

European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

EASA.A.353

ZLIN Z 26 - SERIES

Type Certificate Holder:

ZLIN AIRCRAFT A.S.

Letiště 1578 765 81 Otrokovice CZECH REPUBLIC

For Models: Z 126, Z 126 T, Z 226 B, Z 226 T, Z 226 A, Z 226 M, Z 226 MS;

Z 326, Z 326 A, Z 326 M;

Z 526, Z 526 A, Z 526 F, Z 526 L, Z 526 AFS, Z 526 AFS-V, Z 526 M

Z 726, Z 726 K

Issue 5: 20 September 2013

CONTENTS

SECTION A: Z 126

- Al. General
- All. Certification Basis
- AIII. Technical Characteristics and Operational Limitations
- AIV. Operating and Service Instructions
- AV. Notes

SECTION B: Z 126 T

- Bl. General
- BII. Certification Basis
- BIII. Technical Characteristics and Operational Limitations
- BIV. Operating and Service Instructions
- BV. Notes

SECTION C: Z 226 B

- Cl. General
- CII. Certification Basis
- CIII. Technical Characteristics and Operational Limitations
- CIV. Operating and Service Instructions
- CV. Notes

SECTION D: Z 226 T

- DI. General
- DII. Certification Basis
- DIII. Technical Characteristics and Operational Limitations
- DIV. Operating and Service Instructions
- DV. Notes

SECTION E: Z 226 A

- El. General
- EII. Certification Basis
- EIII. Technical Characteristics and Operational Limitations
- EIV. Operating and Service Instructions
- EV. Notes

SECTION F: Z 226 M

- Fl. General
- FII. Certification Basis
- FIII. Technical Characteristics and Operational Limitations
- FIV. Operating and Service Instructions
- FV. Notes

SECTION G: Z 226 MS

- GI. General
- GII. Certification Basis
- GIII. Technical Characteristics and Operational Limitations
- GIV. Operating and Service Instructions
- GV. Notes

SECTION H: Z 326

- HI. General
- HII. Certification Basis
- HIII. Technical Characteristics and Operational Limitations
- HIV. Operating and Service Instructions
- HV. Notes

SECTION I: Z 326 A

- I.I. General
- I.II. Certification Basis
- I.III. Technical Characteristics and Operational Limitations
- I.IV. Operating and Service Instructions
- I.V. Notes

SECTION J: Z 326 M

- Jl. General
- JII. Certification Basis
- JIII. Technical Characteristics and Operational Limitations
- JIV. Operating and Service Instructions
- JV. Notes

SECTION K: Z 526

- KI. General
- KII. Certification Basis
- KIII. Technical Characteristics and Operational Limitations
- KIV. Operating and Service Instructions
- KV. Notes

SECTION L: Z 526 A

- LI. General
- LII. Certification Basis
- LIII. Technical Characteristics and Operational Limitations
- LIV. Operating and Service Instructions
- LV. Notes

SECTION M: Z 526 F

- MI. General
- MII. Certification Basis
- MIII. Technical Characteristics and Operational Limitations
- MIV. Operating and Service Instructions
- MV. Notes

SECTION N: Z 526 L

- NI. General
- NII. Certification Basis
- NIII. Technical Characteristics and Operational Limitations
- NIV. Operating and Service Instructions
- NV. Notes

SECTION 0: Z 526 AFS

- OI. General
- OII. Certification Basis
- OIII. Technical Characteristics and Operational Limitations
- OIV. Operating and Service Instructions
- OV. Notes

SECTION P: Z 526 AFS-V

- Pl. General
- PII. Certification Basis
- PIII. Technical Characteristics and Operational Limitations
- PIV. Operating and Service Instructions
- PV. Notes

SECTION R: Z 526 M

- RI. General
- RII. Certification Basis
- RIII. Technical Characteristics and Operational Limitations
- RIV. Operating and Service Instructions
- RV. Notes

SECTION S: Z726

- SI. General
- SII. Certification Basis
- SIII. Technical Characteristics and Operational Limitations
- SIV. Operating and Service Instructions
- SV. Notes

SECTION T: Z 726 K

- TI. General
- TII. Certification Basis
- TIII. Technical Characteristics and Operational Limitations
- TIV. Operating and Service Instructions
- TV. Notes

ADMINISTRATIVE SECTION

- I. Acronyms
- II. Type Certificate Holder Record
- III. Change Record

SECTION A: Z 126

AI. **General**

1. a) Type: Z 26

b) Model: Z 126

2. Airworthiness category: Aerobatic (A)

> Normal (N)

ZLIN AIRCRAFT A.S. 3. Type Certificate Holder:

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

> Gottwaldov - Otrokovice **CZECHOSLOVAKIA**

S/N: 701 - 870

5. Certification Application

Date:

6. CAA CZ Type Certificate

Date:

August 15, 1956

7. EASA Type Certificate replaces CAA CZ Type Certificate No. 4-4445-1956.

AII. **Certification Basis**

1. Reference Date for determining the applicable

requirements:

- 2. (Reserved)
- 3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, K5

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

None

Issue 5

9. EASA Environmental

Standards:

ICAO Annex 16, Volume I, Chapter 10

AIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of aircraft Z 126, No. S

126.000.

2. Description: The Z 126 aircraft is two-seat, low wing, single-

engine monoplane.

3. Equipment: Approved equipment list is stated in document

Maintenance Manual Z 126, Chapter 5.

4. Dimensions: Wing Span: 10.282 m

Length: 7.555 m Height: 2.770 m Wing Area: 14.900 m²

5. Engine:

5.1 Model: Walter Minor 4-III

5.2 Type Certificate: No. 19/4-IV A/3 ai 1946, Ministry of Transport, CZ

5.3 Limitations: Max. Continuous power

Max. Power 77 kW (105 HP)
Max. Engine speed 2 500 RPM
Max. Consumption 35 l/h

Max. Cruising power

Max. Power 59 kW (80 HP) Max. Engine speed 2 300 RPM

Max. Consumption 26 l/h

6. Load factors: For category Aerobatic (A) +6.0 g, -3.0 g

For category Normal (N) +3.5 g, -1.0 g

7. Propellers:

7.1.1 Model: V-126

7.1.2 Type Certificate: ---

7.1.3 Number of blades: 2

7.1.4 Diameter: 2 000 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction.

or

7.2.1 Model: L 26.1.8100.5

7.2.2 Type Certificate: ---

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 000 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction.

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with min. 72

octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06 % vol. Recommended kinds of fuel:

LBZ 72 LBZ 78 LBE 80 Shell 80 Esso 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at

100°C, whose per-centual carbon residue does not

exceed the value of 0.4.

MS 20

Aero Shell W100

Aero Shell W120 (in tropical climates)

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: 80 litres

Usable: 78 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

9.2 Oil: Minimum 7 litres – Maximum 11 litres

9.3 Coolant system

capacity:

None

10. Air Speeds: Never exceed speed limit V_{NE} 320 km/h IAS

Maximum speed limit near

the ground V_H 205 km/h IAS

Maximum flaps extended

speed limit V_{FE} 130 km/h IAS

TCDS EASA.A.353 Moravan Aviation Page 9 of 114
Issue 5 Z 26 - Series 20 September 2013

11. Maximum Operating

Altitude:

4 800 m

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight: 765 kg

Max. Variable Load: 194 kg

14. Centre of Gravity Range: 23 % – 26.5 % M.A.C.

M.A.C. is 1 532 mm;

0 % M.A.C. is 621 mm aft reference datum.

15. Datum: The rear part of firewall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 2^{\circ}$

down $20^{\circ} \pm 2^{\circ}$

Elevator trim up $23^{\circ} \pm 2^{\circ}$

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 30° ± 2°

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing $43^{\circ} (+2^{\circ}, -3^{\circ})$

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments: Maximum 10 kg

22. Wheels and Tyres: The wheel K 420.00 of main gear with tyre BARUM

or MITAS 420x150-6.5 or MITAS 420x150-6.5 TI

with tube 420x150;

The wheel K 56-1100.00 of main gear with tubeless

tyre MITAS 420x150-6.5 TL;

The wheels K 34-990 or K 13-0000.00 of tail gear with tyre BARUM or MITAS 260x85-4 with tube 260x85.

AIV. Operating and Service Instructions

1. Flight manual:

In Czech language
 Směrnice pro pilota letounu Z 126

In English language
 Instruction for pilot on the use and handling

of the Z 126 Aircraft

2. Maintenance and operating manual:

In Czech language
 Návod k obsluze a ošetřování letounu Z 126,

date of issue 1954

In German language
 Flugzeug Z 126 Bedienungsanleitung,

date of issue 1956

3. Repair manual:

In Czech language
 Opravárenská příručka Z 126, Z 226,

date of issue 1994

4. Illustrated parts catalogue:

In Czech language
 Seznam náhradních součástí draku letounu Z 126

Trenér, date of issue 1954

AV. Notes:

Following Z 26 aircraft have been converted to the model Z 126 by the aircraft manufacturer:

S/N: 518, 524, 525, 535, 580, 591 595, 611

Following Z 126 aircraft have been converted to the models:

T 126 M S/N: 841 Z 226 S/N: 817 Z 226 B S/N: 830, 831 Z 226 T S/N: 870

Z 226 MS: S/N: 741, 750, 804, 839

by the aircraft manufacturer.

SECTION B: Z 126 T

BI. General

1. a) Type: Z 26

b) Model: Z 126 T

2. Airworthiness category: Utility (U)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan n.p.

Gottwaldov – Otrokovice CZECHOSLOVAKIA

S/N: 780

5. Certification Application

Date:

6. CAA CZ Type Certificate February 10, 1977

Date:

7. EASA Type Certificate replaces CAA CZ Type Certificate No. 55.470 – 1957.

BII. Certification Basis

1. Reference Date for ---

determining the applicable

requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, K4, K5

5. Requirements elected to None

comply:

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety None

Findings:

Standards:

Issue 5

9. EASA Environmental

ICAO Annex 16, Volume I, Chapter 10

BIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: The specification list of aircraft Z 126 T,

No. T-S 126.000.

2. Description: The Z-126 T aircraft is two-seat, low wing, single-

engine monoplane.

3. Equipment: Approved equipment list is stated in document

Maintenance Manual Z 126, Chapter 5.

4. Dimensions: Wing Span: 10.282 m

Length: 7.555 m Height: 2.770 m Wing Area: 14.900 m²

5. Engine:

5.1 Model: Walter Minor 4-III

5.2 Type Certificate: No. 19/4-IV A/3 a.i. 1946 Ministry of Transport, CZ

5.3 Limitations: Max. Continuous power

Max. Power 77 kW (105 HP)
Max. Engine speed 2 500 RPM
Max. Comsumption 35 l/h

Max. Cruising power

Max. Power 59 kW (80 HP)
Max. Engine speed 2 300 RPM
Max. Consumption 36 l/h

Max. Consumption 26 l/h

6. Load factors: For category Utility (U) +4.4 g, -1.8 g

For category Normal (N) +3.5 g, -1.0 g

7. Propellers:

7.1.1 Model: V-126

7.1.2 Type Certificate: ---

7.1.3 Number of blades: 2

7.1.4 Diameter: 2 000 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction

or

7.2.1 Model: L 26.1.8100.5

7.2.2 Type Certificate: ---

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 000 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction.

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with min. 72

octanes.

Application of ethylated fuels is only permitted in case the T.E.L. content does not exceed the value

of 0.06 % vol.

LBZ 72 LBZ 78 LBE 80 LBE 87 Shell 80 ESSO 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4.

MS20

Aeroshell W100

Aeroshell W120 (in tropical climates)

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: 80 litres

Usable: 78 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

9.2 Oil: Minimum 7 litres – Maximum 11 litres

9.3 Coolant system

capacity: None

10. Air Speeds: Never exceed speed limit V_{NE} 300 km/h IAS

Maximum speed limit near V_H

the ground 205 km/h IAS

Maximum flaps extended V_{FE}

TCDS EASA.A.353

Moravan Aviation Z 26 - Series

Page 14 of 114 20 September 2013

speed limit

160 km/h IAS

11. Maximum Operating

Altitude:

4 750 m

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight: 815 kg

Max. Variable Load: 190 kg

14. Centre of Gravity Range: 18 % – 30.5 % M.A.C.

M.A.C. is 1 532 mm;

0 % M.A.C. is 621 mm aft reference datum.

15. Datum: The rear part of firewall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 2^{\circ}$

down $20^{\circ} \pm 2^{\circ}$

Elevator trim up $23^{\circ} \pm 2^{\circ}$

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 30° ± 2°

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing 43° (+ 2°, - 3°)

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments: Maximum 10 kg

22. Wheels and Tyres: The wheel K 420.00 of main gear with tyre BARUM

or MITAS 420x150-6.5 or MITAS 420x150-6.5 TL

with tube 420x150;

The wheel K 56-1100.00 of main gear with

tubeless tyre MITAS 420x150-6.5 TL;

The wheels K 34-990 or K 13-0000.00 of tail gear

with tyre BARUM or MITAS 260x85-4 with tube 260x85.

BIV. Operating and Service Instructions

1. Flight manual:

In Czech language
 Směrnice pro pilota letounu Z 126

In English language
 Instruction for Pilot on the use and Handling

of the Z 126 Aircraft

2. Flight manual supplement:

In Czech language
 Dodatek k letové příručce Z 126 – modifikace T

3. Maintenance and operating manual:

In Czech language
 Návod k obsluze a ošetřování letounu Z 126,

date of issue 1954

In German language
 Flugzeug Z 126 Bedienungsanleitung,

date of issue 1956

4. Repair manual:

In Czech language
 Opravárenská příručka Z 126, Z 226,

date of issue 1994

5. Illustrated parts catalogue:

In Czech language
 Seznam náhradních součástí draku letounu Z 126

Trenér, date of issue 1954

Note: Revisions are issued in Czech and English languages only.

BV. Notes:

Following Z 126 aircraft has been converted to the model

Z 226 S/N: 780

by the aicraft manufacturer.

