



3. Control movement ranges

Rotor head deflection angles

Pitch	forward	2° +/-1°
	back	19° +/-1°
Roll	left	8° +/-1°
	right	8° +/-1°
Rudder deflection	left	131 mm +/- 7 mm
	right	131 mm +/- 7 mm

4. Airspeed data

Maximum speed	210 km/h
Maximum speed with continuous power setting	180 km/h
Maximum speed in turbulent air conditions	120 km/h
Maneuvering speed	100 km/h
Minimum level flight speed V_{S0}	30 km/h

5. Weights / Load factors

Maximum takeoff weight	560 kg
Empty weight with basic equipment	290 kg
Actual Empty weight	According to Weighing Report and Equipment List
Positive limit load factor:	3 g
Negative limit load factor:	1 g

6. Position of Center of Gravity

(XENON IV)

Reference Datum (RD):	Front tip of the fuselage
Gyroplane attitude:	With tailplane horizontally
Forward limit:	1921 mm from nose (RD)
Aft limit :	2283 mm from nose (RD)

(XENON IV CA-22)

Reference Datum (RD):	Front tip of the fuselage
Gyroplane Attitude:	With tailplane horizontally
Forward limit:	2121 mm from nose (RD)
Aft limit:	2344 mm from nose (RD)

7. Approved engine and propeller type (Performance Data in section 8)

	<u>Engine</u>	<u>Propeller</u>
Manufacturer/model :	CA 912 ULST	1.Kaspar, 3-blade const. speed 2.Kaspar, 3-blade fixed



8. Performance data for the engine and associated propeller

8.1.a. Engine:

Manufacturer: Celier Aviation
Model : CA 912 ULST
Type : 4-cylinder 4-stroke boxer
Air/fuel mixture by: 2 carburetors
Mixture charging : Turbocharger regulated by pneumatic
wastegate valve
Cooling : liquid / air / mixture charge

Max. power (acc. to manufacturer)..... : 107 KW
at crankshaft-RPM : 5200 1/min
Max. continuous power (acc. to man.).. : 96 KW
at crankshaft-RPM : 5000 1/min
1st Exh. muffler - Qty/Manufacturer ... : 1 / Celier Aviation
2nd Exh. muffler - Qty/Manufacturer ... : 1 / Celier Aviation
Intake muffler - Qty/Manufacturer : 1 Filter / K&N / Rotax

8.1.1.b. Propeller

Manufacturer : Kaspar
Model : KA 2/3 LT
Qty/Material of blades. : 3 / CFK
Max. diameter : 1,72 m
Pitch : variable angle measured at R 0,74 m
Propeller speed at full
throttle on the ground. : 2060 1/min
Pitch adjustment : yes / in-flight (constant speed)

8.1.1.c. Reduction unit

Type : gear transmission
Reduction ratio.. : 2,43 : 1

8.2.1.d. Noise emission: 66,5 dB(A) acc. to LVL 2004

8.1.2.b. Propeller

Manufacturer : Kaspar
Model : KA 2/3
Qty/Material of blades. : 3 / CFK
Max. diameter : 1,72 m
Pitch : 12 degrees measured at R 0,74 m
Propeller speed at full
throttle on the ground. : 2060 1/min
Pitch adjustment : yes / on the ground

8.1.2.c. Reduction unit

Type : gear transmission
Reduction ratio.. : 2,43 : 1

8.2.2.d. Noise emission: 66,5 dB(A) acc. to LVL 2004

9. Fuel system

Tanks capacity : 2 x 42,5L, with unusable volume of 2L



10. Equipment

1. 1 mech. airspeed ind., 1 mech. altitude ind., 1 liquid compass
2. Firewall covered with flame-retardant material on the engine side
3. 1 Rotor RPM meter
4. 1 Multi-Instrument (for example MED 80 / MGL E-1)
5. Main landing gear tires 4.00-6"
6. Trim tab on the right rudder
7. Pitch and roll trim mechanism for the rotor
8. Prerotation system with bevel gear and flexible shaft

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III. Approved equipment options

- 1) Main landing gear tires 6.00-6"
- 2) Heating

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IV. Operating instructions - Supplements - Restrictions

1. Manual for operation of XENON IV: Flight Manual, Issue 25.06.2015
2. Manual for maintenance and inspections of XENON IV: Maintenance Manual, Issue 01.12.2014
3. Manual for operation of XENON IV GEO: Supplement to Flight Manual, Issue 18.09.2015
4. Manual for operation of XENON IV CA-22: Supplement to Flight Manual, Issue 26.10.2016
5. Manual for maintenance and inspections of XENON IV CA-22: Maintenance Manual, Issue 26.10.2016
6. Max. pilot weight 110 kg per seat
7. Min. pilot weight 60 kg
8. Max. luggage weight 2 x 30kg

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V. Version changes

Changes in XENON IV GEO:

- Two cutouts in the fuselage bottom on the right side
- Lockable cutout covers
- Additional equipment fittings

Changes in XENON IV CA-22:

- Two sidepods on the fuselage
- Extended cockpit
- Extra luggage space
- Third door on the front right of the fuselage (optional)

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VI. Revisions and supplements for Type Certificate

- Issue No.1, 13.04.2015: First Issue of Type Certificate
- Issue No.2, 25.06.2015: FHB
- Issue No.3, 03.12.2015: Geo, Kaspar fixed
- Issue No.4, 26.10.2016: CA-22
- Issue No.5, 01.11.2016: Suppl. Tech. Data

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