



## ***European Aviation Safety Agency***

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**EASA**

**TYPE-CERTIFICATE  
DATA SHEET**

**EASA.A.574**

**SZD-54 „Perkoz“**

**Allstar PZL Glider Sp. z o.o.**

ul. Cieszyńska 325  
43-300 Bielsko-Biała  
POLAND

For models: SZD-54-2 “Perkoz”

Issue 01: 20 November 2013

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## **SECTION A: SZD-54-2 “Perkoz”**

### **A.I. General**

- |                                       |  |
|---------------------------------------|--|
| 1. Data Sheet No.:                    | EASA.A.574   |
| 2. a) Type:                           | SZD-54 “Perkoz”                                    |
| b) Model:                             | SZD-54-2 “Perkoz”                                  |
| c) Variant:                           |  |
| 3. Airworthiness Category:            | Sailplane - Utility (U) and Aerobatic (A) Category |
| 4. Manufacturer:                      | Allstar PZL Glider Sp. z o.o.                      |
| 5. Certification Application<br>Date: | 06 July 2010                                       |
| 6. EASA Certification Date            | 20 November 2013                                   |

### **A.II. EASA Certification Basis**

- |  |   |
|--|---|
| 1. Reference Date<br>for determining the<br>applicable requirements: | 06 July 2010  |
| 2. Airworthiness Requirements:                                       | Certification Specifications for Sailplanes<br>and Powered Sailplanes CS-22,<br>Amendment 2, 5 March 2009 |
| 3. Special Conditions:   | None  |
| 4. Exemptions:   | None  |
| 5. Deviations:   | None  |
| 6. Equivalent Safety Findings:                                       | None  |
| 7. Requirements elected to<br>comply:                                | None  |
| 8. Environmental Standards:  | None  |

### **A.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition:
  - List of Drawings, Document No. 542.3.02, issue 1, 08.08.2013, or later approved revision.
  - Equipment List, Document No. 542.1.05, issue 1, 18.06.2013, or later approved revision.
  
2. Description: Two-seat trainer sailplane of utility and aerobatic category. Cantilever mid-wing monoplane with classic tail unit. Wings are equipped with replaceable flat wingtips or winglets. All composite structure, mainly GFRP (CFRP in minor units). Fixed tandem-type landing gear with nose wheel and auxiliary tail wheel.
  
3. Equipment: Refer to the Technical Service Manual, Section 8.
  
4. Dimensions:
 

Span:	17,50 m
Length:	8,44 m
Wing area:	16,36 m <sup>2</sup>
  
5. Launching Hooks:
 

Nose tow hook:	TOST E
Winch hook:	TOST G
  
6. Weak links:
 

Ultimate strength for aero-towing:	677+10% daN
Nominal strength for winch launching:	677±10% daN
  
7. Load factors:
 

7.1 Utility category	+5,3 / -2,65	(up to V <sub>A</sub> )
	+4,0 / -1,5	(up to V <sub>NE</sub> )
7.2 Aerobatic category	+7,0 / -5,0	(up to V <sub>NE</sub> )
7.3 Airbrakes extended	+3,5 / -1,5	(up to V <sub>NE</sub> )
  
8. Air Speeds:
 

	Category	U	A
IAS [km/h]	Never Exceed Speed	V <sub>NE</sub>	244 266
	Rough Air Speed	V <sub>RA</sub>	169 190
	Manoeuvring Speed	V <sub>A</sub>	169 190
	Max. Aero-tow Speed	V <sub>T</sub>	150 150
	Max. Winch-launch Speed	V <sub>W</sub>	140 140
  
9. Operational Capability: Approved for VFR-day conditions.  
Cloud flying permitted in accordance with binding regulations.