SECTION C: Z 226 B

CI. General

1. a) Type: Z 26

b) Model: Z 226 B

2. Airworthiness category: Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan n.p.

Gottwaldov – Otrokovice CZECHOSLOVAKIA

S/N: 06-08 - 41-09; 54-09; 246 - 285

5. Certification Application

Date:

October 25,1956

6. CAA CZ Type Certificate

Date:

7. EASA Type Certificate replaces CAA CZ Type Certificate No. 4-5150-1956.

CII. Certification Basis

1. Reference Date for

determining the applicable ...

requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, K4, P3

British Civil Airworthiness Requirements, Cat D-4

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings: None

9. EASA Environmental ICAO Annex 16, Volume I, Chapter 10

Issue 5

Standards:

CIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of aircraft Z 226 B,

No. S-B 226.000.

2. Description: The Z 226 B aircraft is two-seat, single-engine

monoplane. Control system is installed in rear pilot

compartment only.

3. Equipment: Approved equipment list is stated in document

Maintenance Manual Z 226 B, Chapter V.

4. Dimensions: Wing Span: 10.280 m

Length: 7.800 m Height: 2.778 m Wing Area: 14.900 m²

5. Engine:

5.1 Model: Walter Minor 6-III

5.2 Type Certificate: No. 132/2-L/6A-a.i.-1947 Ministry of Transport, CZ

5.3 Limitations: Max. Continuous power

Max. Power 118 kW (160 HP)
Max. Engine speed 2 500 RPM
Max. Consumption 53 l/h

Max. Cruising power

Max. Power 92 kW (125 HP) Max. Engine speed 2 300 RPM

Max. Consumption 38 l/h

6. Load factors: $+ 3.8 \, \text{g}, - 1.5 \, \text{g}$

7. Propellers:

7.1.1 Model: V-226

7.1.2 Type Certificate: ---

7.1.3 Number of blades: 2

7.1.4 Diameter: 2 050 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction

or

7.2.1 Model: Z-226.640

7.2.2 Type Certificate: ---

Moravan Aviation

TCDS EASA.A.353 Page 18 of 114 Issue 5 20 September 2013 Z 26 - Series

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 050 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with min. 72

octanes.

Application of ethylated fuels is only permitted in case the T.E.L. content does not exceed the value

of 0.06 % vol.

LBZ 72 **LBZ 78 LBE 80 LBE 87** Shell 80 **ESSO 80** AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

> oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4.

MS20

Aeroshell W100

Aeroshell W120 (in tropical climates)

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: 125 litres

Usable: 123 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

45 litres in auxiliary fuselage tank

9.2 Oil: Minimum 7 litres - Maximum 11 litres

9.3 Coolant system

None capacity:

10. Air Speeds: Never exceed speed limit V_{NE} 300 km/h IAS

Maximum speed limit near V_H

the ground 200 km/h IAS

Maximum flaps extended V_{FF}

speed limit 130 km/h IAS TCDS EASA.A.353 Moravan Aviation Page 19 of 114
Issue 5 Z 26 - Series 20 September 2013

11. Maximum Operating

Altitude:

7 150 m

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight:

In towing 680 kg In flight without towing 770 kg

Max. Variable Load:

In towing 103 kg In flight without towing 193 kg

14. Centre of Gravity Range: 20.3 % – 24.4 % M.A.C.

M.A.C. is 1 532 mm;

0 % M.A.C. is 621 mm aft reference datum.

15. Datum: The rear part of firewall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 2^{\circ}$

down $20^{\circ} \pm 2^{\circ}$

Elevator trim up $23^{\circ} \pm 2^{\circ}$

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 30° ± 2°

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing 43° (+ 2°, - 3°)

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments: Maximum 23 kg (except for towing operation)

22. Wheels and Tyres: The wheel K 420.00 of main gear with tyre BARUM

or MITAS 420x150-6.5 or MITAS 420x150-6.5 TL

with tube 420x150;

The wheel K 56-1100.00 of main gear with tubeless tyre MITAS 420x150-6.5 TL;

The wheels K 34-990 or K 13-0000.00 of tail gear with tyre BARUM or MITAS 260x85-4 with tube 260x85.

CIV. Operating and Service Instructions

Flight manual
 In Czech language
 Směrnice pro pilota letounu Z 226 B, T

- In English language Instruction for Pilot on the Use and Handling of the

Z 226 Aircraft

In German language
 Richtlinien Fuer den Flugzeugfuhrer des

Flugzeuges Z 226

2. Maintenance manual

In Czech language
 Návod k obsluze letounu Z 226 B, date of issue

1957

3. Overhaul manual

In Czech language
 Opravárenská příručka Z 126, Z 226, date of

issue 1994

4. Catalog of spare parts:

In Czech language
 Seznam náhradních součástí draku letounu Z 226 B, T

Note: Revisions are issued in Czech and English languages only.

CV. Notes

Following Z 226 B aircraft have been converted to the models:

Z 126 T S/N: 14-08, 15-08; Z 226 T S/N: 12-08, 25-09;

Z 226 M S/N: 21-09, 28-09, 31-09, 37-09, 39-09, 40-09, 253;

Z 226 MS S/N: 07-08,10-08,11-08, 16-08, 17-08, 19-08, 22-09, 26-09, 29-09, 33-09, 34-

09, 36-09, 41-09, 246, 247, 250, 252, 256, 260, 261, 264, 265, 266, 268,

270, 273, 274, 275, 276, 279, 281, 282, 284, 285;

Z 226 LS S/N: 280

by the aircraft manufacturer.

SECTION D: Z 226 T

DI. General

1. a)Type: Z 26

b) Model: Z 226 T

2. Airworthiness category: Aerobatic (A)

Utility (U) Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n.p.

Gottwaldov – Otrokovice CZECHOSLOVAKIA

S/N: 42 - 53; 55 - 245; 286 - 370

5. Certification Application

Date:

October 25, 1957

6. CAA CZ Type Certificate Date:

7. EASA Type Certificate replaces CAA CZ Type Certificate No. 55.470 – 1957.

DII. Certification Basis

1. Reference Date for

determining the applicable ____

requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, K4, K5

5. Requirements elected to

comply: None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings: None

9. EASA Environmental Standards: ICAO Annex 16, Vol. I, Chapter 10

DIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: The specification list of aircraft Z 226 T

No. T-S 226.000.

2. Description: The Z-226 T aircraft is two-seat, low wing, single-

engine monoplane. Control system is installed in

both of pilot compartments.

3. Equipment: Approved equipment list is stated in document

Maintenance Manual Z 226 T, Chapter V.

4. Dimensions: Wing Span: 10.282 m

Length: 7.800 m Height: 2.060 m Wing Area: 14.900 m²

5. Engine:

5.1 Model: Walter Minor 6-III

5.2 Type Certificate: No. 132/2-L/6A-a.i.-1947 Ministry of Transport, CZ

5.3 Limitations: Max. Continuous power

Max. Power 118 kW (160 HP)
Max. Engine speed 2 500 RPM

Max. Engine speed 2 500 RPM

Max. Consumption 53 l/h

Max. Cruising power

Max. Power 92 kW (125 HP)

Max. Engine speed 2 300 RPM

Max. Consumption 38 I/h

6. Load factors: For category Aerobatic (A) +6.0 g, -

3.0 g

For category Utility (U) +4.0 g, -2.0 g For category Normal (N) +3.5 g, -1.0 g

7. Propellers:

7.1.1 Model: T-226

7.1.2 Type Certificate: ---

7.1.3 Number of blades: 2

7.1.4 Diameter: 2 050 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction.

7.2.1 Model: Z-226.641

7.2.2 Type Certificate: ---

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 000 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction.

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with min. 72

octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06% vol.

LBZ 72 LBZ 78 LBE 80 LBE 87 Shell 80 ESSO 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4.

MS 20

Aeroshell W100

Aeroshell W120 (in tropical climates)

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: 80 litres

Usable: 78 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

9.2 Oil: Minimum 7 litres – Maximum 11 litres

9.3 Coolant system capacity: None

10. Air Speeds: Never exceed speed limit V_{NE}

category A, U, N 300 km/h IAS

Maximum speed limit near the ground

category A, U, N V_H 230 km/h IAS

Maximum flaps extended speed limit

category A, U, N

130 km/h IAS

11. Maximum Operating Altitude: 5 300 m

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

 V_{FF}

13. Maximum Weights: Max. Take-off and Landing weight:

For category Aerobatic (A)
For category Utility
For category Normal (N)
820 kg
820 kg

Max. Variable Load:

For category Aerobatic (A)
For category Utility (U)
For category Normal (N)
182 kg

14. Centre of Gravity Range: 18.6 % – 23.0 % M.A.C.

M.A.C. is 1 532 mm;

0 % M.A.C. is 621 mm aft reference datum.

15. Datum: The rear part of firewall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 2^{\circ}$

down $20^{\circ} \pm 2^{\circ}$

Elevator trim up $23^{\circ} \pm 2^{\circ}$

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 30° ± 2°

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing $43^{\circ} (+2^{\circ}, -3^{\circ})$

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments:

None

22. Wheels and Tyres:

The wheel K 420.00 of main gear with tyre BARUM or MITAS 420x150-6.5 or MITAS

420x150-6.5 TL with tube 420x150;

The wheel K 56-1100.00 of main gear with tubeless tyre MITAS 420x150-6.5 TL;

The wheels K 34-990 or K 13-0000.00 of tail gear with tyre BARUM or MITAS 260x85-4 with tube 260x85.

DIV. Operating and Service Instructions

1. Flight manual

- In Czech language Směrnice pro pilota letounu Z 226 B, T

- In English language Instruction for Pilot on the Use and Handling of the

Z 226 Aircraft

- In German language Richtlinien Fuer den Flugzeugfuhrer des

Flugzeuges Z 226

2. Maintenance manual

- In Czech language Návod k obsluze letounu Z 226 T, 1957

3. Overhaul manual

- In Czech language Opravárenská příručka Z 126, Z 226, 1994

4. List of spare parts

- In Czech language Seznam náhradních součástí draku letounu Z 226

B, T

Note: Revisions are issued in Czech and English versions languages only.

DV. Notes:

Following Z 226 T aircraft have been converted to the models:

Z 126 S/N: 163 Z 126 M S/N: 103;

Z 126 T S/N: 123, 169, 177, 179, 180;

Z 226 A S/N: 108, 164, 353; Z 226 AS S/N: 154, 200;

Z 226 M S/N: 47, 0104, 120, 122, 127 – 129, 132, 134, 137, 140, 155,167, 188, 191,

192, 196;

Z 226 MS S/N: 104, 105, 0105,106, 107, 119, 121, 124, 130, 131, 133, 135, 138, 139,

149, 158,

159, 161, 168, 170, 175, 181 – 184, 186, 189, 190, 193, 194, 198, 202,

204, 243, 322, 350, 368, 370

by the aircraft manufacturer.

SECTION E: Z 226 A

EI. General

1. a) Type: Z 26

b) Model: Z 226 A

2. Airworthiness category: Aerobatic (A)

> (N) Normal

ZLIN AIRCRAFT A.S. 3. Type Certificate Holder:

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n.p.

> Gottwaldov – Otrokovice **CZECHOSLOVAKIA** S/N: 01-08 - 04-08;

5. Certification Application

Date:

April 27, 1963

6. CAA CZ Type Certificate

Date:

7. EASA Type Certificate replaces CAA CZ Type Certificate No. 63 001 – Z 226 A.

EII. **Certification Basis**

1. Reference Date for determining the applicable requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, K5

British Civil Airworthiness Requirements, Cat D

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

None

9. EASA Environmental

ICAO Annex 16, Volume I, Chapter 10

Issue 5

Standards:

EIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: The specification list of aircraft Z 226 A,

No. S-A 226.000.

2. Description: The Z 226 A aircraft is one-seat, low wing,

single-engine monoplane.

3. Equipment: Approved equipment list is stated in document

Flight manual.

4. Dimensions: Wing Span: 10.280 m

Length: 7.820 m Height: 2.060 m Wing Area: 14.900 m²

5. Engine:

5.1 Model: Walter Minor 6-III

5.2 Type Certificate: No. 132/2-L/6A-a.j.-1947, Issued by Czech Ministry

of Transport

5.3 Limitations: Max. Continuous power

Max. Power 118 kW (160 HP)
Max. Engine speed 2 500 RPM
Max. Consumption 53 l/h

Max. Cruising power

Max. Power 92 kW (125 HP) Max. Engine speed 2 300 RPM

Max. Consumption 38 l/h

6. Load factors: For category Aerobatic (A) +6.0 g, -3.0 g

For category Normal (N) +3.5 g, -1.0 g

7. Propellers:

7.1.1 Model: Z-226.641.2

7.1.2 Type Certificate: ---

7.1.3 Number of blades: 2

7.1.4 Diameter: 2 050 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction.

or

7.2.1 Model: Z-326.641.1

7.2.2 Type Certificate: ---

Issue 5

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 000 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction.

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with min. 72

> octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06 % vol.

LBZ 72 **LBZ 78 LBE 80 LBE 87** Shell 80 **ESSO 80** AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

> oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4.

MS 20

Aeroshell W100

Aeroshell W120 (in tropical climates)

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category A: 80 litres

for category N: 120 litres

Usable: for category A: 78 litres

for category N: 118 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

40 litres in fuselage auxiliary tank

Minimum 7 litres - Maximum 11 litres 9.2 Oil:

9.3 Coolant system None

capacity:

10. Air Speeds: Never exceed speed limit V_{NE}

> (category A, N) 300 km/h IAS

Maximum speed limit near the ground

(category A, N) V_H 215 km/h IAS

Maximum flaps extended speed limit

(category A, N) V_{FE} 130 km/h IAS

11. Maximum Operating

Altitude:

15. Datum:

6 450 m

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight:

For category Aerobatic (A)For category Normal (N)745 kg

Max. Variable Load:

For category Aerobatic (A)For category Normal (N)90 kg187 kg

14. Centre of Gravity Range: 19 % - 26 % MAC

M.A.C. is 1 532 mm;

0 % M.A.C. is 621 mm aft reference datum.

