



TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.017

for
ASW 28

Type Certificate Holder
Alexander Schleicher GmbH & Co. Segelflugzeugbau

Alexander-Schleicher-Str. 1
36163 Poppenhausen
Germany

For models: ASW 28
ASW 28-18
ASW 28 B



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Section A: **ASW 28**

A.I General

- | | |
|--|---|
| 1. Type/ Model/ Variant | |
| 1.1 Type: | ASW 28 |
| 1.2 Model: | ASW 28 |
| 2. Airworthiness Category | utility |
| 3. Manufacturer | Alexander Schleicher GmbH & Co.
Segelflugzeugbau
Alexander-Schleicher-Str. 1
36163 Poppenhausen
Germany |
| 4. State of Design Authority | Germany |
| 5. State of Design Auth. Type Certificate Date | 18 July 2001 |

A.II EASA Certification Basis

- | | |
|---|---|
| 1. Reference Date for determining the applicable requirements | Defined by LBA letter M 531-423/00, dated
28 December 2000 |
| 2. Airworthiness Requirements | JAR-22, Change 5, issued 28 October 1995 |
| 3. Special Conditions | none |
| 4. Exemptions | none |
| 5. (Reserved) Deviations | none |
| 6. Equivalent Safety Findings | JAR 22.335(f) |
| 7. Environmental Protection | none |



A.III Technical Characteristics and Operational Limitations

1. Type Design Definition List of the drawing files of the sailplane ASW 28, 6 June 2001, LBA approved
2. Description Single-seat, shoulder-winged sailplane, CRP/GRP/SRP-composite construction, T-shaped horizontal tailplane with fin and elevator, Schempp-Hirth brake-flaps on upper wing surface, water ballast tanks in the wing and optionally in the vertical fin, retractable landing gear equipped with brakes and spring suspension, 15 m span with winglets
3. Equipment
Min. required equipment:
1 Air speed indicator (up to 300 km/h)
1 Altimeter
1 4-Point harness (symmetrical)
Additional Equipment refer to Flight and Maintenance Manual
4. Dimensions
Span: 15,0 m
Wing area: 10,5 m²
Length: 6,59 m
Height: 1,3 m
5. Launching Hooks
 - 1) Nose tow hook Tost E 22
LBA Datasheet No. 11.402/9 NTS
 - 2) Nose tow hook Tost E 72
LBA Datasheet No. 60.230/1
 - 3) Nose tow hook Tost E 75
LBA Datasheet No. 60.230/1
 - 4) Nose tow hook Tost E 85
LBA Datasheet No. 60.230/1
 - 5) Safety hook Tost Europa G 72
LBA Datasheet No. 60.230/2
 - 6) Safety hook Tost Europa G 73
LBA Datasheet No. 60.230/2
 - 7) Safety hook Tost Europa G 88
LBA Datasheet No. 60.230/2
6. Weak Links Ultimate strength:
for aerotow max. 660 daN
for winch and auto tow max. 660 daN
7. Load Factors +5,3 / -2,65 (up to V_A)
+4,0 / -1,5 (up to V_{NE})
8. Air Speeds
 - 8.1 Manoeuvring speed 200 km/h
 - 8.2 Never exceed speed 270 km/h
 - 8.3 Maximum permitted speeds
- in strong turbulence 200 km/h



- in aero-tow	170 km/h
- in winch-launch	140 km/h
- for gear operation	200 km/h
9. Approved Operations Capability	VFR Day Cloud flying and limited aerobatic manoeuvres permitted according to the specifications in the Flight Manual without water ballast
10. Launch methods	Aero tow Winch launch and auto launch
11. Maximum Masses	
11.1 Maximum Take-off Mass	525 kg
11.2 Max. Mass of non-lifting parts	260 kg
12. Centre of Gravity Range	222 – 345 mm aft of datum
13. Datum	wing leading edge at root rib
14. Levelling Means	upper side of fuselage boom placed at slope 1000:49
15. Control Surface Deflections	Refer to Maintenance Manual
16. Minimum Flight Crew	1
17. Maximum Passenger Seating Capacity	0
18. Baggage/ Cargo Compartments	12 kg
19. Lifetime limitations	Refer to Maintenance Manual



A.IV Operating and Service Instructions

- | | |
|---|---|
| 1. Flight Manual | Flight Manual for sailplane model ASW 28, Issue 02.07.2001, or later EASA approved revisions |
| 2. Maintenance Manual | Maintenance Manual for the Sailplane ASW 28, Issue 02.07.2001, or later EASA approved revisions |
| 3. Structural Repair Manual | Repair Manual Alexander Schleicher, latest approved revision |
| 4. Operating Manual for the Launching Hooks | Manual for the Tost release, latest approved issue |



A.V Notes

1. Production is confined to industrial production.
2. All parts made from fibre reinforced plastic exposed to sun radiation – except the areas for markings and registration and except from the inner sides of the engine supports – must have a white colour surface.



