



Prezes Urzędu Lotnictwa Cywilnego
President of the Civil Aviation Authority

ŚWIADECTWO UZNANIA ZATWIERDZENIA TYPU
Type Approval Recognition Certificate

NUMER: UL-A.00 – 003/2024
Reference:

Niniejsze świadectwo uznania zatwierdzenia typu stanowi zatwierdzenie projektu typu wyrobu, które zostało wydane po przeprowadzeniu jego oceny technicznej na podstawie pkt 8.9 załącznika 5a do rozporządzenia Ministra Transportu, Budownictwa i Gospodarki Morskiej z dnia 26 marca 2013 r. w sprawie wyłączenia zastosowania niektórych przepisów ustawy - Prawo lotnicze do niektórych rodzajów statków powietrznych oraz określenia warunków i wymagań dotyczących użytkowania tych statków (Dz. U. z 2019 r. poz. 1497). Równocześnie typ statku powietrznego został wpisany na listę typów zatwierdzonych urządzeń latających prowadzoną przez Prezesa Urzędu Lotnictwa Cywilnego, o której mowa w przepisach wydanych na podstawie art. 33 ust. 2 i 4 ustawy – Prawo lotnicze (Dz.U. z 2025 r. poz. 1431 i 1668 oraz z 2026 r. poz. 176 i 607).

This Type Approval Recognition Certificate constitutes an approval of the product type design, issued following a technical assessment carried out pursuant to point 8.9 of Annex 5a to the Regulation of the Minister of Transport, Construction and Maritime Economy of 26 March 2013 on the exclusion of the application of certain provisions of the Aviation Law Act to certain categories of aircraft and on the specification of the conditions and requirements for the operation of such aircraft (Journal of Laws of 2019, item 1497). At the same time, the aircraft type has been entered on the list of approved flying device types managed by the President of the Civil Aviation Authority, as referred to in the regulations issued pursuant to Article 33 para 2 and 4 of the Aviation Law Act ((Journal of Laws of 2025, items 1431 and 1668 and of 2026, items 176 and 607).

Państwo projektu

State of Design

Państwo produkcji

State of Manufacture

Posiadacz zatwierdzenia typu

Type Approval Holder

Wytwórca

Manufacturer

Oznaczenie typu

Type Designation

Numer zatwierdzenia typu

Type Approval Number

Arkusze danych do zatwierdzenia typu

Type Certificate Data Sheet

Przyjęte wymagania techniczne

Type Certification Basis

Uwagi

Remarks

Czech Republic

Czech Republic

ORLIČAN s.r.o.

Londýnská 376/57, 120 00 Prague 2 Vinohrady, Czech Republic

ORLIČAN s.r.o.

Londýnská 376/57, 120 00 Prague 2 Vinohrady, Czech Republic

M-8 Eagle

ULL 03/2023

ULL 03/2023

UL2 – part I. edition 1. 2019.

Aerodynamically controlled ultralight aircraft, revised version of 27.3.2019.

Approved by LAA CR on:

03.11.2023 – ULL 03/2023 - first edition,

24.01.2024 – ULL 03/2023 – supplement a,

11.12.2025 – ULL 03/2023 – supplement b.

Z upoważnienia Prezesa Urzędu Lotnictwa Cywilnego

On behalf of President of the Civil Aviation Authority

Marcin Perkowski

Dyrektor Departamentu Zdatości do Lotu

Director of the Airworthiness Department

(pismo zostało wydane w postaci elektronicznej

i opatrzone kwalifikowanym podpisem elektronicznym)

(the letter was published in electronic form

and signed with a qualified electronic signature)

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Date of last revision: ETD ref. LTT-3.5460.1.2026



Letecká amatérská asociace ČR – Light Aircraft Association of the Czech Republic

Type Certificate

Issued by the Light Aircraft Association of the Czech Republic (hereinafter LAACR), based on the delegation by the Ministry of Transport to perform the state administration in the matters of sports flying equipment in accordance with the Section 82, Subsection 1 of Act No. 49/1997 Coll. On civil aviation and amending and supplementing Act No. 455/1991 Coll. On Trade Licensing (The Trade Licensing Act), as amended by later regulations of the Ministry of Transport

Aircraft type designation:

Two-seat, single-engine, aerodynamically controlled, all-composite, high-wing aircraft – Sport Flying Equipment.

