



Prezes Urzędu Lotnictwa Cywilnego
President of the Civil Aviation Authority

ŚWIADECTWO UZNANIA ZATWIERDZENIA TYPU
Type Approval Recognition Certificate

NUMER: **UL-A.00 – 002/2023**
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, 607 i 864).

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, 607 and 864).

Państwo projektu

Czech Republic

State of Design

Państwo produkcji

Czech Republic

State of Manufacture

Posiadacz zatwierdzenia typu

Vanessa design s.r.o., Kornická 86, 570 01 Litomyšl, Czech Republic

Type Approval Holder

Wytwórca

JMB Aircraft s.r.o. Nádražní 635, 565 01 Chocẽ, Czech Republic

Manufacturer

Oznaczenie typu

VL-3 E, F, E-912iS, TE-915, TE-916

Type Designation

Numer zatwierdzenia typu

ULL 02/2019

Type Approval Number

Arkusze danych do zatwierdzenia typu

ULL 02/2019

Type Certificate Data Sheet

Przyjęte wymagania techniczne

UL 2 – Part I, issue I 2019

Type Certification Basis

Uwagi

**Approved by the Technical Committee of LAA Czech Republic on:
04.04.2019**

Remarks

Release date of Supplement a): 20.01.2022

Release date of Supplement b): 03.11.2022

Release date of Supplement c): 07.10.2024

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)*

Data pierwszego
wydania: **12.01.2023**

Date of original issue: **EZD ref. LTT-4.5460.9.2022**

22.07.2026

Data ostatniej zmiany: **EZD ref. LTT-5.5460.12.2025**

Date of last revision:



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

Typový průkaz

Vydává Letecká amatérská asociace České republiky pověřená k výkonu státní správy ve věcech sportovních létajících zařízení v souladu s ustanovením § 82 odst. 1 zákona č. 49/1997 Sb. o civilním letectví a o změně a doplnění zákona č. 455/1991 Sb., o živnostenském podnikání (živnostenský zákon), ve znění pozdějších předpisů, ve znění pozdějších předpisů Ministerstvem dopravy.

Označení typu letecké techniky:

Dvoumístný, jednomotorový, aerodynamicky řízený ultralehký dolnoplošník celokompozitové konstrukce – Sportovní létající zařízení.

Typové označení: VL-3,F,TE-915,E-912iS,TE-916

Maximální vzletová hmotnost 600 kg včetně ZS.

Podrobné technické specifikace jsou uvedeny v příloze.

Doplněk a) - 20.1.2022 - motor Rotax 915 iS
- nové vrtule
Doplněk b) - 3.11.2022 - motor Rotax 912iS
Doplněk c) - 7.10.2024 - motor Rotax 916iS
- vrtule pro Rotax 912ULS

Držitel typového průkazu:

Vanessa Design s.r.o.

Kornická 86
570 01 Litomyšl

IČ: 28846737

Schváleno technickou komisí LAA ČR dne:

4.dubna 2019

Typový průkaz je zaregistrován u LAA ČR pod značkou:

ULL 02 / 2019

Letecká amatérská asociace ČR
Ke Káblu 289
102 00 Praha 10
TEL: 242 403 587

Hlavní inspektor techniky LAA ČR:

ing. Petr Tax



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

Type Certificate

Issued by the Light Aircraft Association of the Czech Republic (hereinafter LAA CR), 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 low wing aircraft – Sport Flying Equipment.

Type designation: **VL-3 E,F,TE-915,E-912iS, TE-916**

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

Detailed technical specification is stated in the Data Sheet.

Supplement a) dated January 20, 2022	- engine Rotax 915 iS
	- new propellers
Supplement b) dated November 03, 2022	- engine Rotax 912 iS
Supplement c) dated October 07, 2024	- engine Rotax 916 iS
	- propeller for Rotax 912ULS

Type certificate holder:

Vanessa Design s.r.o.

Kornická 86
570 01 Litomyšl
Czech Republic

ID: 28846737

Approved by the LAA CR Technical commission on:

April 4, 2019

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

ULL 02 / 2019

Letecká amatérská asociace ČR
Ke Káblu 289
102 00 Praha 10
TEL: 242 403 587

LAA CR Chief Technical Inspector:

ing. Petr Tax

Number of the type certificate:	ULL – 02 / 2019
Holder of the type certificate:	Vanessa design s.r.o.
Type of the Sport Flying device:	VL-3 E,F, E-912iS,TE-915, TE-916
Date of issue of the enclosure:	08.04.2019
Release date of Supplement a):	20.1.2022
Release date of Supplement b):	3.11.2022
Release date of Supplement c):	7.4.2024