Section B: **ASW 28-18**

B.I General

- | | |
|---|---|
| 1. Type/ Model/ Variant | |
| 1.1 Type: | ASW 28 |
| 1.2 Model: | ASW 28-18 |
| 2. Airworthiness Category | utility |
| 3. Manufacturer | Alexander Schleicher GmbH & Co.
Segelflugzeugbau
Alexander-Schleicher-Str. 1
36163 Poppenhausen
Germany |
| 4. EASA Type Certification Application Date | 16 November 2000 |
| 5. EASA Type Certification Date | 6 December 2004 |

B.II EASA Certification Basis

- | | |
|---|---|
| 1. Reference Date for determining the applicable requirements | Defined by LBA letter M 531-423/00, dated
28 December 2000 |
| 2. Airworthiness Requirements | JAR-22, Change 5, issued 28 October 1995 |
| 3. Special Conditions | none |
| 4. Exemptions | none |
| 5. (Reserved) Deviations | none |
| 6. Equivalent Safety Findings | JAR 22.335(f) |
| 7. Environmental Protection | none |



B.III Technical Characteristics and Operational Limitations

1. Type Design Definition
List of the drawing files ASW 28, issued 21 September 2004, LBA approved
Optional with engine preparation: List of the drawing files ASW 28 (E), issued 18 October 2004, LBA approved
2. Description
Single-seat, shoulder-winged sailplane, CRP/GRP/SRP-composite construction, T-shaped horizontal tailplane with fin and elevator, Schempp-Hirth brake-flaps on upper wing surface, water ballast tanks in the wing and optionally in the vertical fin, retractable landing gear equipped with brakes and spring suspension, optionally 15 m span with winglets, or 18 m span with winglets. Optional preparation for engine installation.
3. Equipment
Min. required equipment:
1 Air speed indicator (up to 300 km/h)
1 Altimeter
1 4-Point harness (symmetrical)
Additional Equipment refer to Flight and Maintenance Manual
4. Dimensions
Span: 15,0 m 18,0 m
Wing area: 10,5 m² 11,88 m²
Length: 6,59 m 6,59 m
Height: 1,3 m 1,3 m
5. Launching Hooks
 - 1) Nose tow hook Tost E 22
LBA Datasheet No. 11.402/9 NTS
 - 2) Nose tow hook Tost E 72
LBA Datasheet No. 60.230/1
 - 3) Nose tow hook Tost E 75
LBA Datasheet No. 60.230/1
 - 4) Nose tow hook Tost E 85
LBA Datasheet No. 60.230/1
 - 5) Safety hook Tost Europa G 72
LBA Datasheet No. 60.230/2
 - 6) Safety hook Tost Europa G 73
LBA Datasheet No. 60.230/2
 - 7) Safety hook Tost Europa G 88
LBA Datasheet No. 60.230/2
6. Weak Links
Ultimate strength:
for aerotow max. 825 daN
for winch and auto tow max. 825 daN
7. Load Factors
+5,3 / -2,65 (up to V_A)
+4,0 / -1,5 (up to V_{NE})



8. Air Speeds	
8.1 Manoeuvring speed	200 km/h
8.2 Never exceed speed	270 km/h
8.3 Maximum permitted speeds	
- in strong turbulence	200 km/h
- in aero-tow	170 km/h
- in winch-launch	140 km/h
- for gear operation	200 km/h
9. Approved Operations Capability	VFR Day Cloud flying and limited aerobatic manoeuvres permitted according to the specifications in the Flight Manual without water ballast
10. Launch methods	Aero tow Winch launch and auto launch
11. Maximum Masses	
11.1 Maximum Take-off Mass	with 15m wingspan: 525 kg with 18m wingspan: 575 kg
11.2 Max. Mass of non-lifting parts	285 kg
12. Centre of Gravity Range	with 15m wingspan: 227 – 406 mm with 18m wingspan: 233 – 406 mm aft of datum
13. Datum	wing leading edge at root rib
14. Levelling Means	upper side of fuselage boom placed at slope 1000:49
15. Control Surface Deflections	Refer to Maintenance Manual
16. Minimum Flight Crew	1
17. Maximum Passenger Seating Capacity	0
18. Baggage/ Cargo Compartments	12 kg
19. Lifetime limitations	Refer to Maintenance Manual



B.IV Operating and Service Instructions

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|---|--|
| 1. Flight Manual | Flight Manual for sailplane model ASW 28-18, Issue 21.10.2004, or later EASA approved revisions |
| 2. Maintenance Manual | Maintenance Manual for the sailplane model ASW 28-18, Issue 21.10.2004, or later EASA approved revisions |
| 3. Structural Repair Manual | Repair Manual Alexander Schleicher, latest approved revision |
| 4. Operating Manual for the Launching Hooks | Manual for the Tost release, latest approved issue |



B.V Notes

1. Production is confined to industrial production.
2. All parts made from fibre reinforced plastic exposed to sun radiation – except the areas for markings and registration and except from the inner sides of the engine supports – must have a white colour surface.