Type designation: M-8 Eagle

Maximum take off mass 600 kg including the ballistic recovery parachute.

Detailed technical specification is in the attachment to the type certificate.

Supplement a) – 24 January, 2024

- new propellers

- enlargement CG position range

Supplement b) – 11 December, 2025

- engine Rotax 912iS

- propeller E-Props Glorieuse

Type certificate holder:

ORLIČAN s.r.o.

Londýnská 376/57

120 00 Prague 2, Vinohrady

Czech Republic

ID: 03544974

Approved by the LAA CR Technical commission on:

November 3, 2023

The Type certificate is registered at the LAA CR under the reference:

ULL 03 / 2023

Letecká amatérská asociace ČR
Ke Kablu 289

102 00 Praha 10

Tel.: +42 2 403 5837

ing. Petr Tax

LAA CR Chief Technical Inspector:

- Attachment to the Type Certificate - M-8 Eagle -

Type certificate number:	ULL – 03 / 2023
Type certificate holder:	ORLIČAN s.r.o.
Type SLZ:	M-8 Eagle
Date of issuance:	November 3, 2023
Date of supplement a):	January 24, 2024
Date of supplement b):	December 14, 2025

Type certificate annex no. ULL - 03 / 2023

I. Generally

1. Type designation: **M-8 Eagle**
2. Category: Light sport aircraft, microlight aerodynamically controlled aircraft
3. Type certificate holder: ORLIČAN s.r.o.
Londýnská 376/57
120 00 Prague 2, Vinohrady
Czech Republic
ID: 03544974
5. Application date: September 3, 2019
6. Approval date: November 3, 2023

II. Certification specification

1. Airworthiness requirements: UL2 – part I. edition 1. 2019.
Aerodynamically controlled ultralight aircraft, revised version of 27.3.2019.
2. Special conditions: N/A
3. Exceptions: N/A

- Attachment to the Type Certificate - **M-8 Eagle** -

III. Technical data, performance, operation limitation

1. Type definition: Aircraft type is defined by set of drawings and the Type definition.
2. Description:

The M-8 Eagle aircraft is a single-engine, two-seat, strut high-wing monoplane of the all-composite structure.

The fuselage is constructed as a laminate shell with bulkheads. Structural bulkheads are glued into the integrally reinforced skin to absorb forces from the landing gear, rescue system, stabilizer, rudder, safety belts and wing. Two upward opening doors are hinged on the sides of the fuselage. The wing is a single-beam sandwich construction made of carbon composite. A pair of fuel tanks are in the wing leading edge. The wing is fitted with a slotted fowler flap. The wing planform is a combination of a rectangular centropplane and trapezoidal ends. The wing profile is MS 313. The wing strut consists of a steel strength tube with end caps and a laminate cover.

The horizontal trapezoidal tail surface is attached by means of pins and screws into the fuselage bulkheads. The elevator is aerodynamically balanced and is fitted with a trim tab controlled by an electric servo. The vertical tailplane is of an arrow trapezoidal shape.

The rudder is cable-controlled, the ailerons are connected in the wings by a set of rods and controlled by cables, the elevator is controlled by rods. The manual steering is of the steering wheel type ("yokes"). The rudder and the front undercarriage wheel are controlled by pedals with upper suspension shafts. This solution significantly improves the kinematics of the steering. The engine and chassis brakes are controlled by the respective controls.

The flaps are driven by a central servo using a set of pushrods. Its control is located on the centre panel.