ENCLOSURE TO THE TYPE CERTIFICATE No.: ULL 02 / 2019

I.General

1. Type designation: **VL-3 E,F, E-912iS, TE-915, TE-916**
2. Category: Sport flying device (SFD), ultralight aerodynamically controlled airplane
3. Holder of the type certificate: **VL-3 E,F, E-912iS,TE-915,TE-916**
Vanessa design s.r.o.
Kornická 86, 570 01 Litomyšl, Česká republika
4. Producer from the year 2012: **JMB Aircraft s.r.o.**
Nádražní 635, 565 01 Chocẽ
5. Date of homologation: 04.04.2019
6. Supplement (a): Extension to include the Rotax 915 iS engine and associated propellers.
Supplement (b): Extension to include the Rotax 912iS/iSC Sport engine and associated propellers
Supplement (c): Extension to include the Rotax 916 iS engine and associated propellers a propeller for Rotax 912ULS

II. Regulation basis

1. Requirement of airworthiness: UL 2-part I. edition 1. 2019, Requirement of airworthiness of SFD, Ultralight aerodynamically controlled airplanes.
2. Special conditions: None
3. Exceptions: None

III. Technical data, performance and service limitations.

1. Definition of the type: The type is defined by the Type design of VL-3. Date of issue 27.03.2019
2. Description:

VL-3E,F is a two-seats, single-engine, cantilever low-wing airplane with the crew sitting side-by-side. The plane is fully made of composites, mostly in sandwich arrangement. Glass and carbon fibers are used for construction of the sandwiches. The wing has a trapeze pattern with a main and a supporting spars from glass composite. The split flaps can be tilted into positions of 15° , 37° , 55° . The undercarriage is tricycle, fixed (VL-3F) or retractable (VL-3E) with hydraulic system, with hydraulic disc brakes suspended on composite springs, the front wheel is steerable. Tail surfaces are of classical arrangement. There are two fuel tanks integrated into front part the left and right wing.
3. Equipment: To enable issue of airworthiness certificate of SFD, each produced airplane must be equipped with basic instruments corresponding to airworthiness requests and defined in chapter II. Regulation basis.
4. Basic technical data:

Wing span	8.44 m
Length	6.20 m
Height	2.05 m
Wing	
Wing area	9.8 m ²
Used aerofoil	NASA NLF
Wing chord (root)	1.38 m
Wing-span-chord ratio	7.23
Wing loading at MTOW	600 kg = 60.9 kg/m ²
Span of the aileron.....	
Area of the aileron.....	0.8 m
Aileron deflection..... up...	0.21 m ²
down....	28°
Span of the flap	17°
Flap area	2.48 m
Flap deflectionstart....	0.8 m ²
landing...	15°, 37°
	37°, 55°
Horizontal tail units	
Span	2.68 m
Area.....	1.71 m ²
Deflectionup / down.....	14°/20°

	Rotax 912 ULS	Rotax 914 UL
Flight speeds CAS:		
Stall speed with extended flaps V_{SO}	78,6 km/h	78,6 km/h
Stall speed with closed wing flaps and retracted landing gear V_{S1}	92,0 km/h	92,0 km/h
Max. speed with extended flaps V_{FE}	133 km/h	133 km/h
Manoeuvring speed V_A	190 km/h	190 km/h
Max. speed in horizontal flight V_H	260 km/h	278 km/h
Never exceed speed V_{NE}	303 km/h	303 km/h
Design speed V_D	350 km/h	350 km/h
Take-off distance against 15 m barrier	449 m	354 m
Climb performance	5,0 m/sec at 145 km/h	5,9 m/sec at 145 km/h

The following data on performance are valid for airplane VL-3TE-915 under ISA conditions.

Engine Rotax 915iS (104 kW/142 hp).

Propeller WOODCOMP KW30 – 3 blades.

Flight speeds CAS:	
Stall speed with extended flaps V_{SO}	78,6 km/h
Stall speed with closed wing flaps and retracted landing gear V_{S1}	92,0 km/h
Max. speed with extended flaps V_{FE}	141 km/h
Manoeuvring speed V_A	191 km/h
Max. speed in horizontal flight V_H	310 km/h
Never exceed speed V_{NE}	340 km/h
Design speed V_D	380 km/h
Take-off distance against 15 m barrier	350 m
Climb performance	10,1 m/sec at 145 km/h

The following data on performance are valid for airplane VL-3E-912iS under ISA conditions.

Engine Rotax 912iS/912iSC (73,5 kW/100 HP).

Propeller DUC SwirlBlack – 3 blades.

