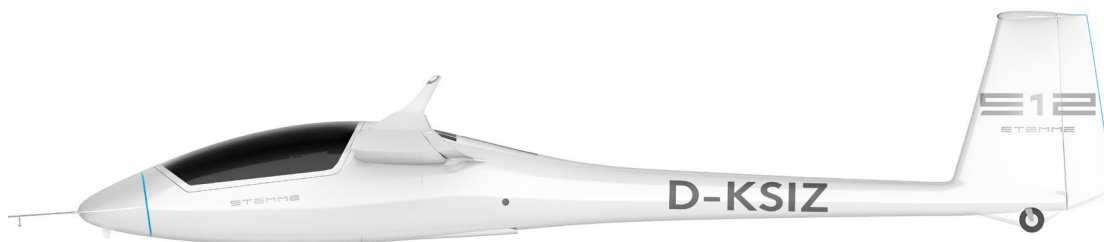


# S12

TOP PERFORMANCE, EXCELLED.  
STEMME TWIN VOYAGER S12. TWO AIRCRAFT UNITED  
IN ONE UNBEATABLY PRECISE MACHINE.



## ENGINE

ROTAX 914 F2/S1 TURBO

Maximum take-off power (MTO):  
84,5kW

Maximum continuous power (MCP):  
73,4kW

Time between overhaul (TBO):  
2,000 hrs or 15 years

Fuel grade: MOGAS (min. RON95),  
AVGAS UL91 or AVGAS 100LL

## DIMENSIONS

Wingspan:  
25m (82ft), optional 21,7m (71.2ft)

Folded wingspan:  
11,4m (37.4ft)

Wing area:  
19,95m<sup>2</sup> (214.7ft<sup>2</sup>), optional 18,6m (200.2ft<sup>2</sup>)

Length:  
8,42m (27.6ft)

Height:  
1,75m (5.74ft)

## WEIGHTS & CAPACITIES

Maximum take off mass (MTOM):  
900kg (1,984lb)

Tank capacity:  
2 x 60 Liter (15.85 US gal) wing tanks and  
6 Liter (1.58 US gal) feeder tank

## PROPELLER

STEMME FOLDABLE - two blade prop with  
2-position variable pitch (T/O and Cruise)

Mechanical propeller brake and centering  
mechanism

Manual operated Nose-cone and cowl flaps

## PERFORMANCE

Maximum speed (Vne):  
270km/h (146kt)

Maximum cruise speed @MSL:  
225km/h (121kt)\*

Maximum cruise speed @FL100:  
260km/h (140kt)\*

Maximum range in Eco-cruise:  
up to 1.759km (950nm)\*

Best climb rate @MTOM:  
3,28m/s (645ft/min)

Glide ratio @106km/h (57kt)  
1:53\*

Load factors (Air-brakes in, Flaps 0° to -10°)  
< Va: +5.3g / -2.65g

Take off run:  
212 m (695 ft)

Take off distance over 15m (50ft) height:  
401m (1,315ft)

## CONTROLS & SYSTEMS

Flight controls on pilot and copilot side

Aileron and elevator through push rods

Rudder and Tail wheel through cable

Automatic connector for elevator

Aileron-flap mix (flaperon), highly  
differentiated

Hydraulic disc brake with parking brake

Electric elevator trim

Adjustable rudder pedals

Emergency canopy jettison with roeger  
hook

## AIRFRAME

Carbon-, glass- and aramid fiber reinforced  
composite structure

Hybrid fiber composite safety cockpit

Side-by-side Cockpit

Green tinted canopy with UV-protection

Lockable sliding windows with build in vents

7-part shoulder wing consists of:  
center wing, outer wings, wing extensions  
and winglets

Wing folding system for easy ground  
handling and taxiing

Integrated fuel tanks in center wing

Removeable tie down rings

Modular fuselage with steel frame center  
section carrying the engine, wing and  
undercarriage

Electromechanical operated retractable  
undercarriage with visual and acoustic  
indicator