- |   |   |                                    |
|---|---|------------------------------------|
| 10. Maximum Masses:                     | Utility category:   | 585 kg                             |
|   | Aerobatic category:   | 565 kg                             |
| 11. Centre of Gravity Range:            | Forward limit:  | 273 mm aft of datum<br>(23,5% MAC) |
|   | Rearward limit:   | 495 mm aft of datum<br>(46,0% MAC) |
| 12. Datum:                              | Vertical plane going through leading points of wing root aerofoil section                             |                                    |
| 13. Levelling Means:                    | Wing root aerofoil section chords or wedge 27/1000 on the slope of top rear fuselage to be horizontal |                                    |
| 14. Control surface deflections:        | Refer to Technical Service Manual, Section 6.   |                                    |
| 15. Minimum Flight Crew:                | 1 pilot   |                                    |
| 16. Maximum Passenger Seating Capacity: | 2 seats<br>(1 pilot + 1 passenger) or (2 pilots)  |                                    |
| 17. Baggage/Cargo Compartments:         | Baggage compartment aft of rear seat;<br>max. allowable load: 17 kg                                   |                                    |
| 18. Wheels and Tyres:                   |   |                                    |
| 18.1 Main wheel                         | TOST 5" disc brake wheel 122-25<br>tire: Michelin 5.00-5/10/120 (or analogue)                         |                                    |
| 18.2 Nose wheel                         | Allstar PZL Glider CT.I5.00.00<br>tire: Stomil 255×110 (or analogue)                                  |                                    |
| 18.3 Tail wheel                         | Allstar PZL Glider CT.I9.01.00<br>tire: Agromech 200×50 (or analogue)                                 |                                    |

#### **A.IV. Operating and Service Instructions**

1. Flight Manual:
  - *INSTRUKCJA UŻYTKOWANIA W LOCIE* szybowca SZD-54-2 „Perkoz”, Dokument nr 542.4.01, wydanie 1, Grudzień 2012
  - FLIGHT MANUAL for a sailplane SZD-54-2 “Perkoz”, Doc. No. 542.4.01, issue 1, December 2012
2. Technical Manual:
  - *INSTRUKCJA OBSŁUGI TECHNICZNEJ* szybowca SZD-54-2 „Perkoz”, Dokument nr 542.4.02, wydanie 1, Grudzień 2012
  - TECHNICAL SERVICE MANUAL for a sailplane SZD-54-2 “Perkoz”, Doc. No. 542.4.02, issue 1, December 2012
3. Instruments and aggregates:
  - Operating Manual for the TOST Release (for release types installed), latest approved revision.
  - Installation and Operating Manual for TOST Aircraft Wheels, latest approved revision.
  - *Sygnalizator przeciągnięcia ANTI-STALL SP3. Instrukcja Obsługi Technicznej, Wyd. I, 23.03.1995 r.*
  - Stall Monitor Anti-Stall SP3. Installation and Service Manual, 1-st Edition, 23.03.1995.
  - *Sygnalizator przeciągnięcia ANTI-STALL SP3. Instrukcja Użytkowania w Locie, Wyd. I, 23.03.1995 r.*
  - Stall Monitor Anti-Stall SP3. Flight Manual, 1-st Edition, 23.03.1995.

**A.V. Notes:**

1. This TCDS, Section A applies to S/N 542.A.yy.nnn, starting from 542.A.11.002 where:  
yy - the year of an aircraft manufacture,  
nnn - the successive aircraft number.
2. All glider outside surfaces must be white painted. No registration number or any colour marks on the wings and stabilizer upper surfaces are allowed.

## **ADMINISTRATIVE SECTION**

### I. Acronyms

CFRP Carbon Fibre Reinforced Plastic  
GFRP Glass Fibre Reinforced Plastic  
MAC Mean Aerodynamic Chord  
S/N Aircraft Serial Number  
VFR Visual Flight Rules

### II. Type Certificate Holder Record

Allstar PZL Glider Sp. z o.o.  
ul. Cieszyńska 325  
43-300 Bielsko-Biała  
POLAND

### III. Change Record

<b>Issue</b>	<b>Date</b>	<b>Changes</b>	<b>TC Issue No. &amp; Date</b>
Issue 01	20 November 2013	Initial issue	Issue 01 20/11/2013