The rear part of firewall; from it are measured, for purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 2^{\circ}$

down $20^{\circ} \pm 2^{\circ}$

Elevator trim up $23^{\circ} \pm 2^{\circ}$

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 30° ± 2°

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing $43^{\circ} (+2^{\circ}, -3^{\circ})$

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

1 (including crew)

20. (Reserved)

Page 30 of 114 20 September 2013

21. Baggage/Cargo Compartments:

13 kg (for category Normal only)

22. Wheels and Tyres:

The wheel K 420.00 of main gear with tyre BARUM or MITAS 420x150-6.5 or MITAS 420x150-6.5 TL

with tube 420x150;

The wheel K 56-1100.00 of main gear with tubeless tyre MITAS 420x150-6.5 TL;

The wheels K 34-990 or K 13-0000.00 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

EIV. Operating and Service Instructions

1. Flight manual:

- In Czech language Směrnice pro pilota o použití a technice pilotáže letounu

Z 226 B, T (upravené pro Z 226 A)

2. Maintenance and operating manual:

In Czech language Návod k obsluze a ošetřování letounu Z – 226 T

(upravený pro Z 226 A)

EV. Notes

Following Z 226 A aircraft have been converted to the models:

Z 226 AS S/N: 01-08, 02-08

by the aircraft manufacturer.

SECTION F: Z 226 M

FI. General

1. a) Type: Z 26

b) Model: Z 226 M

2. Airworthiness category: Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n.p.

Letiště 1578

765 81 Otrokovice CZECHOSLOVAKIA

S/N: see Z 226 B, Z 226 T aircraft

5. Certification Application

Date:

November 8, 1979

6. CAA CZ Type Certificate Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 4 – 5150 – 1956, Supplement No. 1.

FII. Certification Basis

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, K4, P3

British Civil Airworthiness Requirements, Cat D-4

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

9. EASA Environmental ICAO Annex 16, Volume I, Chapter 10

None

Standards:

FIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of aircraft Z 226 M –

conversion

Z 226 T to Z 226 M aircraft, No. S-M 226.000.

2. Description: The Z 226 M aircraft is two-seat, low wing, single-

engine monoplane. Control system is installed in

rear pilot compartment only.

3. Equipment: Approved minimum equipment list is stated in

document Maintenance Manual Z 226 MS (M),

Chapter 12.

4. Dimensions: Wing Span: 10.280 m

Length: 7.860 m Height: 2.778 m Wing Area: 14.900 m²

5. Engine:

5.1 Model: M 137 A

5.2 Type Certificate: 96-02 issued by CAA CZ

5.3 Limitations: Max. Take off power (max. 5 min.)

Max. Power 133 kW (180 HP)
Max. Engine speed 2 750 RPM
Max. Consumption 61 l/h
Max. Manifold pressure 100±2 kPa

Max. Continuous power

Max. Power 118 kW (160 HP)
Max. Engine speed 2 680 RPM
Max. Consumption 53 l/h
Max. Manifold pressure 95±2 kPa

Max. Cruising power

Max. Power 103 kW (140 HP)
Max. Engine speed 2 580 RPM
Max. Consumption 48 l/h

Max. Manifold pressure 87 kPa

6. Load factors: + 3.8 g; - 1.5 g

7. Propellers:

7.1.1 Model: Z 42.6411

7.1.2 Type Certificate: 70-06 issued by CAA CZ

7.1.3 Number of blades: 2

7.1.4 Diameter: 2 000 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction

or

7.2.1 Model: Z 42.6413

7.2.2 Type Certificate: 70-07 issued by CAA CZ

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 050 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with min. 72

octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06 % vol.

LBZ 72 LBZ 78 LBE 80 LBE 87 Shell 80 ESSO 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at

100°C, whose percentual carbon residue does not

exceed the value of 0.4.

MS 20

Aeroshell W100 Aeroshell W120

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: 125 litres

Usable: 123 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

45 litres in fuselage auxiliary tank

9.2 Oil: Minimum 9 litres – Maximum 11 litres

TCDS EASA.A.353 Moravan Aviation Page 34 of 114
Issue 5 Z 26 - Series 20 September 2013

9.3 Coolant system None capacity:

10. Air Speeds: Never exceed speed limit V_{NE} 290 km/h IAS

Normal operating speed

limit V_{NO} 216 km/h IAS

Design manoeuvring speed

limit V_A 183 km/h IAS

Maximum flaps extended

speed limit V_{FE} 130 km/h IAS

11. Maximum Operating 7 150 m Altitude:

12. Allweather Operations Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight:

- at towing with Z 42.6411 propeller 780 kg - at towing with Z 42.6413 propeller 860 kg

Max. Variable Load:

at towing with Z 42.6411 propeller
at towing with Z 42.6413 propeller
106 kg
186 kg

14. Centre of Gravity Range: 18.6 % - 24.4 % MAC

M.A.C. is 1 532 mm;

0 % M.A.C. is 621 mm aft reference datum.

15. Datum: The rear part of firewall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 1^{\circ}$

down $20^{\circ} \pm 1^{\circ}$

Elevator trim up $23^{\circ} \pm 2^{\circ}$

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 30° ± 2°

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing 43° (+ 2°, - 3°)

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger 2 (including crew)

Page 35 of 114 20 September 2013

Seating Capacity:

20. (Reserved)

21. Baggage/Cargo Compartments:

Maximum 23 kg

22. Wheels and Tyres:

The wheel K 420.00 of main gear with tyre BARUM or MITAS 420x150-6.5 or MITAS 420x150-6.5 TL

with tube 420x150;

The wheel K 56-1100.00 of main gear with tubeless tyre MITAS 420x150-6.5 TL;

The wheels K 34-990 or K 13-0000.00 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

FIV. Operating and Service Instructions

1. Flight manual:

- In Czech language Směrnice pro pilota letounu Z 226 M,

date of issue 1978

2. Maintenance and operating manual:

- In Czech language Popis – obsluha – údržba ZLIN 226 MS (M),

date of issue 1992

3. Overhaul manual:

- In Czech language Opravárenská příručka Z 126, Z 226,

date of issue 1994

FV. Notes

None

SECTION G: Z 226 MS

GI. General

1. a) Type: Z 26

b) Model: Z 226 MS

2. Airworthiness category: Normal (N)

ZLIN AIRCRAFT A.S. 3. Type Certificate Holder:

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n.p.

Letiště 1578

765 81 Otrokovice **CZECHOSLOVAKIA**

S/N: see Z 226 B, Z 226 T aircraft

5. Certification Application

Date:

October 21, 1986

6. CAA CZ Type Certificate Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 4 – 5150 – 1956, Supplement No. 1, Modification.

GII. **Certification Basis**

1. Reference Date for determining the applicable

requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, K4, P3

British Civil Airworthiness Requirements, Cat D-4

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

None

9. EASA Enviromental

ICAO Annex 16, Volume I, Chapter 10

Standards:

GIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of aircraft Z 226 MS,

No. MS 226.000.

2. Description: The Z 226 MS aircraft is two-seat, low wing, single-

engine, monoplane. Control system is installed in

rear pilot compartment only.

3. Equipment: Approved minimum equipment list is stated in

document Maintenance Manual Z 226 MS (M),

Chapter 12.

4. Dimensions: Wing Span: 10.280 m

Length: 7.860 m Height: 2.778 m Wing Area: 14.900 m²

5. Engine:

5.1 Model: M 137 A

5.2 Type Certificate: 96-02 issued by CAA CZ

5.3 Limitations: Max. Take off power (max. 5 min.)

Max. Power 133 kW (180 HP)
Max. Engine speed 2 750 RPM
Max. Consumption 61 l/h
Max. Manifold pressure 100±2 kPa

Max. Continuous power

Max. Power 118 kW (160 HP)
Max. Engine speed 2 680 RPM
Max. Consumption 53 l/h
Max. Manifold pressure 95±2 kPa

Max. Cruising power

Max. Power 103 kW (140 HP)
Max. Engine speed 2 580 RPM

Max. Consumption 48 l/h Max. Manifold pressure 87 kPa

6. Load factors: + 3.8 g; - 1.5 g

7. Propeller:

7.1.1 Model: V 503

7.1.2 Type Certificate: 64 002 issued by CAA CZ

7.1.3 Number of blades: 2

Issue 5

7.1.4 Diameter: 1 950 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction

or

7.2.1 Model: V 503 A

7.2.2 Type Certificate: 69-02 issued by SLI CZ

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 000 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with min. 72

octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06 % vol.

LBZ 72 LBZ 78 LBE 80 LBE 87 Shell 80 ESSO 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4.

MS 20

Aeroshell W100

Aeroshell W120 (in tropical climates)

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: 125 litres

Usable: 123 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

45 litres in fuselage auxiliary tank

9.2 Oil: Minimum 9 litres – Maximum 11 litres

TCDS EASA.A.353 Moravan Aviation Page 39 of 114
Issue 5 Z 26 - Series 20 September 2013

9.3 Coolant system None capacity:

10. Air Speeds: Never exceed speed limit V_{NE} 290 km/h IAS

Normal operating speed

limit V_{NO} 216 km/h IAS

Design manoeuvring

speed limit V_A 183 km/h IAS

Maximum flaps extended

speed limit V_{FE} 130 km/h IAS

11. Maximum Operating

Altitude:

6 000 m

12. Allweather Operations The aircraft is appro

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight: 890 kg

Max. Variable Load: 191 kg

14. Centre of Gravity Range: 17 % - 24.5 % MAC

M.A.C. is 1 532 mm;

0 % M.A.C. is 621 mm aft reference datum.

15. Datum: The rear part of firewall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 1^{\circ}$

down $20^{\circ} \pm 1^{\circ}$

Elevator trim up $23^{\circ} \pm 2^{\circ}$

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 30° ± 2°

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing 43° (+ 2°, - 3°)

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

Page 40 of 114 20 September 2013

21. Baggage/Cargo Compartments:

Maximum 23 kg

22. Wheels and Tyres: The wheel K 420.00 of main gear with tyre BARUM

or MITAS 420x150-6.5 or MITAS 420x150-6.5 TL

with tube 420x150;

The wheel K 56-1100.00 of main gear with

tubeless tyre MITAS 420x150-6.5 TL;

The wheels K 34-990 or K 13-0000.00 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

GIV. Operating and Service Instructions

1. Flight manual:

- In Czech language Letová příručka Z 226 MS, date of issue 1986

2. Maintenance and operating manual:

- In Czech language Popis – obsluha – údržba ZLIN 226 MS (M),

date of issue 1992

3. Overhaul manual:

- In Czech language Opravárenská příručka Z 126, Z 226,

date of issue 1994

GV. Notes

None

SECTION H: Z 326

HI. General

1. a) Type: Z 26b) Model: Z 326

2. Airworthiness category: Aerobatic (A)

Utility (U)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Gottwaldov – Otrokovice CZECHOSLOVAKIA

S/N: 301 – 304; 501 – 523

Strojírny první pětiletky, n. p.

Kunovice, závod Moravan Otrokovice

CZECHOSLOVAKIA

S/N: 524 - 530; 532 - 550; 556 - 580; 587 - 595;

600 - 907

Moravan, n. p. Otrokovice

CZECHOSLOVAKIA

S/N: 908 - 933

5. Certification Application

Date:

6. CAA CZ Type Certificate October 13, 1959

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. č.j. 2417/59.

HII. Certification Basis

- 1. Reference Date for --determining the applicable requirements:
- 2. (Reserved)
- 3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, Kat. K 5

British Civil Airworthiness Requirements, Cat. D

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

None

9. EASA Environmental

Standards:

ICAO Annex 16, Volume I, Chapter 10

HIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of aircraft Z 326,

No. S-Z 326.000.

2. Description: The Z 326 aircraft is two-seat, low wing, single-

engine, monoplane

3. Equipment: Approved equipment list is stated in document

Flight Manual Z 326.

4. Dimensions: Wing 10.596 m without auxiliary tanks

Span: 10.845 m with auxiliary tanks

7.820 m

Length: 2.060 m Height: 15.451 m²

Wing Area:

5. Engine:

5.1 Model: Walter Minor 6-III.

5.2 Type Certificate: č.j. 132/2-L/6A-a.i.-1947

5.3 Limitations: Max. Continuous power

Max. Power 118 kW (160 HP)

Max. Engine speed 2 500 RPM

Max. Consumption 54 l/h

Max. Cruising power

Max. Power 92 kW (125 HP)
Max. Engine speed 2 300 RPM

Max. Consumption 36 l/h

6. Load factors: For category Aerobatic (A) +6.0 g; -3.0 g

For category Utility (U) +4.5 g; -1.8 g For category Normal (N) +3.5 g; -1.0 g 7. Propellers:

7.1.1 Model: Z – 326.641

7.1.2 Type Certificate: č.j. 2417/59 from date October 13, 1959

7.1.3 Number of blades: 2

7.1.4 Diameter: 2 000 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction

or

7.2.1 Model: Z – 226.640

7.2.2 Type Certificate: č.j. 6312/61 from date September 26, 1961

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 050 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction

or

7.3.1 Model: Z – 326.641.1

7.3.2 Type Certificate: č.j. 2417/59 from date October 13, 1959

7.3.3 Number of blades: 2

7.3.4 Diameter: 2 000 mm

7.3.5 Sense of Rotation: Anticlockwise in flight direction

or

7.4.1 Model: Z – 42.6413

7.4.2 Type Certificate: No. 70-07 issued by CAA CZ

7.4.3 Number of blades: 2

7.4.4 Diameter: 2 050 mm

7.4.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline with min. 72 ÷ 87

octanes. Application of ethylated fuels is only

TCDS EASA.A.353

Moravan Aviation Z 26 - Series

Page 44 of 114 20 September 2013

permitted in case the T.E.L. content does not exceed the value of 0.06 % vol.

Recommended kinds of fuel:

LBZ 72 LBZ 83

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4. Recomended kinds of oil:

MS 20

AERO-SHELL W100

AERO-SHELL W120 in tropical climates.

