
3000	9 843	144	266
4 000	13 123	136	253
5 000	16 404	129	240
6 000	19 685	122	227
7 000	22 966	116	215
8 000	26 247	109	203
9 000	29 528	103	191
10 000	32 808	97	180

Max winch weak link: 750 daN (Tost Red)

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

Category "Utility" Aerobatic manoeuvres and cloud flying not approved.

LBA Type certificate number 349

The hydraulic wheel brake takes Dot 3, Dot 4 or Dot 5 brake fluid.

This sheet compiled by: Tim Macfadyen 29 April 2015

Retitled (and minor corrections) 14 May 2018 to remove confusion between the 2cT and 2cxT versions

Tail wheel pressure corrected 12 August 2018

Elevator deflection corrected 1 Nov 2019 (different from Ventus 2ct)