

#### 4 Basic technical data

Wing span	33.46 Ft
Wing area	138.85 Sg Ft
B-SAT	4.23 Ft
Span chord ratio	8.06
Wing dihedral	3°
Backsweep	0°
Length	20.64 Ft
Height	7.87 Ft
Horizontal tail area span	7.87 Ft
Undercarriage gauge	5.90 Ft
Undercarriage wheel base	5.77 Ft
Empty Weight	653 Lbs
Maximum crew weight	327 Lbs
Max. surface load	7.15 Lbs/Sg Ft
Cabin Widht	51,95 In.
Cabin Heigth	42,52 In.

#### 4.1. Service limitations :

Air speed :		
Take-off speed	43,50 Mph	
Climbing speed	62,20 Mph	
Rate of Climb	1280 Fpm / 1020 Fpm	
Cruising speed	75 - 112 Mph ( typical 100 Mph )	
Stall Speed	39,77 Mph	
Max. turbulence speed	87 Mph	
Never-exceed speed	125 Mph	
Maximum speed with flaps		
flaps 15°	75 Mph	
flaps 40°	70 Mph	
CAUTION ! when flap 55° is used	62 Mph	A fast deceleration occurs.
Manoeuvring speed	87 Mph	
Maximum taxiing speed	5 Mph	
Takeoff Distance	330 Ft / 590 Ft	
Landing Roll	360 Ft / 700 Ft	
Maximum Range	500 Sm	

Note: Given the difference between the indicated speed and the true air speed, the corresponding values of the indicated speed are listed in parentheses against the important data.

#### 4.2. Engine operation limitations

Limitations to the engine operation are stipulated by the engine manufacturer:

max. permitted speed	5800 rpm max. 5 min.
permanent max. speed	5500 rpm
oil pressure	min. 1.5 atm ( 2800 rpm )
	max. 5.0 atm
	short-term max. 7.0 atm

oil temperature 122 - 284° F ( opt. 194 - 230° F )

coolant temperature max. 248° F

further service limitations are stated in the engine operation manual supplied with the airplane.

It is user's duty to get familiar with this manual before using the airplane.

#### 4.3. Fuel and oil limitations

The applicable fuel is a gasoline or a jet fuel with a minimum octane number of 95. When the jet fuel is used, the ROTAX engines manufacturer's instructions must be observed.

The recommended gasoline - Natural 95

When a different gasoline is used, the steps must be taken in conformity with the service information to the engine.

The applicable oil must conform to the service information to the engine.

#### 4.4. Minimum leftover fuel:

Flying is prohibited with the leftover fuel of less than 15,3 Gal. The recommended minimum leftover fuel is 3 Gal. in a tank. The minimum fuel quantity in a tank at the start is 6 Gal.

Fuel Consumption ROTAX 912 2,2 – 3,1 Gph ( typical 2,8 Gal.)

#### 4.5. Manoeuvrability limitations

Aerobatics and intentional spins are prohibited !!!

Maximum bank 60 °

Maximum longitudinal incline ± 30 °

With the speed below 50 Mph , neither turns nor banks are recommended. A minimum speed of 70 Mph is specified for the turns with a bank above 40 °.

#### 4.6. Load factor limitations :

the airplane is limited by a load factor of + 4 G - 2 G with a max. take-off weight of 992 Lbs ( 1042 Lbs with the emergency system).

#### 4.7. Crew

The minimum crew is 1 pilot weighing min. 132 Lbs. The pilot must have the ULLA pilot qualification.

An exception is trainees schooled by ULLA pilots in individual flights.

The maximum crew is two persons, with the pilot always sitting on the left-hand seat. Both members of the crew must be fastened with safety belts during flight.

#### 4.8. Maximum flight altitude

The airplane is permitted to climb to the altitude in which the airplane's climbing capacity does not drop below the value of 98 Fpm with the indicated speed of 50 Mph observed. When the airplane climbs it is necessary to follow all the associated regulations. Ceiling 17300 Ft / 14750 Ft.

#### 4.9. Limitation by the meteorological conditions:

The airplane is permitted to be operated under such meteorological conditions that allow to maintain the engine operation temperatures within the specified values. It is prohibited to use the airplane under heavy rain, snowfall, and storm.

Flying under the ice accretion conditions is prohibited !!!

The general regulations apply for the visibility and the distance from the clouds.

Limitations to the take-off wind and the landing wind:

headwind max. 2000 Fpm

lateral wind 90 ° max.1000 Fpm

tail-on wind max. 500 Fpm