Section C: ASW 28 B

C.I General

- | | |
|---|---|
| 1. Type/ Model/ Variant | |
| 1.1 Type: | ASW 28 |
| 1.2 Model: | ASW 28 B |
| 2. Airworthiness Category | utility |
| 3. Manufacturer | Alexander Schleicher GmbH & Co.
Segelflugzeugbau
Alexander-Schleicher-Str. 1
36163 Poppenhausen
Germany |
| 4. EASA Type Certification Application Date | 28 January 2022 |
| 5. EASA Type Certification Date | 09 March 2023 |

C.II EASA Certification Basis

- | | |
|---|---|
| 1. Reference Date for determining the applicable requirements | 28 February 2022 |
| 2. Airworthiness Requirements | JAR-22, Change 5, issued 28 October 1995
CS 22.49; 22.1529; 22.1581; 22.1583;
22.1585; 22.1587; 22.1589 at Amdt. 3, 15
Sept. 2021. |
| 3. Special Conditions | none |
| 4. Exemptions | none |
| 5. (Reserved) Deviations | none |
| 6. Equivalent Safety Findings | JAR 22.335(f) |
| 7. Environmental Protection | none |



C.III Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawing files ASW 28 B, issue 16 September 2022
2. Description	Single-seat, shoulder-winged sailplane, CRP/GRP/SRP-composite construction, T-shaped horizontal tailplane with fin and elevator, Schempp-Hirth brake-flaps on upper wing surface, water ballast tanks in the wing and optionally in the vertical fin, retractable landing gear equipped with brakes and spring suspension, 15 m span with winglets
3. Equipment	Min. required equipment: 1 Air speed indicator (up to 300 km/h) 1 Altimeter 1 4-Point harness (symmetrical) 1 Parachute or back cushion (thickness approx. 8 cm) 1 Outside air temperature indicator (when flying with water ballast) Additional Equipment refer to Flight and Maintenance Manual
4. Dimensions	Span: 15,0 m Wing area: 10,5 m ² Length: 6,59 m Height: 1,3 m
5. Launching Hooks	1) Nose tow hook Tost E 22 LBA Datasheet No. 11.402/9 NTS 2) Safety hook Tost Europa G 88 LBA Datasheet No. 60.230/2
6. Weak Links	Ultimate strength: for aerotow max. 660 daN for winch and auto tow max. 660 daN
7. Load Factors	+5,3 / -2,65 (up to V _A) +4,0 / -1,5 (up to V _{NE})
8. Air Speeds	
8.1 Manoeuvring speed	200 km/h
8.2 Never exceed speed	270 km/h
8.3 Maximum permitted speeds	
- in strong turbulence	200 km/h
- in aero-tow	170 km/h
- in winch-launch	140 km/h
- for gear operation	200 km/h
9. Approved Operations Capability	VFR Day



	Cloud flying and limited aerobatic manoeuvres permitted according to the specifications in the Flight Manual without water ballast
10. Launch methods	Aero tow Winch launch and auto launch
11. Maximum Masses	
11.1 Maximum Take-off Mass	525 kg
11.2 Max. Mass of non-lifting parts	260 kg
12. Centre of Gravity Range	222 – 345 mm aft of datum
13. Datum	wing leading edge at root rib
14. Levelling Means	upper side of fuselage boom placed at slope 1000:49
15. Control Surface Deflections	Refer to Maintenance Manual
16. Minimum Flight Crew	1
17. Maximum Passenger Seating Capacity	0
18. Baggage/ Cargo Compartments	12 kg
19. Lifetime limitations	Refer to Maintenance Manual



C.IV Operating and Service Instructions

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|---|---|
| 1. Flight Manual | Flight Manual for the sailplane ASW 28 B, Issue 01.02.2022, or later EASA approved revisions |
| 2. Maintenance Manual | Maintenance Manual for the sailplane ASW 28 B, Issue 01.02.2022, or later EASA approved revisions |
| 3. Structural Repair Manual | Repair Manual Alexander Schleicher, latest approved revision |
| 4. Operating Manual for the Launching Hooks | Manual for the Tost release, latest approved issue |



C.V Notes

1. Production is confined to industrial production.
2. All parts made from fibre reinforced plastic exposed to sun radiation – except the areas for markings and registration and except from the inner sides of the engine supports – must have a white colour surface.



Section D: Administrative Section

D.I Acronyms & Abbreviations

CRP	Carbon Fibre Reinforced Plastic
EASA	European Union Aviation Safety Agency
GRP	Glass Fibre Reinforced Plastic
JAR	Joint Aviation Requirements
LBA	Luftfahrt-Bundesamt
SRP	Synthetic Fibre Reinforced Plastic
VFR	Visual Flight Rules

D.II Type Certificate Holder Record

Alexander Schleicher GmbH & Co. Segelflugzeugbau
Alexander-Schleicher-Str. 1
36163 Poppenhausen
Germany

D.III Change Record

Issue	Date	Changes	TC Issue No. & Date
01	06 December 2004	Initial Issue	Initial Issue, 06 December 2004
02	16 March 2023	Introduction of new model ASW 28 B; Nose tow hook Tost E 22 added for models ASW 28 and ASW 28-18	09 March 2023

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