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category A, U: 100 litres

for category N: 170 litres

Usable: for category A, U: 98 litres for category N: 168 litres

2 x 45 litres in main tanks 3 litres in connecting tank

7 litres in gravity tank 2 x 35 litres in auxiliary wing tip tanks

9.2 Oil: Minimum 7 litres – Maximum 11 litres

9.3 Coolant system None

capacity:

10. Air Speeds: Never Exceed Speed Limit V_{NE} 320 km/h IAS

Normal Operation Speed

Limit V_{NO} 212 km/h IAS

11. Maximum Operating

Altitude:

4 750 m

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight:

For category Aerobatic (A)For category Utility (U)935 kg

- For category Normal (N) 975 kg

Maximum Variable Load:

TCDS	EASA	.A.353
Icens 5		

Moravan Aviation Z 26 - Series

Page 45 of 114 20 September 2013

- For category Aerobatic (A) 177 kg - For category Utility 202 kg (U) - For category Normal (N) 182 kg

18 ÷ 30 % MAC 14. Centre of Gravity Range:

M.A.C. is 1 545 mm;

0 % M.A.C. is 621 mm aft reference datum.

The rear part of firewall; from it are measured, for 15. Datum:

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 1^{\circ}$

> down 20° ± 1°

Elevator trim $25^{\circ} \pm 2^{\circ}$ up

> down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right $28^{\circ} \pm 2^{\circ}$

 $5^{\circ} \pm 1^{\circ}$ Rudder trim left

> $30^{\circ} \pm 2^{\circ}$ right

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

0° Wing flaps position: retracted

> take-off 15°

landing $40^{\circ} (+5^{\circ}, -3^{\circ})$

Levelling points on left and right side of airplane 17. Leveling Means:

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

1 (Pilot) 18. Minimum Flight Crew:

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments:

22. Wheels and Tyres: The wheels K 12-0100.00 or K 420.1-00 of main

gear with tyre BARUM or MITAS 420x150-6,5 or

MITAS 420x150-6,5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear

tyre BARUM or MITAS 260x85-4 with tube

260x85.

HIV. Operating and Service Instructions

1. Flight Manual:

- In Czech language Letová příručka letounu s vrtulí Z 326, date of

issue 1964 Směrnice pro pilota letounu Z 326 s vrtulí V 503

- In English language Instruction for Pilot on the Use and Handling of the

Z 326 Aircraft

- In German language Anweisungen für den Flugzeug Führer über die

Verwendung und Technik des Fliegens mit dem

Flugzeug Z 326

2. Technical Manual:

In Czech language Technický popis a návod k obsluze letounu Z 326

Speciál s vrtulí V 503

- In English language Description of Aircraft Z 326 and Direction for its

Operation

3. Repair Manual:

- In Czech language Příručka pro generální opravu letounu Z 326,

date of issue 1961

- In English language Instruction Manual for Major Overhaul of Z 326 Aircraft,

date of issue 1963 Instruction for Complete Overhauls and Minor Repairs of the Z 326 Tail Landing Gear.

4. Catalogue of spare parts:

- In Czech language Trener Master Z 326 – Seznam náhradních součástí,

date of issue 1963

HV. Notes:

Following Z 326 aircraft have been converted to the models:

Z 326 M S/N: 301, 604, 606, 608 – 610, 612, 833;

Z 326 MF S/N: 605, 861, 893;

Z 526 S/N: 869, 886, 890, 901, 916, 930, 932;

Z 526 A S/N: 922; Z 526 M S/N: 909; Z 526 ML S/N: 921; Z 526 F S/N: 838

by the aircraft manufacturer.

SECTION I: Z 326 A

I.I. General

1. a) Type: Z 26

b) Model: Z 326 A

2. Airworthiness category: Aerobatic (A)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Strojírny první pětiletky, n. p.

Kunovice, závod Moravan Otrokovice

CZECHOSLOVAKIA

S/N: 531, 551 – 555, 581 – 586, 596 – 599

5. Certification Application

Date:

6. CAA CZ Type Certificate December 30, 1960

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. č.j. 8061/60.

I.II. Certification Basis

- 2. (Reserved)
- 3. (Reserved)

4. Airworthiness Requirements: Bauvorschrifted für Flugzeuge, Kat. K 5

British Civil Airworthiness Requirements, Cat. D

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

None

9. EASA Environmental

ICAO Annex 16, Volume I, Chapter 10

Standards:

I.III. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of aircraft Z 326 A,

No. S-A 326.000.

2. Description: The Z 326 A aircraft is one-seat, low wing,

single-engine monoplane.

3. Equipment: Approved equipment list is stated in document

Flight Manual Z 326 A.

4. Dimensions: Wing 10.596 m without auxiliary tanks

Span: 10.850 m with auxiliary tank

7.820 m

Length: 2.060 m Height: 15.451 m²

Wing Area:

5. Engine:

5.1 Model: Walter Minor 6-III.

5.1 Type Certificate: č.j. 132/2-L/6A-a.i.-1947

5.1 Limitations: Max. Continuous power

Max. Power 118 kW (160

HP)

Max. Engine speed 2 500 RPM

Max. Consumption 54 l/h

Max. Cruising power

Max. Power 92 kW (125 HP) Max. Engine speed 2 300 RPM

Max. Consumption 36 l/h

6. Load factors: For category Aerobatic (A) +6.0 g; -3.0 g

For category Normal (N) +3.5 g; -1.0 g

7. Propeller:

7.1 Model: Z – 326.641

7.2 Type Certificate: č.j. 8061/60, December 30, 1960

7.3 Number of blades: 2

7.4 Diameter: 2 000 mm

7.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline with min. 72 ÷ 87

octanes. Application of ethylated fuels is only

TCDS EASA.A.353 Moravan Aviation Page 49 of 114
Issue 5 Z 26 - Series 20 September 2013

permitted in case the T.E.L. content does not

exceed the value of 0.06 % vol.

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4.

Recomended kinds of oil:

MS 20

AERO-SHELL W100

AERO-SHELL W120 in tropical climates.

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: 80 litres

Usable: 78 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

9.2 Oil: Minimum 7 litres – Maximum 11 litres

9.3 Coolant system capacity: None

10. Air Speeds: Never Exceed Speed Limit V_{NF} 320 km/h CAS

Normal Operation Speed

Limit V_{NO} 212 km/h CAS

11. Maximum Operating Altitude: 5 200 m

12. Allweather Oparations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight:

For category Aerobatic (A) 790 kgFor category Normal (N) 850 kg

Maximum Variable Load:

- For category A, N 111 kg

14. Centre of Gravity Range: 18.6 ÷ 24.5 % MAC

M.A.C. is 1 545 mm;

0 % M.A.C. is 621 mm aft reference datum.

15. Datum: The rear part of firewall; from it are measured, for

purpose of assignation of Gravity Centre, all

lateral dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 1^{\circ}$

TCDS	EASA	.A.353
Issue 5		

Moravan Aviation Z 26 - Series

Page 50 of 114 20 September 2013

	down	20° ± 1°
Elevator trim	up down	25° ± 2° 40° ± 2°
Rudder deflection	left an right	28° ± 2°
Rudder trim	left right	5° ± 1° 30° ± 2°
Ailerons deflection	•	nm (+5, -3) mm nm (+5, -3) mm
Wing flaps position	: retrac take-off landing	oted 0° 15° 40° (+ 5°, - 3°)

17. Levelling Means:

Levelling points on left and right side of airplane fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew:

4 (!:= al. . al!:= a. a. a. . . .)

1 (Pilot)

19. Maximum Passenger Seating 1 (including crew)

Capacity:

20. (Reserved)

21. Baggage/Cargo Compartments:

Maximum is 34 kg

22. Wheels and Tyres:

The wheels K 12-0100.00 or K 420.1-00 of main gear with tyre BARUM or MITAS 420x150-6,5 or MITAS 420x150-6,5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85–4 with tube 260x85.

I.IV. Operating and Service Instructions

1. Flight Manual:

- In Czech language Letová příručka letounu s vrtulí Z 326, date of

issue 1964 Směrnice pro pilota letounu Z 326

s vrtulí V 503

- In English language Instruction for Pilot on the Use and Handling of

the Z 326 Aircraft

- In German language Anweisungen für den Flugzeug Führer über die

Verwendung und Technik des Fliegens mit dem

Flugzeug Z 326

2. Technical Manual:

- In Czech language Technický popis a návod k obsluze letounu Z 326

Speciál s vrtulí V 503

- In English language Description of Aircraft Z 326 and Direction for its

Operation

3. Repair Manual:

- In Czech language Příručka pro generální opravu letounu Z 326,

date of issue 1961

- In English language Instruction Manual for Major Overhaul of Z 326

Aircraft, date of issue 1963Instruction for

Complete Overhauls and Minor Repairs of the Z

326 Tail Landing Gear.

4. Catalogue of spare parts:

- In Czech language Trener Master Z 326 – Seznam náhradních

součástí, date of issue 1963

I.V. Notes:

None

SECTION J: Z 326 M

Jl. General

1. a) Type: Z 26

b) Model: Z 326 M

2. Airworthiness category: Utility (U)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Gottwaldov – Otrokovice CZECHOSLOVAKIA S/N: see Z 326 aircraft

5. Certification Application ---

Date:

6. CAA CZ Type Certificate February 5, 1976

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate Supplement No. 4 from date 13.10.1959 (č.j. 2417/59)

JII. Certification Basis

Reference Date for determining the applicable

requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschrifted für Flugzeuge, Kat. K 5

British Civil Airworthiness Requirements, Cat. D

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

TCDS EASA.A.353 Moravan Aviation Page 53 of 114
Issue 5 Z 26 - Series 20 September 2013

8. EASA Equivalent Safety

Findings:

None

9. EASA Environmental

Standards:

ICAO Annex 16, Volume I, Chapter 10

JIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of aircraft Z 326 M –

conversion Z 326 to Z 326 M aircraft, No. S-M

326.000.

2. Description: The Z 326 M aircraft is two-seat, low wing,

single-engine monoplane.

3. Equipment: Approved equipment list is stated in document

Maintenance Manual ZLIN 326 M, MS.

4. Dimensions: Wing Span: 10.596 m

Length: 7.820 m Height: 2.060 m Wing Area: 15.451 m²

5. Engine:

5.1 Model: M 137 A

5.2 Type Certificate: No. 96-02 issued by CAA CZ

5.3 Limitations: Max. Take off power (max. 5 min.)

Max. Power 132 kW (180 HP)
Max. Engine speed 2 750 RPM
Max. Consumption 61 l/h
Max. Manifold pressure 100 ±2 kPa

Max. Continuous power

Max. Power 118 kW (160 HP)
Max. Engine speed 2 680 RPM

Max. Consumption 52 I/h

Max. Manifold pressure 95 kPa ±2 kPa

Max. Cruising power

Max. Power 103 kW (140 HP)

Max. Engine speed 2 580 RPM Max. Consumption 45 I/h

Max. Manifold pressure 87 kPa

6. Load factors: For category Utility (U) +5.5 g; -3.0 g

For category Normal (N) +3.5 g; -1.0 g

7. Propellers:

7.1.1	Model:	Z 42.6	3411

7.1.2 Type Certificate: No. 70-06 issued by CAA CZ

7.1.3 Number of blades: 2

7.1.4 Diameter: 2 050 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction

or

7.2.1 Model: Z 42.6413

7.2.2 Type Certificate: No. 70-07 issued by CAA CZ

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 050 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction

or

7.3.1 Model: V 503

7.3.2 Type Certificate: No. 64 002 issued by CAA CZ

7.3.3 Number of blades: 2

7.3.4 Diameter: 1 950 mm

7.3.5 Sense of Rotation: Anticlockwise in flight direction

or

7.4.1 Model: V 503 A

7.4.2 Type Certificate: No. 69-02 issued by CAA CZ

7.4.3 Number of blades: 2

7.4.4 Diameter: 2 000 mm

7.4.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline with min. 72

octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

Page 55 of 114 20 September 2013

exceed the value of 0.06 % vol. Recommended kinds of fuel:

LBZ 72 LBZ 78 LBE 80 LBE 87

SHELL 80 ESSO 80 100L

Grade 100/130.

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4. Recomended kinds of oil:

MS 20

AERO-SHELL W100 AERO-SHELL W120

ELF AD-100.

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category U: 100 litres

for category N: 170 litres

Usable: for category U: 98 litres

for category N: 168 litres

2 x 45 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

2 x 35 litres in auxiliary wing tip tanks

9.2 Oil: Minimum 7 litres – Maximum 11 litres

9.3 Coolant system None

capacity:

10. Air Speeds: Never Exceed Speed Limit V_{NE}

308 km/h IAS

Normal Operating Speed Limit V_{NO}

222 km/h IAS

Design Manoeuvring Speed Limit V_A

222 km/h IAS

Maximum Flaps Extended Speed Limit V_{FE}

140 km/h IAS

Maximum Operating Altitude:

4 750 m

12. Allweather Operations Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights:

Max. Take-off and Landing weight:

- For category Utility (U) 910 kg - For category Normal (N) 975 kg

Maximum Variable Load:

- For category Utility (U): pilot 77 kg

person, cargo 85 kg

- For category Normal (N): pilot 77 kg

person, cargo 90 kg

14. Centre of Gravity Range:

18 ÷ 30 % MAC

M.A.C. is 1 545 mm; 0 % M.A.C. is 616 mm aft

reference datum.

15. Datum:

The rear part of firewall; from it are measured, for purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections:

 $25^{\circ} \pm 1^{\circ}$ Elevator deflection up

20° ± 1° down

 $25^{\circ} \pm 2^{\circ}$ Elevator trim uр

> $40^{\circ} \pm 2^{\circ}$ down

 $28^{\circ} \pm 2^{\circ}$ Rudder deflection left an right

 $5^{\circ} \pm 1^{\circ}$ left Rudder trim

> $30^{\circ} \pm 2^{\circ}$ right

Ailerons deflection up 108 mm (+5, -3) mm

> 98 mm (+5, -3) mm down

0° Wing flaps position: retracted

> take-off 15°

landing 40° (+ 5°, - 3°)

17. Levelling Means:

Levelling points on left and right side of airplane fuselage to be levelled. Measurement plane to be

min. 850 mm below.