Steerable tailwheel with aerodynamic  
faring

Tail water ballast tank for up to 15 Liters

Adjustable engine cowl flaps

Luggage compartment for 20kg (44lb) in  
tail boom

## CERTIFICATION CATEGORY

Certificated as "Powered Sailplane"  
according to EASA CS22

FAA standard airworthiness certificat



## AVIONICS

- \_\_\_\_\_ Dynon D10A EFIS
- \_\_\_\_\_ Dynon Autopilot
- \_\_\_\_\_ Garmin aera 660
- \_\_\_\_\_ Fuel Flow computer
- \_\_\_\_\_ LX9070 Soaring computer
- \_\_\_\_\_ LX V8 digital variometer
- \_\_\_\_\_ VHF-COM 8,33kHz with integrated Intercom
- \_\_\_\_\_ Transponder Mode-S cl.1 with ADS-B out
- \_\_\_\_\_ VHF antenna integrated in rudder
- \_\_\_\_\_ ADS-B receiver with integrated FLARM
- \_\_\_\_\_ Headset sockets LEMO and PJ
- \_\_\_\_\_ Gooseneck microphone
- \_\_\_\_\_ ELT 406MHz
- \_\_\_\_\_ Magnetic Compass
- \_\_\_\_\_ Airspeed indicator
- \_\_\_\_\_ Altimeter (barometric)
- \_\_\_\_\_ Electric acoustic stall warning

## OPTIONAL AVIONIC PACKAGE "SOARING"

- \_\_\_\_\_ Smaller Panel for more Legroom
- \_\_\_\_\_ LX9070 Soaring computer
- \_\_\_\_\_ V80 digital variometer
- \_\_\_\_\_ Dedicated traffic information display
- \_\_\_\_\_ VHF-COM 8,33kHz with integrated Intercom
- \_\_\_\_\_ Transponder Mode-S cl.1 with ADS-B out
- \_\_\_\_\_ VHF antenna integrated in rudder
- \_\_\_\_\_ ADS-B receiver with integrated FLARM
- \_\_\_\_\_ Headset sockets LEMO and PJ
- \_\_\_\_\_ Gooseneck microphone
- \_\_\_\_\_ ELT 406MHz
- \_\_\_\_\_ Magnetic Compass
- \_\_\_\_\_ Airspeed indicator
- \_\_\_\_\_ Altimeter (barometric)
- \_\_\_\_\_ Electric acoustic stall warning

## ELECTRICS

- \_\_\_\_\_ Two separate electrical systems, main and engine
- \_\_\_\_\_ Main circuit for the Avionics, powered by an LiFePO4 battery (19,2Ah) and an external generator
- \_\_\_\_\_ Engine circuit for starting the engine, powered by an LiFePO4 battery (7,5Ah) and the internal generator
- \_\_\_\_\_ Ground power receptacle for engine start
- \_\_\_\_\_ Solar cells with charge controller, connected to the main circuit
- \_\_\_\_\_ LED landing light and integrated
- \_\_\_\_\_ LED strobe and navigation lights

## ENGINE INSTRUMENTS (ANALOG)

- \_\_\_\_\_ RPM indicator
- \_\_\_\_\_ Cylinder head temperature (left & right)
- \_\_\_\_\_ Oil temperature
- \_\_\_\_\_ Oil pressure
- \_\_\_\_\_ Fuel quantity indicator (left & right)
- \_\_\_\_\_ Ampere- and Voltmeter
- \_\_\_\_\_ Engine fire warning system
- \_\_\_\_\_ Engine hour meter

## INTERIOR

- \_\_\_\_\_ Interior in leather, standad color light grey other colors optional
- \_\_\_\_\_ Adjustable backrests, suitable for Parachutes
- \_\_\_\_\_ 4 Point seat belts, standard color grey other colors optional
- \_\_\_\_\_ Luggage compartments behind the backrests
- \_\_\_\_\_ Adjustable fresh air vents for Pilot and Copilot
- \_\_\_\_\_ Canopy defog vent
- \_\_\_\_\_ Document compartment between the seats
- \_\_\_\_\_ Storage space in the rear of the cockpit, suitable for 2 oxygen bottles or baggage

# STEMME