Flight speeds CAS:	
Stall speed with extended flaps V_{SO}	78,6 km/h
Stall speed with closed wing flaps and retracted landing gear V_{S1}	92,0 km/h
Max. speed with extended flaps V_{FE}	133 km/h
Manoeuvring speed V_A	190 km/h
Max. speed in horizontal flight V_H	260 km/h
Never exceed speed V_{NE}	303 km/h
Design speed V_D	350 km/h
Take-off distance against 15 m barrier	450 m
Climb performance	5 m/sec at 145 km/h

The following data on performance are valid for airplane VL-3TE-916 under ISA conditions.

Engine Rotax 916iS (117 kW/160 HP).

Propeller WOODCOMP KW30 – 3 blades.

Flight speeds CAS:	
Stall speed with extended flaps V_{SO}	78,6 km/h
Stall speed with closed wing flaps and retracted landing gear V_{S1}	92,0 km/h
Max. speed with extended flaps V_{FE}	141 km/h
Manoeuvring speed V_A	191 km/h
Max. speed in horizontal flight V_H	310 km/h
Never exceed speed V_{NE}	340 km/h
Design speed V_D	380 km/h
Take-off distance against 15 m barrier	240 m
Climb performance	10,1 m/sec at 145 km/h

7. Centre-of-gravity (CG) position range:
 - Extreme front operation CG position: 20% MAC
 - Extreme rear operation CG position: 35% MAC
 - Reference plane: Reference plane is leading edge of wing
 - Mean aerodynamic chord: 1,236 m
8. Operational multiples
 - Maximal positive / negative +4,0 / -2,0.
9. Engine:
 - Rotax 912 ULS or Rotax 914 UL or Rotax 912iS/iSC Sport or Rotax 915iS or Rotax 916iS
 - Operating limitations of the engine:
 - Rotax 912 ULS:
 - Maximum take-off power 73,5 kW/5800 min⁻¹ (time 5 min.)
 - Maximum continuous power 69 kW/5500 min⁻¹
 - Rotax 914 UL:
 - Maximum take-off power 84,5 kW/5800 min⁻¹ (time 5 min.)
 - Maximum continuous power 73,5 kW/5500 min⁻¹
 - Rotax 912iS/iSC:
 - Maximum take-off power 73,5 kW/5800 min⁻¹ (time 5 min.)
 - Maximum continuous power 69 kW/5500 min⁻¹
 - Rotax 915iS
 - Maximum take-off power 104 kW/ 5800 min⁻¹ (time 5 min.)
 - Maximum continuous power 99 kW/5500 min⁻¹
 - Rotax 916 iS:
 - Maximum take-off power 117 kW/ 5800 min⁻¹ (time 5 min.)
 - Maximum continuous power 101 kW/5500 min⁻¹
10. Propeller and its limitations:

Rotax 912 S/ULS:	Woodcomp SR3000-2blades(φ1,73m) Woodcomp SR3000-3blades(φ1,73m) Woodcomp KW20-2blades(φ1,73m) DUC SwirlBlack- 3blades (φ1,66m))
Rotax 914 UL:	Woodcomp SR3000-2blades (φ1,75m) Woodcomp KW20-2blades (φ1,75m)
Rotax 912iS/iSc Sport:	DUC SwirlBlack – 3blades(φ1,66m) Woodcomp KW20-2blades(φ1,73m)
Rotax 915 iS:	Woodcomp KW30-3blades(φ1,75m) DUC FlashBlack-3-R-3blades (φ1,7m) DUC Swirl-4-PV-D-4blades (φ1,66m)
Rotax 916iS:	Woodcomp KW30-3blades(φ1,75m) DUC TigerBlack-R – 3blades (φ1,73m) DUC TigerBlack-R – 4blades (φ1,66m)
11. Fuel:
 - EUROSUPER RON 95 unleaded according to DIN 51607, Ö-NORM 1100 AVGAS 100 LL.
 - Fuel recommended for the Czech Republic is BA 95 Natural

12. Oil:

Oil of API classification SF(SG) or higher, intended for 4-stroke motorcycles (with additives for gear lubrication).
To use the prescribed type of engine oil, refer to the operating manual of the engine type!

