



European Aviation Safety Agency

EASA

**TYPE-CERTIFICATE
DATA SHEET**

EASA.A.546

PS-28 Cruiser

Type Certificate Holder:

Czech Sport Aircraft a.s.

Na Záhonech 1177/212
686 04 Kunovice
CZECH REPUBLIC

For model: PS-28 Cruiser

Issue 01: 16 April 2012

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SECTION A: PS-28 CRUISER

AI. General

- | | |
|-------------------------------------|----------------------------------------------------------------------------------------|
| 1. Data Sheet No | EASA.A.546 |
| 2. a) Type: | P-28 Cruiser |
| b) Model: | P-28 Cruiser |
| c) Variant: | P-28 Cruiser |
| 3. Airworthiness Category: | Restricted |
| 4. Manufacturer: | Czech Sport Aircraft a.s.
Na Záhonech 1177/212
686 04 Kunovice
CZECH REPUBLIC |
| 5. Certification Application Date: | 31 March 2011 |
| 6. EASA Type Certificate Issue Date | 16 April 2012 |

A.II. EASA Certification Basis

- | | |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 1. Reference Date for determining the applicable requirements: | 27 June 2011 |
| 2. Airworthiness Requirements: | Certification Specifications for Light Sport Aeroplanes CS-LSA, Initial Issue, June 27, 2011
For detailed information see CRI-A01 |
| 3. Special Conditions: | None |
| 4. Exemptions: | None |
| 5. Deviations: | None |
| 6. Equivalent Safety Findings: | None |
| 7. Requirements elected to comply: | None |
| 8. Environmental Standards: | ICAO Annex 16, Chapter 10 |

A.III. Technical Characteristics and Operational Limitations

- | | | | |
|-----|------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1. | Type Design Definition | PS-28 Cruiser RTC Type Design - Report No. PS-REP-10-02-EN, Rev. 11, or later approved revisions | |
| 2. | Description | Two-seat, low wing, single-engine, semi-monocoque structure, with tricycle landing gear | |
| 3. | Equipment | PS-28 Cruiser RTC Type Design - Report No. PS-REP-10-02-EN, Rev. 11, or later approved revisions | |
| | | The minimum instruments and equipment list is shown in POH Section 2 – Limitations. | |
| 4. | Dimensions | Span | 8.600 m |
| | | Length | 6.620 m |
| | | Height | 2.315 m |
| | | Wing Area | 12.3 m ² |
| 5. | Engine | Rotax 912 S2
TC EASA.E.121
or
Rotax 912 ULS2
Certified as part of the aircraft | |
| 6.1 | Limitations | Power: | Max. takeoff: 73.5 kW at 5,800 rpm (max. 5 min)
Max. continuous: 69 kW at 5,500 rpm
Cruising (75 %): 51 kW at 5,000 rpm |
| | | Engine speed: | Max. takeoff: 5,800 rpm (max. 5 min)
Max. continuous: 5,500 rpm
Cruising (75 %): 5,000 rpm
Idling: 1,400 rpm (minimum) |
| | | Oil pressure: | Minimum: 0.8 bar below 3,500 rpm
Maximum: 7 bar cold engine starting
Optimum: 2 – 5 bar above 3,500 rpm |
| | | Oil temperature: | Minimum: 50 °C
Maximum: 130 °C
Optimum: 90 – 110 °C |
| | | Cylinder head temperature (CHT): | Maximum: 135 °C |

Exhaust gas temperature (EGT):
Nominal: 800 °C
Maximum: 850 °C
Max. takeoff: 880 °C
Fuel pressure: Minimum: 0.15 bar
Maximum: 0.4 bar

7. Propeller

KLASSIC 170/3/R
Certified as part of the aircraft
Number of blades 3
Diameter 1,712 mm +/- 3 mm
Sense of rotation: clockwise, in pilot's view
Pitch setting according AMM and POH

8. Fluids

7.1 Fuel:

MOGAS
European standards:
min. RON 95, EN 228 Super, EN 228 Super plus
US standard:
ASTM D 4814
Canadian standards:
min. AKI 91, CAN/CGSB-3.5 Quality 3
AVGAS 100 LL