1 (Pilot) 18. Minimum Flight Crew:

19. Maximum Passenger

Seating Capacity:

20. (Reserved)

2 (including crew)

21. Baggage/Cargo

For category Utility (U): 85 kg For category Normal (N): 90 kg

Compartments:

Page 57 of 114 20 September 2013

22. Wheels and Tyres:

The wheels K 12-0100.00 or K 420.1-00 of main gear with tyre BARUM or MITAS 420x150-6,5 or MITAS 420x150-6,5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear

with

tyre BARUM or MITAS 260x85-4 with tube

260x85.

JIV. Operating and Service Instructions

1. Flight Manual:

In Czech language
 Z 326 Dodatek č. 1 k letové příručce – Z 326 M,

date of issue 1976

2. Technical Manual:

In Czech language
 Popis – obsluha – údržba ZLIN 326 M, MS,

date of issue 1994

JV. Notes:

None

SECTION K: Z 526

KI. General

1. a) Type: Z 26

b) Model: Z 526

2. Airworthiness category: Aerobatic (A)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT a.s.

Olivova 4/2096 110 00 Praha 1 Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: 1006-1015, 1021-1025, 1031-1035, 1046-1066, 1068-1074, 1077-1088

5. Certification Application ---

Date:

6. CAA CZ Type Certificate April 26, 1966

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 1617/66, Supplement No. 2.

KII. Certification Basis

Reference Date for determining the applicable requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, Kat. K;

British Civil Airworthiness Requirements, Cat. D,

AIR 2052, effective November 7, 1968

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

None

9. EASA Environmental

Standards:

ICAO Annex 16, Volume I, Chapter 10

KIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of Z 526 aircraft,

No. S-Z 526.000.

2. Description: The Z 526 aircraft is two-seat, low wing, single-

engine, monoplane.

3. Equipment: Approved equipment list is stated in document

Technical Description, Operation Instruction for

Z 526 Aircraft.

4. Dimensions: Wing Span: 10.845 m with auxiliary tanks

10.596 m without auxiliary tanks

Length: 8.000 m Height: 2.060 m Wing Area: 15.450 m²

5. Engine:

5.1 Model: Walter Minor 6-III

5.2 Type Certificate: Č.j. 132/2-L/6A-a.i.-1947

5.3 Limitations: Max. Continuous power

Max. Power 118 kW (160 HP) Max. Engine speed 2 500 RPM

Max. Consumption 53 l/h

Max. Cruising power

Max. Power 92 kW (125 HP)
Max. Engine speed 2 300 RPM

Max. Consumption 38 l/h

6. Load factors: For category Aerobatic (A) +6 g, -3 g

For category Normal (N) +3.5 g, -1 g

7. Propeller:

7.1 Model: V 503

7.2 Type Certificate: No. 64 002 issued by CAA CZ

7.3 Number of blades: 2

TCDS EASA.A.353 Issue 5

Moravan Aviation Z 26 - Series

Page 60 of 114 20 September 2013

7.4 Diameter:

1 950 mm

7.5 Sense of Rotation:

Anticlockwise in flight direction

8. Fluids:

8.1 Fuel:

Non-ethylated aviation gasoline, with min. 72 octanes (for example LBE 72 or LBE 83).

Application of ethylated fuels is only permitted in case the T.E.L. content does not exceed the value

of 0.06 % vol.

8.2 Oil:

For engine operation are recommended mineral oils with min. kinematic viscosity of 20 cSt at

Recommended kinds of oil: 100°C.

MS20-GOST 1013-49

ELF AD-100

AERO-SHELL W100 AERO-SHELL W120

8.3 Coolant:

None

9. Fluid capacities:

9.1 Fuel:

Total: for category A: 100 litres

for category N: 170 litres

Usable: for category A: 98 litres

for category N: 168 litres

2 x 45 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

2 x 35 litres in auxiliary wing tip tanks

9.2 Oil:

Minimum 9 litres - Maximum 11 litres

9.3 Coolant system

None

capacity:

10. Air Speeds:

Never Exceed Speed Limit

V_{NF} 292 km/h IAS

Normal Operating Speed

 V_{NO}

Limit

234 km/h IAS

Design Manoeuvring

 V_A

Speed Limit

230 km/h IAS

Maximum Flaps Extended

 V_{FF}

Speed Limit

140 km/h IAS

11. Maximum Operating

5 000 m

Altitude:

12. Allweather Operations Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights:

Max. Take-off and Landing weight:
- For category Aerobatic (A) 940 kg
- For category Normal (N) 975 kg

Maximum Variable Load:

For category Aerobatic (A)For category Normal (N)166 kg

14. Centre of Gravity Range:

17 % ÷ 27.4 % MAC

M.A.C. is 1 545 mm; 0 % M.A.C. is 616 mm aft

reference datum.

15. Datum:

The rear part of fire wall; from it are measured, for purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections:

Elevator deflection up $25^{\circ} \pm 1^{\circ}$

down $20^{\circ} \pm 1^{\circ}$

Elevator trim up $25^{\circ} \pm 2^{\circ}$

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 28° ± 2°

Rudder trim left $5^{\circ} \pm 1^{\circ}$

right $30^{\circ} \pm 2^{\circ}$

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing $40^{\circ} (+5^{\circ}, -3^{\circ})$

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Maximum 17 kg

Compartments:

22. Wheels and Tyres:

The wheels K 12-0100.00 or K 420.1-00 of main

gear with tyre BARUM or MITAS 420x150-6.5 or MITAS 420x150-6.5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85-4 with tube 260x85.

KIV. Operating and Service Instructions

1. Flight manual:

In Czech language Letová příručka školního a akrobatického letounu
 Z 526 – Z 526 A.

Směrnice pro pilota. Použití a technika pilotáže letounů

TRENER typů Z 526 a Z 526 A.

In English language
 Instruction for Pilot on the Use and Handling of the

Training and Acrobatic Z 526 and Z 526 A Aircraft,

date of issue 1966

In German language
 Handbuch für den Flugzeugführer zum Schulungs

und kunstflugzeuges Z 526 – Z 526 A,

date of issue 1966

2. Descriprion - Operation - Maintenance:

In Czech language
 Technický popis a návod k obsluze letounu

Z 526 – Z 526 A

In English language Technical Description, Operation Instruction for

Z 526 – Z 526 A Aircrafts, date of issue 1966

In German language
 Technische Beschreibung und Bedienungsanleitung

zum Flugzeug Z 526 – Z 526 A, date of issue 1966

3. Overhaul Manual:

In English language
 Major Overhaul of Z 526 – Z 526 A Aircraft,

date of issue 1969

4. Catalogue of spare parts:

In Czech, English, German language

Trener Master Z 526 Katalog, date of issue 1967

KV. Notes:

Following Z 526 aircraft have been converted to the model:

Z 326 S/N: 909, 1008

Z 526 F S/N: 1071

Z 526 M S/N: 1021, 1023, 1031-1033, 1053, 1068, 1077, 1088

Z 726 S/N: 1069 by the aircraft manufacturer.

SECTION L: Z 526 A

LI. General

1. a) Type: Z 26

b) Model: Z 526 A

2. Airworthiness category: Aerobatic (A)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: 1001-1005, 1016-1020, 1036-1045, 1067

5. Certification Application ---

Date:

6. CAA CZ Type Certificate April 26, 1966

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 1617/66, Supplement No. 2.

LII. <u>Certification Basis</u>

1. Reference Date for

determining the applicable ---

requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, Kat. K;

British Civil Airworthiness Requirements, Cat. D

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety None

Findings:

9. EASA Environmental

Standards:

ICAO Annex 16, Volume I, Chapter 10

LIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of Z 526 A aircraft,

No. S-A 526.000.

2. Description: The Z 526 A aircraft is one-seat, low wing,

single-engine, monoplane.

3. Equipment: Approved equipment list is stated in document

Technical Description, Operation Instruction for

Z 526 – Z 526 A Aircraft.

4. Dimensions: Wing Span: 10.845 m with auxiliary tanks

10.596 m without auxiliary tanks

Length: 8.000 m Height: 1.950 m Wing Area: 15.450 m²

5. Engine:

5.1 Model: Walter Minor 6-III

5.2 Type Certificate: Č.j. 132/2-L/6A-a.i.-1947

5.3 Limitations: Max. Continuous power

Max. Power 118 kW (160 HP)

Max. Engine speed 2 500 RPM

Max. Consumption 53 l/h

Max. Cruising power

Max. Power 92 kW (125 HP) Max. Engine speed 2 300 RPM

Max. Consumption 38 l/h

6. Load factors: For category Aerobatic (A) + 6.0 g, - 3.0 g

For category Normal (N) + 3.5 g, - 1.0 g

7. Propeller:

7.1 Model: V 503

7.2 Type Certificate: No. 64002 issued by CAA CZ

7.3 Number of blades: 2

7.4 Diameter: 1 950 mm

7.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with min. 72

octanes (for example LBE 72 or LBE 83).

Application of ethylated fuels is only permitted in case, the T.E.L. content does not exceed the

value of 0.06 % vol.

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at

100°C. Recommended kinds of oil:

MS20-GOST 1013-49

ELF AD-100

AERO-SHELL W100 AERO-SHELL W120

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category A: 80 litres

for category N: 150 litres

Usable: for category A: 78 litres

for category N: 148 litres

2 x 35 litres in main tanks 3 litres in connecting tank 7 litres in gravity tank

2 x 35 litres in auxiliary wing tip tanks

9.2 Oil: Minimum 9 litres – Maximum 11 litres

9.3 Coolant system

capacity:

None

10. Air Speeds: Never Exceed Speed Limit V_{NE} 292 km/h IAS

Normal Operating Speed V_{NO}

Limit 236 km/h IAS

Design Manoeuvring V_A

Speed Limit 230 km/h IAS

Maximum Flaps Extended V_{FE}

Speed Limit 140 km/h IAS

11. Maximum Operating

Altitude:

6 000 m

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

TCDS EASA.A.353	Moravan Aviation
Issue 5	Z 26 - Series

Page 66 of 114 20 September 2013

13. Maximum Weights:	Max. Take-off and Landing weight:	
	For category Aerobatic (A)For category Normal (N)	850 kg 910 kg

Maximum Variable Load:

 For category Aerobatic 	(A)	142 kg
 For category Normal 	(N)	131 kg

14. Centre of Gravity Range: 17 % ÷ 29 % MAC

M.A.C. is 1 545 mm; 0 % M.A.C. is 621 mm aft

reference datum.

15. Datum: The rear part of fire wall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up 28° ± 1°

down $24^{\circ} \pm 1^{\circ}$

Elevator trim up $25^{\circ} \pm 2^{\circ}$

down $35^{\circ} \pm 2^{\circ}$

Rudder deflection left an right 30° ± 2°

Rudder trim left $5^{\circ} \pm 1^{\circ}$

right $30^{\circ} \pm 2^{\circ}$

Ailerons deflection up 112 mm (+5, -3) mm

down 108 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing $40^{\circ} (+5^{\circ}, -3^{\circ})$

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

1 (including crew)

20. (Reserved)

21. Baggage/Cargo Maximum 17 kg

Compartments:

22. Wheels and Tyres: The wheels K 12-0100.00 or K 420.1-00 of main

gear with tyre BARUM or MITAS 420x150-6.5 or

MITAS 420x150-6.5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear

with tyre BARUM or MITAS 260x85-4 with tube 260x85.

LIV. Operating and Service Instructions

1. Flight manual:

In Czech languageZ 526 – Z 526 A

Letová příručka školního a akrobatického letounu

Směrnice pro pilota. Použití a technika pilotáže letounů

TRENER typů Z 526 a Z 526 A.

In English language

Instruction for Pilot on the Use and Handling of the Training and Acrobatic Z 526 and Z 526 A Aircraft,

date of issue 1966

In German language

Handbuch für den Flugzeugführer zum Schulungs

und kunstflugzeuges Z 526 – Z 526 A,

date of issue 1966

2. Description – Operation – Maintenance:

In Czech language

Technický popis a návod k obsluze letounu

Z 526 – Z 526 A

In English language

Technical Description, Operation Instruction for Z 526 – Z 526 A Aircrafts, date of issue 1966

- In German language

Technische Beschreibung und Bedienungsanleitung zum Flugzeug Z 526 – Z 526 A, date of issue 1966

3. Overhaul Manual:

In English language

Major Overhaul of Z 526 - Z 526 A Aircraft,

date of issue 1969

4. Catalogue of spare parts:

In Czech, English, German language

Trener Master Z 526 Katalog, date of issue 1967

LV. Notes:

Following Z 526 A aircraft has been converted to the model:

Z 526 AM S/N: 1019 by the aircraft manufacturer.

SECTION M: Z 526 F

MI. General

1. a) Type: Z 26

b) Model: Z 526 F

2. Airworthiness category: Aerobatic (A)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: 1075-1076, 1089-1100, 1102-1117, 1119, 1121-1124, 1128, 1146-1159, 1161-1185,

1231-1300, 1311-1325

5. Certification Application ---

Date:

6. CAA CZ Type Certificate October 14, 1969

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 69-04.

MII. Certification Basis

 Reference Date for determining the applicable requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: FAR PART 23 effective March 14, 1969

5. Requirements elected to None

comply:

6. EASA Special Conditions: None

7. EASA Exemptions:

None

- 8. EASA Equivalent Safety Findings:
- § 23.177(a)(2), (3) In aerobatic (without auxiliary wing tip tanks) there is no tendency to raise the low wing in a slip. This deviation is admitted with regard to the purpose of the aircraft (aerobatic flying) and to the operational experience. It is possible to ensure the fulfilment of the requirement by the installation of the spring device, which the manufacturer delivers on request. In normal category, there is no deviation the requirement is met.
- § 23.207 The requirement of "clear and distinct stall warning" is not met in aerobatic category in case of wing stalling with power and in turning flight stalls in normal category in all conditions. The deviation is admitted with regard to the operational experience.
- § 23.613(c) In the design and the construction of the airplane the Czechoslovak material standards (ČSN) and the specifications being in force for the Czechoslovak aircraft industry have been used. The deviation is admitted because the intent of the requirement is fulfilled.
- § 23.781 The shape of the flaps and landing gear control knobs does not meet the requirement. The deviation is admitted with regard to the location and the sense of movement of these controls, which ensure the same level of safety.
- § 23.955 The requirement of the fuel flow rate delivered by the fuel pump system to the engine is not met. The deviation is admitted with regard to the fact that the fuel flow is throttled by the valve LUN 7520.02 and is by 50 % higher than the take-off consumption of the engine.
- § 23.991(b) The aircraft is not equipped with emergency pump for fuel supply resume into the engine in case of main fuel pump failure. It is admitted with regard to the fact that: The engine is equipped with high-pressure injector, which is joined with low-pressure supply fuel pump into one aggregate. Any pertinent failure of this aggregate would cause contemporaneous breakdown of supply pump and injector. In that case, no emergency pump could ensure fuel supply and distribution to finish the flight without excessive efforts and attention distraction of the pilot. No failure of the low-pressure supply fuel pump has

occurred yet and its occurrence is extremely improbable.