The landing gear is of tricycle type with steerable front wheel.
3. Equipment: For technical airworthiness approval of light sport aircraft issue, basic equipment according certification specification listed in chapter II must be installed.

- Attachment to the Type Certificate - M-8 Eagle -

4. Basic technical data:

1. Dimensions

Span	9,117 m
Length	6,911 m
High	2,719 m

Wing

Area	10,804 m ²
MAC	1,204 m
Profil	MS313
Aspect ratio	7,693
Wing loading at MTOM 600kg	55,5 kg/m ²

Aileron

Aileron length	1,54 m
Area	0,4231 m ²
Aileron deflection (up/down)	17° ± 1° / 12° ± 1°

Wing trailing edge flap

Flap length	2,33 m
Area	0,868 m ²
Flap deflection - cruise	0° ± 1°
Flap deflection – take-off	15° ± 1°
Flap deflection – approach, landing	30° ± 1°, 39° ± 2°

Horizontal stabilizer

Span	2, 8 m
Area	2,352 m ²
Elevator area	0,8 m ²
Elevator deflection (up/down)	19° ± 1° / 14° ± 1°

Vertical fin

Area	1,005 m ²
Rudder area	0,423 m ²
Rudder deflection	25° ± 1° / 25° ± 1°

Undercarriage

Main undercarriage wheelbase	1,980 m
Main and front undercarriage wheelbase	1,690 m
Main and front wheel dimensions	14x4,00-6, 12x4,00-4
Main undercarriage tire pressure	2,5 bar
Front undercarriage tire pressure	2,1 bar
Brakes	hydraulic disc brakes
Main undercarriage suspension	compozite spring

- Attachment to the Type Certificate - M-8 Eagle -

Front undercarriage suspension	spring/hydraulic shock absorber
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2. Mass

Max. take-off mass	600 kg
Max. take-off mass with emergency parachute system	600 kg
Max. useful load	230 kg
Min. crew mass	60 kg
Max. baggage mass	15 kg
Wing fuel tanks	2x50 l
Standard Empty mass including emergency parachute system	370 kg

3. Airspeed and performance

Engine ROTAX 912 ULS (73,5 kW / 100 HP), propeller WOODCOMP SR3000 3N

Performance in ISA conditions.	Take-off mass 600 kg Airspeed CAS
Stall speed flaps extended V_{SO}	68 km/h
Stall speed flaps retracted V_{SI}	81 km/h
Max. speed – flaps extended (30°) V_{FE}	126 km/h
Design airspeed V_A	173 km/h
Max. horizontal flight airspeed V_H	217 km/h
Never exceed speed V_{NE}	236 km/h
Take-off length 15 m obstacle, grass - concrete	350 m, 362,5 m
Rate of climb	3,33 m/s at 120 km/h
Rough airspeed V_{RA}	194 km/h

Engine ROTAX 912 ULS (73,5 kW / 100 HP), propeller DUC Swirl - 3

Performance in ISA conditions.	Take-off mass 600 kg Airspeed CAS
Stall speed flaps extended V_{SO}	68 km/h
Stall speed flaps retracted V_{SI}	81 km/h
Max. speed – flaps extended (30°) V_{FE}	126 km/h
Design airspeed V_A	173 km/h
Max. horizontal flight airspeed V_H	205 km/h
Never exceed speed V_{NE}	236 km/h
Take-off length 15 m obstacle, grass - concrete	360 m, 385 m
Rate of climb	3,24 m/s at 120 km/h
Rough airspeed V_{RA}	194 km/h