IV. Instructions for operation and maintenance

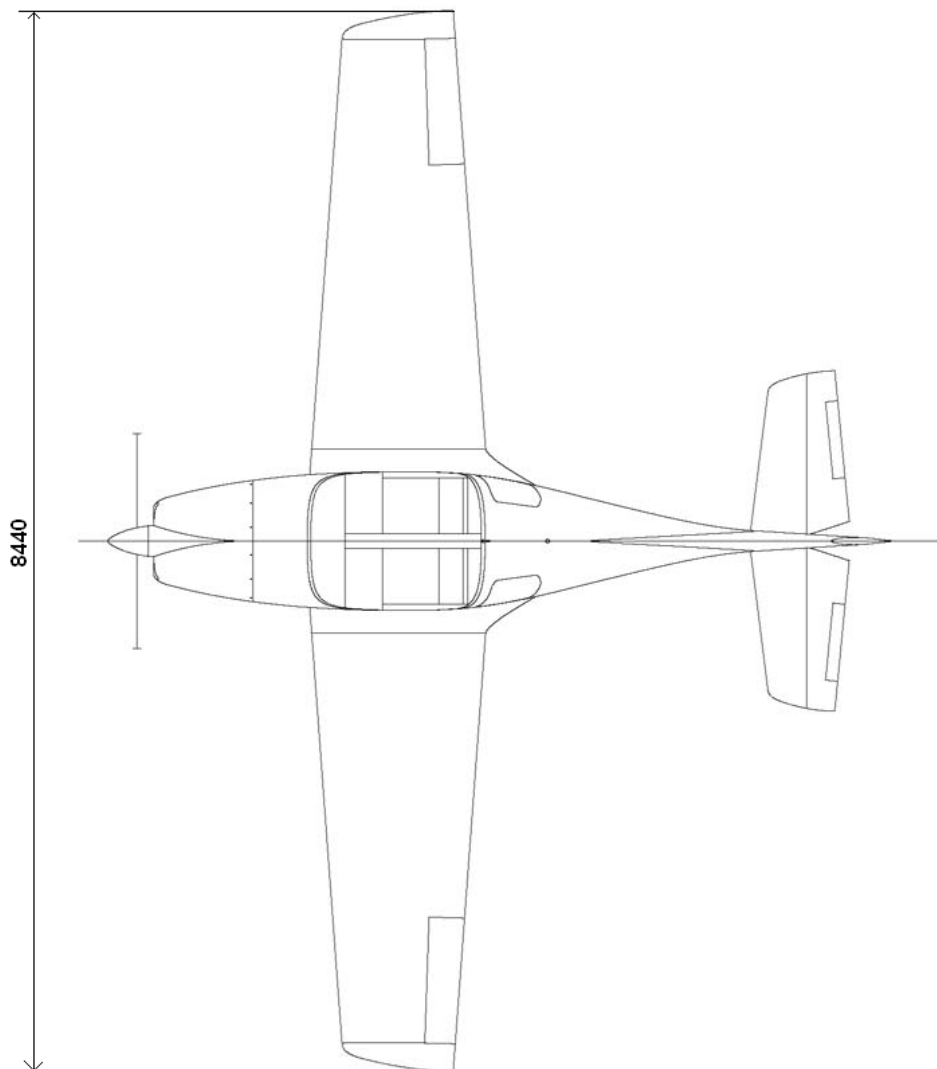
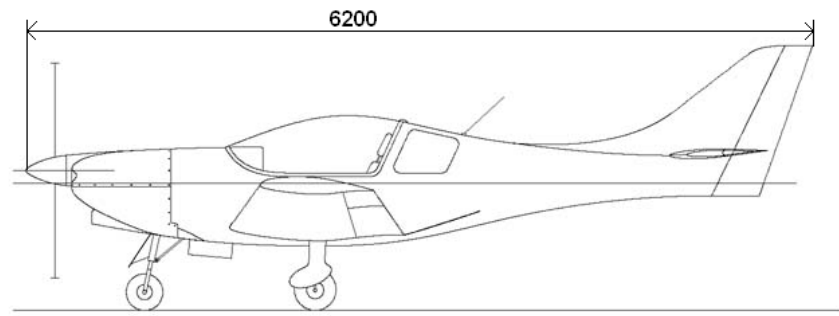
- Flight and operation manual for airplane VL-3.
+ supplements resulting from optional installation of equipment
- Operating instructions Rotax 912 ULS, Rotax 914 UL and Rotax 912iS/iSC and Rotax 915iS and Rotax 916iS
- Technical description and operation manual for installed propeller
- Operation instruction for the rescue system (in case it has been installed)
- Operating instructions for individual pieces of equipment installed on of the customer wishes

V. Supplements:

Notice:

1. Each airplane presented for issue of Certificate of airworthiness of SFD must be provided with up-to-date Weighing protocol and estimation of centre of gravity with a list of equipment included into the weight of an empty airplane.
2. The plane must be equipped with inscriptions and labels listed in the Pilot Operating Handbook.

Dimensional drawing of the airplane:



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