



TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.038

for
Swift S-1

Type Certificate Holder
Secint Air Support Poland sp. z o.o.

CEGIELNIANA STR. 4A/15
30-404 KRAKÓW PL Malopolskie

For models: Swift S-1

The Type Certificate EASA.A.038 has been issued by EASA in accordance with Regulation (EU) No 2018/1139, in particular Article 77 1 (e) thereof and Regulation (EU) No 748/2012 Annex 1b.



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Section A: SWIFT S-1

A.I. General

- | | |
|---|---|
| 1. Type Designation: | SWIFT S-1 |
| 2. Airworthiness Category: | Sailplane - Aerobatic (A) Category |
| 3. Certification process: | Regulation (EU) No 748/2012 – Annex Ib |
| 4. Manufacturer: | Zakład Remontów i Produkcji Sprzętu Lotniczego Edward Margański
ul. Cieszyńska 321
43-300 Bielsko-Biała
POLAND |
| 5. Certification Date | 12 August 1992 |
| 6. This TCDS replaces the Polish TC/TCDS No. BG-181 | |

A.II. Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | May 1990 |
| 2. Airworthiness Requirements: | JAR-22, Change 4, issued on 7 May 1987 |
| 3. Special Conditions: | None |
| 4. Exemptions: | <ul style="list-style-type: none">• Landing gear and airbrakes operating forces exceed limit 20 daN. (JAR 22.143 & 22.145).• Stall warning outside the required limit 1,05-1,10 V_{S1} (JAR 22.207).• Fuselage structure verified up to 77% of emergency landing ultimate loads (JAR 22.561). |
| 5. Deviations: | None |
| 6. Equivalent Safety Findings: | None |
| 7. Requirements elected to comply: | None |
| 8. Environmental Standards: | None |



A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: List of drawings, 5 November 1992
2. Description: Single-seat, mid-wing glider with conventional tailplane arrangement. All composite construction (GFRP).
Wing equipped with Schempp-Hirth airbrake, extended on upper surface only, and Friese-type aileron.
Horizontal tailplane split in stabiliser and elevator, and vertical - in fin and rudder.
Retractable main landing gear, with wheel brake.
3. Equipment: Minimum equipment:
 - airspeed indicator,
 - altimeter,
 - accelerometer,
 - stall warning device,
 - 5-point pilot harness,
 - parachute or back cushion (8 cm thick).
4. Dimensions: Span: 12,68 m
Length: 6,91 m
Height: 1,74 m (flight attitude)
Wing area: 11,73 m²
5. Tow release:
 - nose towing hook
TOST E85 or SZD-III
 - CG towing hook (option)
TOST Europa G 88
6. Weak links: Ultimate strength:
 - for winch launch 745 daN
 - for aero-tow 745 daN
7. Load factors: +10,0 / -7,5 over the whole airspeed range
8. Air Speeds (IAS):

Never Exceed Speed	V _{NE}	287 km/h
Manoeuvring Speed	V _A	236 km/h
Rough Air Speed	V _{RA}	236 km/h
Max Aero-tow Speed	V _T	151 km/h
Max Winch-launch Speed	V _W	140 km/h
9. Operational Capability: VFR-day only
10. Launch methods: Aero tow
Winch launch
11. Masses: Maximum mass: 410 kg
Maximum mass of non-lifting parts: 260 kg



12. Centre of Gravity Range: Empty glider with standard equipment:
Forward limit: 620 mm aft of the datum
Rearward limit: 640 mm aft of the datum
Centre of Gravity operational limits:
Forward limit: 257 mm aft of the datum
(26,0% MAC)
Rearward limit: 414 mm aft of the datum
(41,9% MAC)
MAC is 984 mm;
0% MAC is situated at 1,3 mm aft of the datum.
13. Datum: Wing leading edge at root rib.
14. Levelling Means: Leading and trailing edge at root rib at the same level.
15. Seating Capacity: 1 pilot
16. Lifetime limitations: Refer to the Technical Service Manual
17. Other limitations: The following is prohibited:
- night flying,
- flight in icing conditions.
18. Control surface deflections:
- | | | |
|-----------|---------|-----------------|
| Aileron: | - up | 22° ±1° |
| | - down | 17° ±1° |
| Elevator: | - up | 25° +1° / -1,5° |
| | - down | 25° +1° / -1,5° |
| Rudder: | - left | 30° +1° / -2° |
| | - right | 30° +1° / -2° |

A.IV. Operating and Service Instructions

1. Flight Manuals:
- | | |
|---------|---|
| English | ● Flight Manual SWIFT S-1, Issue II, December 1992. |
| German | ● Flughandbuch SWIFT S-1, Ausg. III, Juli 2003, LBA-anerkannt. |
| Polish | ● <i>Instrukcja Użytkowania w Locie</i> SWIFT S-1, wydanie II, grudzień 1992. |
2. Maintenance Manuals:
- | | |
|---------|---|
| English | ● Technical Service and Maintenance Manual SWIFT S-1, Issue II, December 1992. |
| German | ● Wartungshandbuch SWIFT S-1, Ausg. III, April 2003. |
| Polish | ● <i>Instrukcja Obsługi Technicznej, Prace Okresowe</i> , SWIFT S-1, wydanie II, grudzień 1992. |



3. Instructions for equipment installed, latest approved version:
 - TOST, Operating manual for E85 tow release.
 - TOST, Operating manual for Europa G88 safety release.
 - SZD, Operating manual for SZD III tow release.
 - TOST, Installation and operating manual for TOST aircraft wheels.

A.V. Notes:

1. Serial Numbers:
P-05, P-06, P-08, and S/N 101 through S/N 125
2. Upper surface of wings, horizontal tail plane and fuselage, exposed to sun radiation, must be painted white. No colour markings allowed on these surfaces.



Administrative section

I. Acronyms

MAC Mean Aerodynamic Chord
S/N Aircraft Serial Number
VFR Visual Flight Rules

II. Type Certificate Holder Record

ZAKŁADY LOTNICZE Margański & Mysłowski S.A.
ul. Strażacka 60
43-300 Bielsko-Biała
POLAND

As of 12 December 2024
Secint Air Support Poland sp. z.o.o.
CEGIELNIANA STR. 4A/15
30-404 KRAKÓW PL Malopolskie
Poland

III. Change Record

Issue	Date	Changes
01	23/06/2005	Transfer from Polish Type Certificate No. BG-181 to the EASA Type Design
02	23/05/2016	Editorial corrections and rearrangement to EASA TCDS current format.
03	dd/12/2024	TC transfer to Secint Air Support Poland