- Attachment to the Type Certificate - **M-8 Eagle** -

Engine ROTAX 912 ULS (73,5 kW / 100 HP), propeller WOODCOMP SR200

Performance in ISA conditions.	Take-off mass 600 kg Airspeed CAS
Stall speed flaps extended V_{SO}	68 km/h
Stall speed flaps retracted V_{SI}	81 km/h
Max. speed – flaps extended (30°) V_{FE}	126 km/h
Design airspeed V_A	173 km/h
Max. horizontal flight airspeed V_H	190 km/h
Never exceed speed V_{NE}	236 km/h
Take-off length 15 m obstacle, grass - concrete	380 m, 405 m
Rate of climb	3,16 m/s at 120 km/h
Rough airspeed V_{RA}	194 km/h

Engine ROTAX 912 iS (73,5 kW / 100 HP), propeller E-Props Glorieuse

Performance in ISA conditions.	Take-off mass 600 kg Airspeed CAS
Stall speed flaps extended V_{SO}	68 km/h
Stall speed flaps retracted V_{SI}	81 km/h
Max. speed – flaps extended (30°) V_{FE}	126 km/h
Design airspeed V_A	173 km/h
Max. horizontal flight airspeed V_H	215 km/h
Never exceed speed V_{NE}	236 km/h
Take-off length 15 m obstacle, grass - concrete	331m, 370 m
Rate of climb	5,23 m/s at 130 km/h
Rough airspeed V_{RA}	194 km/h

4. CG position range

Limit front CG position: **28,5 % MAC**
Limit aft CG position: **36,0 % MAC**

The reference plane is the leading edge of the wing, on the rib dividing the centerplane and the wing. The stroke of the b_{SAT} is 37 mm. Middle aerodynamic chord - depth of the middle aerodynamic chord $b_{SAT}=1,204$ m.

5. Flight load factors

Maximal positive / negative +4,0 / -2,0.

6. Power-plant

7.

- Attachment to the Type Certificate - M-8 Eagle -

Rotax 912 ULS.

Maximal take-off power	73,5 kW/ 5800 min ⁻¹ (max duration 5 min).
Maximal continuous power	68,5 kW/ 5500 min ⁻¹

Rotax 912 iS.

Maximal take-off power	73,5 kW/ 5800 min ⁻¹ (max duration 5 min).
Maximal continuous power	72,0 kW/ 5500 min ⁻¹

8. Propellers

- Three-blade in-flight electric adjustable Woodcomp SR3000 3N / ϕ 1750 mm.
- Three-blade ground adjustable Woodcomp SR200 / ϕ 1680 mm.
- Three-blade ground adjustable DUC Swirl-3 / ϕ 1730 mm.
- Three-blade in-flight electric adjustable E-Props Glorieuse / ϕ 1750 mm.

9. Fuel

EUROSUPER RON 95 unleaded according to DIN 51607, Ö-NORM 1100 AVGAS 100 LL.
BA 95 Natural recommended in Czech Republic.

10. Oil

Oil specification API SF(SG) or higher, designated for 4-stroke motorcycles
(with gear lubrication additives).

11. Rescue parachute system

Galaxy GRS6/600 Speedy SD installed according to Galaxy s.r.o. company standards.

IV. Operation and maintenance documents:

- Flight and maintenance manual together with appendix of optional equipment.
- Operation manual ROTAX 912.
- Propeller technical description and operation manual.
- Operation manual Galaxy s.r.o.

