



# Blue Bird

## TWO - SEAT AIRCRAFT



Blue Bird is a two - seat, side-by-side, all composite structure,very light aircraft.conventional low-wing with two spars, single-spar horizontal tail, monocoque fuselage, non-retractable tricycle type landing gear , cantilever self - spring composite main landing gear and tubular steel nose leg with composite speed fairing and ability of short take off and landing (STOL).

Good cockpit design,layout and space.Online in flight engine data recording, low operating cost, easy maintenance and life structure.

**Adjustable rudder pedals and seats with option of having stick or yoke control system.**



### Applications

- Pilot training.
- Recreational flying.
- Aero club operations.
- Anti smuggler patrol.
- Postal purposes.
- Research flight.
- Border patrol.



### Performance

Never Exceed Speed (IAS)	140 kt (260 km/h, 160 mph)
Max Level Speed at 14000 ft.(TAS)	152 kt (280 km/h, 175 mph)
Max Cruising Speed at 10000 ft.(TAS)	130 kt (240 km/h, 150 mph)
Stalling Speed, Flaps Down	44 kt (81 km/h, 51 mph)
Max Rate of Climb	229 m (750 ft) / min
Service Ceiling	4265 m (14000 ft)
Takeoff Run	274 m ( 900 ft )
Landing Run	244 m ( 800 ft )
Max Range with 45 min Fuel Reserved	1100 km, 680 miles



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## External Dimensions

Wing Chord, Constant	1.17 m (3 ft 10 in)
Wing Aspect Ratio	8.08
Length Overall	6.17 m ( 20 ft 2.9 in)
Fuselage Max Width	1.12 m (3 ft 8.1 in)
Height Overall	2.17 m (7 ft 1.4 in)
Wheel Track	1.94 m (6 ft 4.38 in)
Wheelbase	1.51 m (4 ft 11.45 in)
Propeller Diameter	1.72 m ( 5 ft 7.12 in)
Propeller Ground Clearance	0.18 m (7 in)
Wingspan	9.45 m (31 ft)



## Areas

Wing Gross	11.06 m2 ( 119.05 ft2)
Ailerons(total)	0.952 m2 (10.25 ft2)
Trailing Edge Flaps (total)	1.54 m2 (6.58 ft2)
Fin	0.422 m2 (4.54 ft2)
Rudder	0.368 m2 (3.96 ft2)
Tail	0.841 m2 (9.05 ft2)
Elevator (total)	0.515 m2 (5.54 ft2)



## Weight and loading

Empty Weight,Equipped	500 kg (1101.3 lb)
Max Fuel Weight	70 kg (154.2 lb)
Max Takeoff Weight	750 kg (1653.75 lb)
Max Capacity of Fuel System	92 Lit (24.8 gallons)
Usable Fuel	90 Lit (24.3 gallons)
Power Loading	6.25 kg/hp (14.38 lb/hp)
Wing Loading	67.81 kg/m2 (13.89 lb/ft2)
G Limits	+3.8 and -2.0

## Interior Dimensions Areas

Cockpit Max Width	1.02 m ( 3 ft 4.25 in)
Max Length	1.09 (3 ft 6.9 in)



## Propeller

**Manufacturer :** MT Propeller  
**Type :** MTV-6-A-172-08  
**Specifications:** Constant speed,variable pitch,3 blades,Max diameter of 172 cm(67.7 in), 75/30 degrees pitch range with 11.2 kg (24.5 lbs) approximately weight.

## Power plant

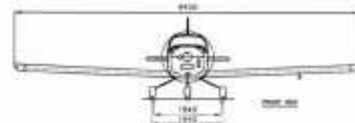
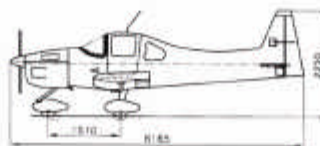


Engine Manufacturer	Bombardier - Rotax
Model	914 F3
Max Takeoff Power	115 HP for 5 min( 84.5 KW )
Max Continues Power	100 HP ( 73.5 KW )
Fuel Type	Automotive Super 95% Octane Unleaded or Avgas 100 LL
Fuel Consumption	at Takeoff Performance 33.0 L/h at Max Continues Power 27.2 L/h
Weight (with hydraulic governor for constant speed propeller)	77.4 kg (170 lb)



**Specifications:** 4 stroke, 4 cylinders,horizontally oppose, spark ignition engine,with turbo charger and electronic control of boost pressure ( TCU: turbo charge control unit ), one central camshaft - push - rod - OHV, liquid cooled cylinder heads and ram air - cooled cylinders.

**Type Description:** Prop shaft with flange for constant speed propeller and drive for hydraulic governor for constant speed propeller.



**H.F.Dorna Co.**