



G I N

Zulu Explorer Manual – in addition to the Zulu Manual



Please read this manual prior to your first flight with the Zulu Explorer.

Zulu Explorer manual in addition to the Zulu manual

Thank you for buying the Zulu Explorer and flying with Gin Gliders

We hope that you will enjoy climbing and flying with this lightweight equipment.

The Zulu Explorer is the lightweight version of the Zulu, with new light materials, made for the pilots who like to travel with their flying gears and looking for compact equipment.

This user information is provided in addition to the Zulu manual, which must also be read carefully before flying the Zulu Explorer. The Zulu Explorer has very similar flying characteristics to the Zulu. GIN Gliders have achieved great savings in the weight of the Zulu Explorer in comparison with the Zulu.

Warning

This glider and its light bag (plus the light harness and the light rescue, delivered as an option) is made from special materials in order to reduce the weight of the glider.

These special light materials (fabric, lines, risers, webbing etc) are more susceptible to ageing than regular materials, even though their strength is more than sufficient. The Zulu Explorer has passed the same 8G load test as all regular gliders.

For this reason, we ask that you:

- Have your Zulu Explorer fully inspected by an authorized GIN agent every year or after each 100 hours of flight, whichever is the sooner.
- Do not practice aerobatics, towing, paramotoring, or extreme manoeuvres to lose altitude, such as very deep spirals. For big ears, please practice them with caution. Only use "altitude-losing manoeuvres" when absolutely necessary. They will cause the material of your Zulu Explorer to age more rapidly.
- Take special care of this wing not only during its use, but also in its packing and storage. Be careful during ground handling at the take-off site, do not pack it too tightly when you are not climbing with it, and let it dry in the shade after each flight before final packing (the material of Zulu Explorer hates moisture and humidity).

Technical Specifications

SIZE		XS	S	M	L
FLAT	AREA	24.13m ²	25.71m ²	27.90m ²	30.18m ²
	SPAN	11.06m	11.42m	11.90m	12.37m
	A.R	5.07	5.07	5.07	5.07
PROJECTED	AREA	20.93m ²	22.30m ²	24.20m ²	26.17m ²
	SPAN	8.97	9.25	9.64m	10.03m
	A.R	3.84	3.84	3.84	3.84
CHORD	ROOT	2.79m	2.88m	3.00m	3.12m
	TIP	0.90m	0.93m	0.97m	1.01m
TOTAL HEIGHT		7.10m	7.32m	7.63m	7.94m
CELL NUMBER		50	50	50	50
GLIDER WEIGHT		4.95kg	5.18kg	5.5kg	5.98kg
WEIGHT IN FLIGHT		55-75kg	70-90kg	85-105kg	100-125kg
D.H.V		1-2	1-2	1-2	1-2

Description

FABRIC OF CANOPY

SUPPLIER	NAME	PORCHER NCV Industries			
	ADDRESS	L'Isle d'Abeau, Parc de Chesnes, 75, rue du Ruisseau 38070 SAINT QUENTIN FALLAVIER Cedex / France			
TYPE OF FINISH		SIDE COATED(POLYURETHANE)			
TYPE OF YARN		PA 6.6 HIGH TENACITY – 33 dtex			
FABRIC CODE		9017 E29A (Rib)	9017 E38A (Top back)	9017 E68A (Bottom)	9017 E77A (Top front)
PATTERN		Rip Stop	Rip Stop	Rip Stop	Rip Stop
Coated fabric's weight (g/sqm)		40+/-2	40+/-2	36 +/-1.5	40+/-2
Tear Strength	WARP (DaN)	1.5 mini	1.5 mini	2 mini (average 3.3)	1.5 mini
	WEFT (DaN)	1.5 mini	1.5 mini	2 mini (average 3.3)	1.5 mini
Elongation on bias 3 lbs (%)		1 maxi	8 maxi	5+/-2	6.5 maxi
Elongation on bias 5 lbs (%)		2 maxi	17 maxi	11+/-4	2 maxi
Elongation on bias 10 lbs (%)		10 maxi	28 maxi	24+/-	15 maxi
Break Strength	WARP (DaN/5cm)	38 mini	38 mini	38 mini (average 41.6)	38 mini
	WEFT (DaN/5cm)	33mini	33mini	33 mini (average 38.4)	33mini
AIR Permeability p=2000Pa (l/SQMxMN)		100(maxi)	40maxi	20 maxi (average 5)	40maxi

SUSPENSION LINE

MATERIAL		Dyneema line		
SUPPLIER	NAME	LIROS FlightSport technique		
	ADDRESS	Rosenberger Tauwerk GmbH Poststrasse 11, 95192 Lichtenberg GERMANY		
Line type designation		DSL 70 (Top)	PPSL 120 (Middle)	PPSL 200 (Main)
Diameter(mm)		0.95	1.15	1.42
Strength min (daN)		70	120	200
Strength eff. (daN)		92	159	241
Elongation at strength eff. (%)		2.8		1.59
Elongation / Line creep at 10 daN (%)		0.36/0.04	0.20/0.036	0.24/0.128
Elongation / Line creep at 30 daN (%)		1.0/0.25	0.58/0.13	0.55/0.26
Weight (g/m)		0.67	1.00	1.60

REINFORCEMENT

FABRIC CODE		W420 SCRIM
SUPPLIER	NAME	PORCHER NCV Industries
	ADDRESS	L'Isle d'Abeau, Parc de Chesnes, 75, rue du Ruisseau 38070 SAINT QUENTIN FALLAVIER Cedex / France
MATERIAL		POLYESTER SCRIM
WEIGHT(GR/M ²)		180
BREAKING STRENGTH (KG/5Cm)	WARP	137
	WEFT	118
TEAR STRENGTH (KG/5Cm)	WARP	4.2
	WEFT	4.1
WEAVE DESIGN		RIPSTOP

RISER

MATERIAL		KEVLAR and POLYESTER TAPE
SUPPLIER	NAME	Shinkwang
	ADDRESS	947-2 Dogok Wabu Namyangjusi Kyungkido Korea
WEIGHT(GR/M)		20.8
BREAKING STRENGTH		800DAN
WIDTH(mm)		12mm

MAILLONS

MATERIAL		MAILLON DELTA INOX
SUPPLIER	NAME	PEGUET
	ADDRESS	BP 205 74105 ANNEMASSE CEDEX FRANCE
WEIGHT(GR)		5.2
BREAKING STRENGTH		550 kg
DIAMETER(mm)		3.0

BRIDLE (ATTACHMENT LINES)

MATERIAL		NYLON
SUPPLIER	NAME	KOLON INDUSTRIAL CO.
	ADDRESS	45 MU KYO DONG JUNG – GU, SEOUL, KOREA
WEIGHT(GR/M)		3
BREAKING STRENGTH (kg)		84.8
WIDTH(mm)		10

THREAD

MATERIAL		HIGH TENACITY POLYESTER YARN	
SUPPLIER	NAME	AMANN & SOHNE GMBH & CO.	
	ADDRESS	INDUSTRIESTRASE 1, D-74391 ERLIGHEIM, GERMANY	
DENIER		150D/3	225D/3
BREAKING STRENGTH(EN2062)		2.9kg	3.2kg
ELONGATION AT BRAKE(EN 2062)		16%	16%