V. Annex:

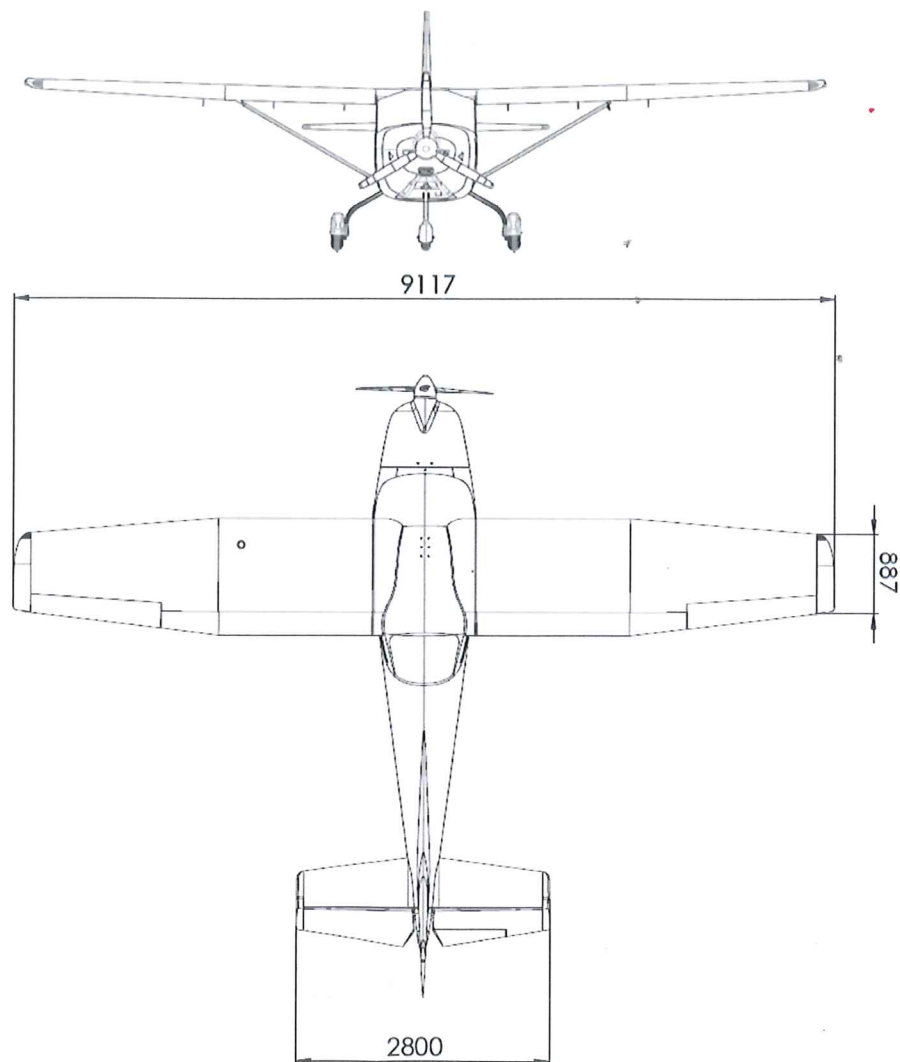
1. Supplement a)
 - adding propellers DUC Swirl-3 and Woodcomp SR200
 - enlargement CG position range
2. Supplement b)
 - adding propellers E-Props Glorieuse
 - engine Rotax 912iS

- Attachment to the Type Certificate - M-8 Eagle -

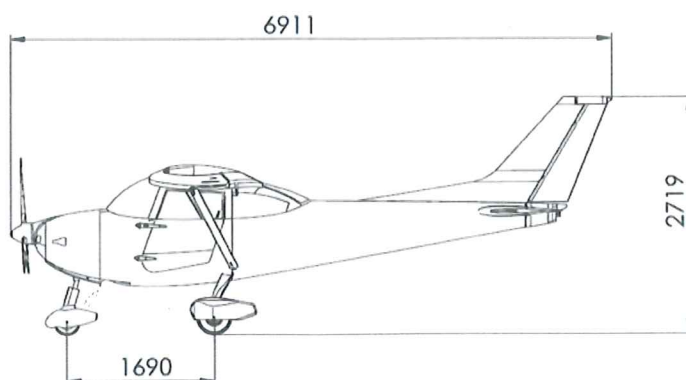
Notes:

1. Each aircraft must be equipped with actual weight and balance protocol with equipment list to issue airworthiness technical approval.
2. Aircraft must be equipped with placards listed in the flight manual.

VI. 3-view M-8 Eagle aircraft drawing according to type definition.



- Attachment to the Type Certificate - M-8 Eagle -



-End-