- § 23.1145 The requirement of means to prevent the inadvertent operation of ignition switches is not met. The deviation is admitted with regard to the location and the shape of the switch.
- § 23.1183(a) The requirement of the fire resistancy of the lines (hoses) is not met.
- § 23.1191(g) The requirement of the resistance of fittings against the flame penetration is not met. The deviation is admitted with regard to the operation experience.
- § 23.1337(b) The LUN 1600 indicator does not meet the requirement of the calibration of the fuel quantity indicator in gallons or pounds, where the calibration in litres is used. The deviation is admitted because the intent of the requirement is fulfilled and safety level is not affected.
- § 23.1357(d) The requirement of the battery circuit braker resetting is not met. The deviation is admitted with regard to the operational experience.
- § 23.1389, § 23.1391, § 23.1393, § 23.1395 and §23.1397 Requirements concerning the location and intensities of position lights are not met. This is admitted because the airplane is certified for VFR-DAY flights and the position lights are fitted only for the facilitation of the manoeuvering the plane on the ground.

9. EASA Environmental Standards:

ICAO Annex 16, Volume I, Chapter 10

MIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of aircraft Z 526 F

No. S-F 526.000 (up to 22nd series including)

No. S-F 526.000.1 (from 23rd series)

2. Description: The Z 526 F aircraft is two-seat, low wing,

single-engine, cantilever monoplane.

3. Equipment: Approved equipment list is stated in document

Description, Operation, Maintenance ZLIN 526 F,

Chapter 10.

4. Dimensions: Wing Span: 10.596 m

Length: 8.000 m Height: 2.060 m Wing Area: 15.450 m² 5. Engine:

5.1 Model: M 137 A

5.2 Type Certificate: No. 96-02 issued by CAA CZ

5.3 Limitations: Max. Take-off power

Max. Power 132 kW (180 k) Max. Engine speed 2 750 RPM

Max. Consumption 59 l/h Max. Manifold pressure 100 kPa

Max. Continuous power

Max. Power 118 kW (160 k)
Max. Engine speed 2 680 RPM
Max. Consumption 52 l/h
Max. Manifold pressure 95 kPa

Max. Cruising power

Max. Power 103 kW (140 k)
Max. Engine speed 2 580 RPM
Max. Consumption 44 l/h
Max. Manifold pressure 88 kPa

6. Load factors: For category Aerobatic (A) +6.0 g, -3.0 g For category Normal (N) +3.8 g, -1.5 g

7. Propeller:

7.1 Model: V 503 A

7.2 Type Certificate: No. 69-02 issued by CAA CZ

7.3 Number of blades: 2

7.4 Diameter: 2 000 mm

7.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: LBZ 78

SHELL 80

ESSO 80 (TEO max. 0.06 % objemu) Grade 100/130 (TEO max. 0.06% objemu)

AVGAS 100 LL

(DEFENCE STANDARD 91/90ASTM D910).

AVGAS 100 L AVGAS 80

(See service instruction of Engine manufacturer)

8.2 Oil: AEROSHELL Oil W 100

AEROSHELL OILW 120

ELF Aviation AD 100 MOBIL Aero Oil 100

BP Aero D 100

CASTROL Aero AD 100 TOTAL Aero D 100

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category A: 95.5 litres

for category N: 165.5 litres

Usable: for category A: 93 litres

for category N: 163 litres

2 x 45 litres in main tanks 5.5 litres in connecting tank

2 x 35 litres in auxiliary wing tip tanks

9.2 Oil: Minimum 9 litres – Maximum 14 litres

9.3 Coolant system None

capacity:

10. Air Speeds: Never Exceed Speed Limit V_{NE}

305 km/h IAS

Normal Operating Speed V_{NO}

Limit 230 km/h IAS

Design Manoeuvring V_A

Speed Limit 230 km/h IAS

Maximum Flaps Extended V_{FE}

Speed Limit 152 km/h IAS

Maximum Landing Gear V_{LO}

Operating Speed 140 km/h IAS

11. Maximum Operating 5 200 m

Altitude:

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight:

For category Aerobatic (A)For category Normal (N)940 kg975 kg

Max. Variable Load:

For category Aerobatic (A)For category Normal (N)167 kg

TCDS	EASA	.A.353
Issue 5		

Moravan Aviation Z 26 - Series

Page 73 of 114 20 September 2013

14. Centre of Gravity Range:

20.4 % ÷ 27.4 % MAC

M.A.C. is 1 545 mm; 0 % M.A.C. is 616 mm aft

reference datum.

15. Datum:

The rear part of fire wall; from it are measured, for purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections:

Elevator deflection up $25^{\circ} \pm 1^{\circ}$ 20° ± 1° down

 $25^{\circ} \pm 2^{\circ}$ Elevator trim up

 $40^{\circ} \pm 2^{\circ}$ down

Rudder deflection left an right 28° ± 2°

left $5^{\circ} \pm 1^{\circ}$ Rudder trim

> right $30^{\circ} \pm 2^{\circ}$

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

0° Wing flaps position: retracted

> take-off 15°

 40° (+ 5° , - 3°) landing

17. Levelling Means:

Levelling points on left and right side of airplane fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew:

1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments:

None

22. Wheels and Tyres:

The wheels K 12-0100.00 or K 420.1-00 of main gear with tyre BARUM or MITAS 420x150-6.5 or

MITAS 420x150-6.5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

MIV. Operating and Service Instructions

1. Flight manual:

 In Czech language Letová příručka ZLÍN 526 F, date of issue 1971

 In English language Pilot's Handbook for the Z 526 F Aircraft,

date of issue 1971

Z 526 F Flughandbuch, date of issue 1969 In German language

2. Description – Operation – Maintenance:

 In Czech language Popis – obsluha – údržba ZLIN 526 F,

date of issue 1972

 In English language Description – Operation – Maintenance ZLIN 526 F,

date of issue November 1971

 In German language Beschreibung – Bedienung – Instalhaltung ZLIN 526 F,

date of issue 1972

3. Overhaul Manual:

 In Czech language Opravárenská příručka ZLIN 526 F, date of issue 1971

 In English language Overhaul Manual ZLIN 526 F, date of issue 1971

 In German language Reparatur Handbuch ZLIN 526 F, date of issue 1971

4. Catalogue of spare parts:

In Czech, English, German language

Katalog ZLIN 526 F Trener, date of issue 1971

MV. Notes:

Note 1: Following Z 526 F aircraft have been converted to the model:

> S/N: 1155-1159 Z 526 L Z 526 FI S/N: 1170-1173 Z 526 AFS-V S/N: 1119

Z 726 S/N: 1075

by the aircraft Manufacturer.

Note 2: S/N 1026 and S/N 1027 have been converted to Zlin Z 526 ASM (for

Z 526 ASM see CAA Cz STC No. STC-001-97). definition of

SECTION N: Z 526 L

NI. General

1. a) Type: Z 26

b) Model: Z 526 L

2. Airworthiness category: Aerobatic (A)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: 1160

5. Certification Application Date: ---

6. CAA CZ Type Certificate May 10, 1971

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 71-06.

NII. <u>Certification Basis</u>

Reference Date for

determining the applicable

determining the applicable

requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: FAR PART 23 effective March 14, 1969

5. Requirements elected to None

comply:

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety § 23.177(a)(2)(3) – Good controllability of the

Findings: aircraft.

§ 23.613(c), § 23.615 – The sense of requirement is met.

§ 23.781 – The same safety level is ensured.

§ 23.1183(a) – Operation experience.

§ 23.1337(b) – Fuel marking in litres does not

affect the degree of safety.

§ 23.1357 – Good operation experience.

9. EASA Environmental Standards:

Issue 5

ICAO Annex 16, Volume I, Chapter 10

Technical Characteristics and Operational Limitations NIII.

1. Type Design Definition: The specification list of Z 526 L aircraft,

No. S-L 526.000.

2. Description: The Z 526 L aircraft is two-seat, low wing, single-

engine, monoplane.

3. Equipment: Approved equipment list is stated in document

Technical description and Maintenance instructions

Z 526 L aircraft, Chapter 10.

4. Dimensions: Wing 10.596 m

> Span: 7.650 m Length: 2.060 m 15.450 m² Height:

Wing Area:

5. Engine:

5.1 Model: TEXTRON Lycoming AIO - 360 - B1B

No. 1E10 issued by FAA 5.2 Type Certificate:

5.3 Limitations: Max. Take-off power (MT)

> Max. Power 149 kW (202 HP) Max. Engine speed 2 750 RPM Max. Consumption 61 l/h Max. Manifold pressure 101 kPa

Max. Continuous Cruising power (75 % MC)

Max. Power 112 kW (152 HP) Max. Engine speed 2 450 RPM

Max. Consumption 46 l/h Max. Manifold pressure 82 kPa Max. Economic Cruising power (65 % MC)

Max. Power 97 kW (132 HP) Max. Engine speed 2 350 RPM

Max. Consumption 36 l/h Max. Manifold pressure 78 kP

6. Load factors: For category Aerobatic (A) +6.0 g, -3.0 g

For category Normal (N) +3.8 g, -1.5 g

7. Propeller:

7.1 Model: Hartzell HC-C2YK-4

7.2 Type Certificate: No. P-920 issued by FAA

7.3 Number of blades: 2

7.4 Diameter: 1 880 mm

7.5 Sense of Rotation: Clockwise in flight direction

8. Fluids:

8.1 Fuel: Aviation gasoline with min. 100/130 octanes.

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at 100°C, whose percentual carbon residue does not

exceed the value of 0.4.

Recommended kinds of oil: MS20-GOST 1013-49

ELF AD-100

AERO-SHELL W100 AERO-SHELL W120

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category A: 95.5 litres

for category N: 165.5 litres

Usable: for category A: 93 litres

for category N: 163 litres

2 x 45 litres in main tanks 5.5 litres in connecting tank

2 x 35 litres in auxiliary wing tip tanks

9.2 Oil: Minimum 9 litres – Maximum 11 litres

TCDS EASA.A.353	Moravan Aviation	Page 78 of 114
Issue 5	Z 26 - Series	20 September 2013

9.3 Coolant system None capacity:

10. Air Speeds: **Never Exceed Speed Limit** V_{NF}

> 305 km/h IAS category A category N 269 km/h IAS

Normal Operating Speed Limit V_{NO}

230 km/h IAS category A, N

Design Manoeuvring Speed Limit V_A

230 km/h IAS category A category N 189 km/h IAS

Maximum Flaps Extended Speed Limit VFE category A, N 148 km/h IAS

11. Maximum Operating Altitude:

6 500 m

12. Allweather Operations Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight:

> - For category Aerobatic (A) 940 kg - For category Normal 975 kg

Max. Variable Load:

- For category Aerobatic (A) 170 kg - For category Normal (N) 144 kg

20.6 % ÷ 26.5 % MAC 14. Centre of Gravity Range:

M.A.C. is 1 545 mm; 0 % M.A.C. is 616 mm aft

reference datum.

15. Datum: The rear part of fire wall; from it are measured, for

Rudder deflection

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 1^{\circ}$

> 20° ± 1° down

right and left 28° ± 2°

Elevator trim tab $25^{\circ} \pm 2^{\circ}$ uр $40^{\circ} \pm 2^{\circ}$

down

 $5^{\circ} \pm 1^{\circ}$ Rudder trim tab left

> right $30^{\circ} \pm 2^{\circ}$

Ailerons deflection up 108 mm (+ 5/-3) mm

> 98 mm (+ 5/-3) mm down

Wing flaps positions retracted 0°

take-off 15°

landing 40° (+ 5°, -3°)

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo Compartments:

Maximum 25 kg

22. Wheels and Tyres: The wheels K 12-0100.00 or K 420.1-00 of main

gear with tyre BARUM or MITAS 420x150-6.5 or

MITAS 420x150-6.5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

NIV. Operating and Service Instructions

1. Flight manual:

In English language
 Flight Manual Z 526 L

2. Description – Operation – Maintenance:

In English language Technical Description and Maintenance Instruction,

ZLIN 526 L Aircraft, date of issue 1970

3. Overhaul Manual:

In English language
 Overhaul Manual Z 526 L, date of issue 1972

4. Catalogue of spare parts:

In Czech language
 Katalog ZLIN 526 L (Dodatek ke katalogu Z 526 F),

date of issue 1972

English language
 Spare Parts Catalogue Z 526 L (Supplement of the

Z 526 F Aircraft Catalogue), date of issue 1972

German language
 Ersatzeteilkatalog Z 526 L (Nachtrag zum Katalog des

Flugzeugs Z 526 F), date of issue 1972

NV. Notes:

None

SECTION O: Z 526 AFS

OI. General

1. a) Type: Z 26

b) Model: Z 526 AFS

2. Airworthiness category: Aerobatic (A)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: 1126, 1201-1230, 1301-1310, 1326-1330

5. Certification Application

Date:

June 30,1972

6. CAA CZ Type Certificate

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 72-04.

Oll. Certification Basis

Reference Date for determining the applicable requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requiremenst: FAR PART 23, Amdt. 23-9 included

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety § 23.177 – Requirements are met with except for

flight characteristics at sideslips when aileron and

Findings:

rudder control forces are inexpressive and, in some cases, the tendency to raise the low wing is not demonstrated according to regulation requirement. It is admitted with regard to very good aircraft controllability, to the fact that uncontrollable tendencies do not occur and to the fact that the aircraft is aerobatic for which higher manoeuverability is required.