7.2 Oil:

AeroShell Oil Sport Plus 4
SAE: 10W-40, API: SL

7.3 Coolant:

ASTM D 3306, VW TL 774C
Mixing ratio coolant/water: 50/50

8 Fluid capacities:

8.1 Fuel:

Total fuel quantity: 114 litres
Total usable fuel: 113 litres

8.2 Oil:

Minimum 3.3 litres
Maximum 3.8 litres

8.3 Coolant system capacity

Approx. 2.5 litres

9. Airspeeds (IAS):

Never exceed speed	VNE	138 kts	256 km/h
Design maneuvering speed	VA	88 kts	163 km/h
Maximum flap extended speed	VFE	75 kts	139 km/h
Stalling speed	VS0	31 kts	57 km/h

10. Maximum Operating Altitude: 15,000 ft

11. Operation: VFR Day only

12. Maximum Weights:
- | | |
|--------------------------------------------|--------------|
| Maximum takeoff and landing weight | 600 kg |
| Maximum fuel weight | 82 kg |
| Maximum baggage weight in rear fuselage | 18 kg |
| Maximum baggage weight in each wing locker | 10 kg |
| Empty weight (minimum equipment) | 374 kg + 2 % |
13. Centre of Gravity Range:
- | | |
|---------------------------------------|---------------------------------------------------|
| Empty weight centre of gravity range: | 28.5 to 29.5 % of MAC
427.5 to 442.5 mm of MAC |
| Operating centre of gravity range: | 28 to 35 % of MAC
420 to 525 mm of MAC |
14. Datum:
- The datum (reference plane) for arms measuring is on the wing leading edge – rib No. 4.
15. Levelling Procedure
- Placement of scales under each wheel.
Deflation of the nose tire and/or lowering or raising the nose strut to properly centre the bubble in the level.
16. Minimum Flight Crew:
- 1 (pilot)
17. Maximum Passenger Seating Capacity:
- 2 (including crew)
18. Baggage/Cargo Compartments:
- max. 38 kg
19. Wheels and Tyres:
- | | |
|---------------|--------------------------------------------------------------------------|
| Main wheel | MHE51CZ (5 in) |
| Nose wheel | WHLNW51CC.75R (5 in) |
| Tyre and tube | Goodyear FLIGHT SPECIAL II - 5.00-5 in
(or equivalent aircraft grade) |
20. Lifetime limitations
- Refer to AMM, Section 2

A.IV. Operating and Service Instructions

PS-28 Cruiser Pilot's Operating Handbook (LTD+ avionics equipment) Rev. - issued on 2011-09-01, or later approved revisions	PS-POH-1-1-11
PS-28 Cruiser Pilot's Operating Handbook (6-pack avionics equipment) Rev. - issued on 2011-10-24, or later approved revisions	PS-POH-1-1-12
PS-28 Cruiser / SportCruiser Maintenance Manual Rev. 2 issued on 2011-11-08, or later approved revisions	CR-MM-1-0-00
PS-28 Cruiser / SportCruiser Instructions for Continued Airworthiness Rev. - issued on 2011-03-01, or later approved revisions	CR-ICA-1-0-00
PS-28 Cruiser / SportCruiser Aircraft Assembly Manual Rev. - issued on 2011-03-01, or later approved revisions	CR-AAM-0-0-00
PS-28 Cruiser / SportCruiser Wiring Manual (LTD+ avionics equipment) Rev. - issued on 2011-03-01, or later approved revisions	CR-WMA-1-0-00
PS-28 Cruiser / SportCruiser Wiring Manual (6-pack avionics equipment) Rev. - issued on 2011-03-01, or later approved revisions	CR-WMA-1-0-04
PS-28 Cruiser / SportCruiser / PiperSport Illustrated Parts Catalogue Rev. - issued on 2010-12-12, or later approved revisions	CR-IPC-1-0-00

A. V Notes

None

ADMINISTRATIVE SECTION

I. Acronyms

II. Type Certificate Holder Record

TC Holder	Period
Czech Sport Aircraft a.s. Na Záhonech 1177/212 686 04 Kunovice CZECH REPUBLIC	

III. Change Record

Issue	Date	Changes
Issue 01	16 April 2012	Initial Issue