- § 23.207 Stall warning is inexpressive. It is admitted with regard to good flight characteristics at stall, to very good aircraft controllability and to the fact that dangerous tendencies do not occur.
- § 23.613(c), § 23.615 Materials and design values used for aircraft design and construction comply with the Czechoslovak State Standard and specifications valid for the Czechoslovak aviation industry. It is admitted with regard to the fact that the requirement sense is met.
- § 23.729(f)(1) A warning device is not used. It is admitted with regard to the fact that the aircraft is intended for aerobatic flying only.
- § 23.991(b) The aircraft is not equipped with emergency pump for fuel supply recovery in case of main fuel pump failure. It is admitted with regard to these reasons:
- The engine is equipped with high-pressure pump, which is joined with low-pressure pump to a single aggregate. A failure of this aggregate could cause contemporaneous break of fuel supply by both supply and injection pumps. In such case no emergency pump could ensure sufficient fuel supply to finish the flight without abnormal pilot's skills or effort. A failure of low-pressure pump has not been occurred yet and its occurrence is extremely improbable.
- § 23.1183(a) Requirement for hoses fire resistance is not met.
- § 23.1357(d) Requirement for battery circuit breaker during flight is not met. It is admitted with regard to operation experiences.
- 9. EASA Environmental Standards:
- ICAO Annex 16, Volume I, Chapter 10

OIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of Z 526 AFS aircraft,

No. S-AFS 526.000

2. Description: The Z 526 AFS Aircraft is one-seat, low wing,

single-engine, cantilever monoplane.

3. Equipment: Approved equipment list is stated in document

Description, Operation, Maintenance ZLIN 526

AFS, Section 10.

4. Dimensions: Wing Span: 8.840 m

Length: 7.806 m Height: 1.900 m Wing Area: 13.810 m²

5. Engine:

5.1 Model: M 137 A

5.2 Type Certificate: No. 96-02 issued by CAA CZ

5.3 Limitations: Max. Take-off power

Max. Power 132 kW (180 HP) Max. Engine speed 2 750 RPM

Max. Consumption 59 l/h
Max. Manifold pressure 100 kPa

Max. Continuous power

Max. Power 118 kW (160 HP)

Max. Engine speed 2 680 RPM

Max. Consumption 52 l/h Max. Manifold pressure 95 kPa

Max. Cruising power

Max. Power 103 kW (140 HP)

Max. Engine speed 2 580 RPM

Max. Consumption 44 l/h Max. Manifold pressure 88 kPa

6. Load factors: For category Aerobatic (A) + 7.0 g, - 4.5 g

For category Normal (N) + 3.8 g, - 1.5 g

7. Propeller:

7.1 Model: V 503 A

7.2 Type Certificate: No. 69-02 issued by CAA CZ

7.3 Number of blades: 2

7.4 Diameter: 2 000 mm

7.5 Sense of Rotation:

Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline with minimum 72

octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06% vol.

BL 78 BP 100L AVGAS 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with minimal kinematic viscosity of 20 mm² s⁻¹ at 100°C, which percentual carbon residue does

not exceed the value of 0.29 %.

MS 20 – Running in

AEROSHELL Oil 100 - Running in

Aeroshell W100

Aeroshell W120 (in tropical climates)

ELF Aviation AD 100 BP Aero D 100 TOTAL Aero D 100

8.3 Coolant: None

9. Fluids capacities:

9.1 Fuel: Total: for category A: 75.5 litres

for category N: 145.5 litres

Usable: for category A: 73 litres

for category N: 143 litres

2 x 35 litres in main tanks 5.5 litres in connecting tank

2 x 35 litres in auxiliary wing tip tanks

9.2 Oil: Minimum 7 litres – Maximum 14 litres

9.3 Coolant system

capacity:

None

10. Air Speeds: Never Exceed Speed Limit V_{NE}

305 km/h IAS

Normal Operating Speed V_{NO}

Limit 230 km/h IAS

Design Manoeuvring V_A

Speed Limit 238 km/h IAS

Maximum Open Landing V_{LE}

Gear Speed 180 km/h IAS

	Maximum Landing Operating Speed	Gear V _{LO}	140 km/h IAS
	Maximum Permiss Maneuver speed	ible Snap	160 km/h IAS
Maximum Operating Altitude:	5 800 m		
Allweather Operations Capability:	The aircraft is appr	oved for VFR	Day flights.
13. Maximum Weights:	Max. Take-off and - For category Aero - For category Nor	obatic (A)	nt: 740 kg 840 kg
	Max. Variable Load - For category Aero - For category Nori	obatic (A)	70 kg 83 kg
14. Centre of Gravity Range:	24.8 % – 31 % MA M.A.C. is 1 609 mr reference datum.		. is 380 mm aft
15. Datum:	The rear part of fire purpose of assignadimensions.		are measured, for y Centre, all lateral
16. Control surface deflections:	Elevator deflection	up down	28° ± 2° 24° ± 1°
	Elevator trim tab	up down	25° ± 2° 40° ± 2°
	Rudder deflection	right and lef	t 30° ± 2°
	Rudder trim tab	left right	5° ± 1° 30° ± 2°
	Outside Aileron de		
	Inside aileron defle	down 108 r	nm; (+ 5; - 3) mm nm; (+ 5; - 3) mm
		up 84 m	m; (+ 5; - 3) mm m; (+ 5; - 3) mm
17. Levelling Means:	Levelling points on	_	<u>-</u>

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger Seating Capacity:

1 (including crew)

min. 850 mm below.

fuselage to be levelled. Measurement plane to be

TCDS EASA.A.353 Moravan Aviation Page 86 of 114 20 September 2013 Issue 5 Z 26 - Series

None

20. (Reserved)

21. Baggage/Cargo

Compartments:

The wheels K 12-0100.00 or K 420.1-00 of main

22. Wheels and Tyres: gear with tyre BARUM or MITAS 420x150-6.5 or MITAS 420x150-6.5 TL with tube 420x150;

> The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

OIV. Operating and Service Instructions

1. Flight Manual:

 In Czech language Letová příručka ZLIN 526 AFS, date of issue 1971

 In English language Flight Manual ZLIN 526 AFS

 In German language Flugzeug - Betriebshandbuch ZLIN 526 AFS

2. Maintenance Manual:

In Czech language Popis – obsluha – údržba ZLIN 526 AFS,

date of issue 1972

In English language Description - Operation - Maintenance ZLIN 526 AFS,

date of issue 1972

Beschreibung – Bedienung – Instandhaltung ZLIN In Germany language

526 AFS, date of issue 1972

3. Overhaul Manual:

Opravárenská příručka ZLIN 526 AFS (Dodatek In Czech language

k Opravárenské příručce Z 526 F), date of issue 1972

Overhaul Manual ZLIN 526 AFS (Supplement to In English language

Overhaul Manual of the Z 526 F Aircraft),

date of issue 1972

Reparaturhandbuch ZLIN 526 AFS (Nachtrag zum In German language

Reparaturhanbuch Z 526 F), date of issue 1972

4. Illustrated Parts Catalogue:

In Czech, German and English language, date of issue 1972

Katalog Z 526 AFS (Dodatek ke katalogu Z 526 F) Ersatzteil Katalog (Nachtrag zum Katalog für das

Fugzeug Z 526 F)

Spare Parts Catalogue (Catalogue Supplement of the

Z 526 F Aircraft)

5. Catalogue Supplement:

In Czech, German and English language, issued 1973

Dodatek ke katalogu pro Z 526 AFS

Nachtrag zum Katalog für das Fugzeug Z 526 AFS Supplement of the Z 526 AFS Catalogue

OV. Notes:

Following Z 526 AFS aircraft have been converted to the model: Z 526 AFS-V S/N: 1213, 1218-1220, 1224, 1307 by the aircraft manufacturer.

SECTION P: Z 526 AFS-V

Pl. General

1. a) Type Z 26

b) Model: Z 526 AFS-V

2. Airworthiness category: Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: 1101

5. Certification Application

Date:

6. CAA CZ Type Certificate

Date: September 24, 1982

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 72-04, Supplement No. 2.

PII. <u>Certification Basis</u>

requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: FAR PART 23, Amdt. 23-9 included

5. Requirements elected to

comply: None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

§ 23.177 – Requirements are met with except for flight characteristics at sideslips when aileron and rudder control forces are inexpressive and, in

some cases, the tendency to raise the low wing is not demonstrated according to regulation requirement. It is admitted with regard to a very good aircraft controllability, to the fact that uncontrollable tendencies do not occur and to the fact that the aircraft is aerobatic, for which higher manoeuverability is required.

§ 23.207 – Stall warning is inexpressive. It is admitted with regard to good flight characteristics at stall, to very good aircraft controllability and to the fact that dangerous tendencies do not occur.

§ 23.613(c), § 23.615 – Materials and design values used for aircraft design and construction comply with the Czechoslovak State Standard and specifications valid for the Czechoslovak aviation industry. It is admitted with regard to the fact that the requirement sense is met.

§ 23.991(b) – The aircraft is not equipped with emergency pump for fuel supply recovery in case of main fuel pump failure. It is admitted with regard to these reasons:

- The engine is equipped with high-pressure pump, which is joined with low-pressure pump to a single aggregate. A failure of this aggregate could cause contemporaneous break of fuel supply by both supply and injection pumps. In such case, no emergency pump could ensure sufficient fuel supply to finish the flight without abnormal pilot's skills or effort. A failure of low-pressure pump has not been occurred yet and its occurrence is extremely improbable.

§ 23.1183(a) — Requirement for hoses fire resistance is not met.

§ 23.1357(d) – Requirement for battery circuit breaker during flight is not met. It is admitted with regard to operation experiences.

9. EASA Environmental Standards:

ICAO Annex 16, Volume I, Chapter 10

PIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: The specification list of Z 526 AFS-V aircraft,

No. S-AFS 526.000, AFN 526

2. Description: The Z 526 AFS-V aircraft is one-seat, low wing,

single-engine, cantilever monoplane.

3. Equipment: Approved equipment list is stated in document

Description, Operation, Maintenance ZLIN 526

AFS, Section 10.

4. Dimensions: Wing Span: 8.840 m

Length: 7.806 m Height: 1.900 m Wing Area: 13.810 m²

5. Engine:

5.1 Model: M 137 A

5.2 Type Certificate: No. 96-02 issued by CAA CZ

5.3 Limitations: Max. Take-off power

Max. Power 132 kW (180 HP)
Max. Engine speed 2 750 RPM

Max. Consumption 59 l/h
Max. Manifold pressure 100 kPa

Max. Continuous power

Max. Power 118 kW (160 HP)

Max. Engine speed 2 680 RPM

Max. Consumption 52 l/h Max. Manifold pressure 95 kPa

Max. Cruising power

Max. Power 103 kW (140 HP)

Max. Engine speed 2 580 RPM

Max. Consumption 43 l/h Max. Manifold pressure 87 kPa

6. Load factors: +3.8 g, -1.5 g

7. Propeller:

7.1 Model: V 503 A

7.2 Type Certificate: No. 69-02 issued by CAA CZ

7.3 Number of blades: 2

7.4 Diameter: 2 000 mm

7.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with minimum

72 octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06% vol.

BL 78 BP 100L AVGAS 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with minimal kinematic viscosity of 20 mm² s⁻¹ at 100°C, which percentual carbon residue does

not exceed the value of 0.29 %.

MS 20 - Running in

AEROSHELL Oil 100 - Running in

Aeroshell W100

Aeroshell W120 (in tropical climates)

ELF Aviation AD 100

BP Aero D 100 TOTAL Aero D 100

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: 145.5 litres

Usable: 143 litres

2 x 35 litres in main tanks 5.5 litres in connecting tank

2 x 35 litres in auxiliary wing tip tanks

9.2 Oil: Minimum 7 litres – Maximum 14 litres

9.3 Coolant system

capacity:

None

10. Air Speeds: Never Exceed Speed Limit V_{NE}

305 km/h IAS

Normal Operating Speed V_{NO}

Limit 230 km/h IAS

Design Manoeuvring Speed V_A

Limit 238 km/h IAS

Maximum Open Landing V_{LE}

Gear Speed 180 km/h IAS

Maximum Landing Gear V_{LO}

Operating Speed 140 km/h IAS

11. Maximum Operating 5 800 m

Altitude:

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight: 840 kg

Max. Variable Load: 83 kg

14. Centre of Gravity Range: 24.8 % – 31 % MAC

M.A.C. is 1 609 mm; 0 % M.A.C. is 380 mm aft

reference datum.

15. Datum: The rear part of fire wall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $28^{\circ} \pm 2^{\circ}$

down $24^{\circ} \pm 1^{\circ}$

Elevator trim tab up $25^{\circ} \pm 2^{\circ}$

down $35^{\circ} \pm 2^{\circ}$

Rudder deflection right and left 30° ± 2°

Rudder trim tab left 5° ± 1°

right $30^{\circ} \pm 2^{\circ}$

Outside aileron deflection

up 112 mm; (+ 5; - 3) mm

down 108 mm; (+ 5; - 3) mm

Inside aileron deflection

up 84 mm; (+ 5; - 3) mm

down 81 mm; (+ 5; - 3) mm

Wing flaps position: retracted 0°

take-off 15°

landing 40° (+ 5°, - 3°)

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity: 1 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments:

None

22. Wheels and Tyres: The wheels K 12-0100.00 or K 420.1-00 of main

gear with tyre BARUM or MITAS 420x150-6.5 or

MITAS 420x150-6.5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85-4 with tube 260x85.

PIV. Operating and Service Instructions

1. Flight Manual:

In Czech language Letová příručka ZLIN 526 AFS, date of issue 1971

- Dodatek k Letové příručce Z 526 AFS-V,

date of issue 1982

In English language
 Flight Manual ZLIN 526 AFS

In German language
 Flugzeug – Betriebshandbuch ZLIN 526 AFS

2. Maintenance Manual:

In Czech language
 Popis – obsluha – údržba ZLIN 526 AFS,

date of issue 1972

In English language Description – Operation – Maintenance ZLIN 526 AFS,

date of issue 1972

In Germany language Beschreibung – Bedienung – Instandhaltung ZLIN

526 AFS, date of issue 1972

3. Overhaul Manual:

In Czech language
 Opravárenská příručka ZLIN 526 AFS (Dodatek)

k Opravárenské příručce Z 526 F), date of issue 1972

In English language
 Overhaul Manual ZLIN 526 AFS (Supplement to

Overhaul Manual of the Z 526 F Aircraft),

date of issue 1972

In German language
 Reparaturhandbuch ZLIN 526 AFS (Nachtrag zum

Reparaturhanbuch Z 526 F), date of issue 1972

4. Ilustrated Parts Catalogue:

In Czech, German and English language, date of issue 1972

Katalog Z 526 AFS (Dodatek ke katalogu Z 526 F) Ersatzteil Katalog (Nachtrag zum Katalog für das

Flugzeug Z 526 F)

Spare Parts Catalogue (Catalogue Supplement of the

Z 526 F Aircraft)

5. Catalogue Supplement:

In Czech, German and English language, issued 1973

Dodatek ke katalogu pro Z 526 AFS

Nachtrag zum Katalog für das Flugzeug Z 526 AFS

Supplement of the Z 526 AFS Catalogue

PV. Notes Z 526 AFS-V

None

SECTION R: Z 526 M

RI. General

1. a) Type: Z 26

b) Model: Z 526 M

2. Airworthiness category: Utility (U)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: see Z 526 aircraft

5. Certification Application ---

Date:

6. CAA CZ Type Certificate February 5, 1976

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 2417/59, Supplement No. 5

RII. <u>Certification Basis</u>

 Reference Date for determining the applicable requirements:

2. (Reserved)

3. (Reserved)

4. Airworthiness Requirements: Bauvorschriften für Flugzeuge, Kat. K;

British Civil Airworthiness Requirements, Cat. D

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemptions: None

8. EASA Equivalent Safety

Findings:

None

9. EASA Environmental

Standards:

ICAO Annex 16, Volume I, Chapter 10

RIII. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: The specification list of Z 526 M aircraft,

No. S-Z526.000.

2. Description: The Z 526 M aircraft is two-seat, low wing,

single-engine, monoplane.

3. Equipment: Approved equipment list is stated in document

Technical Description, Operation

Instructions, Chapter 9.

4. Dimensions: Wing Span: 10.845 m with auxiliary tanks

10.596 m without auxiliary tanks

Length: 7.820 m Height: 2.060 m Wing Area: 15.450 m²

5. Engine:

5.1 Model: M 137 A

5.2 Type Certificate: No. 96-02 issue by CAA CZ

5.3 Limitations: Max. Take-off power

Max. Power 132 kW (180 HP)
Max. Engine speed 2 750 RPM
Max. Consumption 59 l/h
Max. Manifold pressure 100 kPa

Max. Continuous power

Max. Power 118 kW (160 HP)
Max. Engine speed 2 680 RPM
Max. Consumption 52 l/h

Max. Manifold pressure 95 kPa

Max. Cruising power

Max. Power 103 kW (140 HP)

Max. Engine speed 2 580 RPM

Max. Consumption 43 l/h Max. Manifold pressure 87 kPa

6. Load factors: For category Utility (U) +5.5 g, -3 g

For category Normal (N) +3.5 g, -1 g

7. Propellers:

7.1.1 Model: V 503

7.1.2 Type Certificate: No. 64 002 issued by CAA CZ

7.1.3 Number of blades: 2

7.1.4 Diameter: 1 950 mm

7.1.5 Sense of Rotation: Anticlockwise in flight direction

or

7.2.1 Model: V 503 A

7.2.2 Type Certificate: No. 96-02 issued by CAA CZ

7.2.3 Number of blades: 2

7.2.4 Diameter: 2 000 mm

7.2.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline with min. 72÷87

octanes. Application of ethylated fuels is only permitted in case, the T.E.L. content does not

exceed the value of 0.06 % vol. Recommended kinds of fuel:

LBZ 72 LBZ 83

8.2 Oil: For engine operation are recommended mineral

oils with min. kinematic viscosity of 20 cSt at

100°C, whose percentual carbon residues does not

exceed the value of 0.4. Recommended kinds of oil:

MS 20

AERO-SHELL W 100

AERO-SHELL W 120 in tropical climates.

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category U: 100 litres

for category N: 170 litres

Usable: for category U: 97.5 litres

for category N: 167.5 litres

2 x 45 litres in main tanks 3 litres in connecting tank

TCDS EASA.A.	353
Issue 5	

Moravan Aviation Z 26 - Series

Page 97 of 114 20 September 2013

7 litres in gravity tank

2 x 35 litres in auxiliary wing tip tanks

9.2 Oil: Minimum 7 litres – Maximum 11 litres

9.3 Coolant system None

capacity:

10. Air Speeds: Never Exceed Speed Limit V_{NE}

292 km/h IAS

Normal Operating Speed Limit V_{NO}

233 km/h IAS

Design Manoeuvring Speed V_A

Limit 225 km/h IAS

Maximum Flaps Extended V_{FF}

Speed Limit 140 km/h IAS

Maximum Open Landing Gear VLE

Speed 292 km/h

IAS

Maximum Landing Gear V_{LO}

Operating 140 km/h IAS

Maximum permissible Snap

Maneuver Speed Limit for cat. A 160 km/h IAS

11. Maximum Operating

Altitude:

5 000 m

12. Allweather Operations

Capability:

The aircraft is approved for VFR Day flights.

13. Maximum Weights: Max. Take-off and Landing weight:

For category Utility (U) 940 kgFor category Normal (N) 975 kg

Max. Variable Load:

For category Utility (U) 195 kgFor category Normal (N) 163 kg

14. Centre of Gravity Range: 17 % ÷ 27.4 % MAC

M.A.C. is 1 545 mm; 0 % M.A.C. is 616 mm aft

reference datum.

15. Datum: The rear part of fire wall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $25^{\circ} \pm 1^{\circ}$

down $20^{\circ} \pm 1^{\circ}$

Elevator trim tab up $25^{\circ} \pm 2^{\circ}$

Page 98 of 114 20 September 2013

down $40^{\circ} \pm 2^{\circ}$

Rudder deflection right and left 28° ± 2°

Rudder trim tab left $5^{\circ} \pm 1^{\circ}$

right $30^{\circ} \pm 2^{\circ}$

Ailerons deflection up 108 mm (+5, -3) mm

down 98 mm (+5, -3) mm

Wing flaps position: retracted 0°

take-off 15°

landing $40^{\circ} (+5^{\circ}, -3^{\circ})$

17. Levelling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments:

Maximum 17 kg

22. Wheels and Tyres: The wheels K 12-0100.00 or K 420.1-00 of main

gear with tyre BARUM or MITAS 420x150-6.5 or MITAS 420x150-6.5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

RIV. Operating and Service Instructions

1. Flight manual:

In Czech languageZ 526 – Z 526 A

Letová příručka školního a akrobatického letounu

- Dodatek č. 1 k Letové příručce Z 526 M,

date of issue 1978

In English language
 Instruction for Pilot on the Use and Handling of the

Training and Acrobatic Z 526 and Z 526 A Aircraft,

date of issue 1966

In German language
 Handbuch für den Flugzeugführer zum Schulungs

und kunstflugzeuges Z 526 – Z 526 A,

date of issue 1966

- Nachtrag Nr. 1 zum Flughandbuch Z 526 M,

date of issue 1978

2. Descriprion – Operation – Maintenance:

In Czech language
 Technický popis a návod k obsluze letounu

Z 526 – Z 526 A

In English language Technical Description, Operation Instruction for

Z 526 – Z 526 A Aircrafts, date of issue 1966

In German language Technische Beschreibung und Bedienungsanleitung

zum Flugzeug Z 526 – Z 526 A, date of issue 1966

3. Overhaul Manual:

In English language
 Major Overhaul of Z 526 – Z 526 A Aircraft,

date of issue 1969

4. Catalogue of spare parts:

- In Czech, English, German language

Trener Master Z 526 Katalog, date of issue 1967

RV. Notes:

None

SECTION S: Z726

SI. General

1. a) Type: Z 26

b) Model: Z 726

2. Airworthiness category: Utility (U)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: 1331, 1333-1360

5. Certification Application

Date:

6. CAA CZ Type Certificate June 10, 1974

Date:

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 74-01.

SII. <u>Certification Basis</u>

 Reference Date for determining the applicable requirements:

2. (Reserved)

3. Reserved)

4. Airworthiness Requirements: FAR PART 23, Amdt. 23-13 included

5. Requirements elected to

comply: None

6. EASA Special Conditions: None

7. EASA Exemptions: None

- 8. EASA Equivalent Safety Findings:
- § 23.177(a)(2), (3) Some requirements for directional and lateral stability and aileron control stick force curve in straight, steady slips are not fully met. It is admitted with regard to very good aircraft controllability and to the fact that dangerous tendencies do not occur and abnormal pilot's skills or effort are not needed.
- § 23.613(c), § 23.615 Materials and design values used for aircraft design and construction comply with the Czechoslovak State Standard and specifications valid for the Czechoslovak aviation industry. It is admitted with regard to the fact that the requirement sense is met.
- § 23.955(c) Requirement for flow rate of fuel supplied by fuel pump to the engine is not met. It is admitted with regard to the fact that fuel flow is higher than engine consumption at maximum power.
- § 23.991(b) The aircraft is not equipped with emergency pump for fuel supply recovery in case of main fuel pump failure. It is admitted with regard to these reasons:
- The engine is equipped with high-pressure pump, which is joined with low-pressure pump to a single aggregate. A failure of this aggregate could cause contemporaneous break of fuel supply by both supply and injection pumps. In such case, no emergency pump could ensure sufficient fuel supply to finish the flight without abnormal pilot's skills or effort. A failure of low-pressure pump has not been occurred yet and its occurrence is extremely improbable.
- § 23.993(d), § 23.1183(a) Requirement for hoses fire resistance is not met. It is admitted with regard to experiences from operation of the aircraft of former type.
- § 23.1013(e), § 23.1019 Oil tank outlet is provided with the screen, which does not restrict oil flow. A surface of the screen is multiple bigger than cross section of the outlet fitting, thus safety level is kept.
- § 23.1145(c) Requirement for protection of magnetos changeover switch against dangerous change over is not met. It is admitted with regard to the shape and location of the changeover switch.
- § 23.1381 to 23.1401 The aircraft is not equipped

with lighting for night operation.

§ 23.1545(a), (b) – Requirement for a scale for CAS speed is not met. Airspeed indicator scale and its colour markings are done in IAS.

9. EASA Environmental Standards:

ICAO Annex 16, Volume I, Chapter 10

SIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: The specification list of Z 726 aircraft,

No. S-Z 726.000.

2. Description: The Z 726 aircraft is two-seat, low wing, single-

engine, cantilever monoplane.

3. Equipment: Master equipment list is stated in document Flight

Manual Z 726, section 6.

4. Dimensions: Wing Span: 9.875 m

Length: 7.975 m Height: 2.060 m Wing Area: 14.890 m²

5. Engine:

5.1 Model: M 137 AZ

5.2 Type Certificate: No. 96-02 issued by CAA CZ

5.3 Limitations: Max. Take-off power

Max. Power 132 kW (180 HP)
Max. Engine speed 2 750 1/min
Max. Consumption 61 I/hod
Max. Manifold pressure 100 kPa

Max. Continuous power

Max. Power 118 kW (160 HP)
Max. Engine speed 2 680 1/min
Max. Consumption 52 I/hod
Max. Manifold pressure 95 kPa

Max. Cruising power

Max. Power103 kW (140 HP)Max. Engine speed2 580 1/minMax. Consumption43 I/hodMax. Manifold pressure88 kPa

6. Load factors: For category Utility (U) +4.4 g, -2.2 g

For category Normal (N) +3.8 g,

1.5 g

7. Propeller:

7.1 Model: V 503 A

7.2 Type Certificate: No. 69-02 issued by CAA CZ

7.3 Number of blades: 2

TCDS EASA.A.353

Moravan Aviation Z 26 - Series

Page 104 of 114 20 September 2013

7.4 Diameter: 2 000 mm

7.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with minimum

72 octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06% vol.

BL 78 BP 100L AVGAS 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with minimal kinematic viscosity of 20 mm² s⁻¹ at 100°C, which percentual carbon residue does

not exceed the value of 0.29 %.

MS 20 – Running in

AEROSHELL Oil 100 - Running in

Aeroshell W100

Aeroshell W120 (in tropical climates)

ELF Aviation AD 100

BP Aero D 100 TOTAL Aero D 100

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category U: 95.5 litres

for category N: 165.5 litres

Usable: for category U: 93 litres

for category N: 163 litres

2 x 45 litres in main fuel tanks 5.5 litres in connecting tank

2 x 35 litres in auxilitary wing tip tanks

9.2 Oil: Minimum 9 litres – Maximum 14 litres

9.3 Coolant system

capacity:

None

10. Air Speeds: Never Exceed Speed Limit V_{NE}

300 km/h IAS

Normal Operating Speed V_{NO}

Limit 220 km/h IAS

Design Manoeuvring Speed V_A

Limit 203 km/h IAS

TCDS EASA.A.353	Moravan Aviation
Issue 5	Z 26 - Series

Page 105 of 114 20 September 2013

108 mm (+ 5; - 3) mm

0° 15° ± 2°

40° (+ 5°, - 3°)

down 98 mm (+ 5; - 3) mm

retracted

take-off

landing

Levelling points on left and right side of airplane

	Maximum Flaps Ex Speed Limit	tended	V _{FE} 152 km/h IAS
	Maximum Open La Gear Speed	nding V _{LE}	300 km/h IAS
	Maximum Landing Operating Speed	Gear V _L	o 140 km/h IAS
	Maximum Permissi Maneuver Speed	ble Snap	160 km/h IAS
Maximum Operating Altitude:	4 500 m		
Allweather Operations Capability:	The aircraft approv	ed for VFR D	ay flights.
13. Maximum Weights:	Max. Take-off weig - For category Aero - For category Norr	batic (U)	940 kg 1 000 kg
	Max. Landing weight - For category Aero - For category Norr	batic (U)	940 kg 950 kg
	Max. Variable Load - For category Aero - For category Norr	batic (U)	250 kg 300 kg
14. Centre of Gravity Range:	17.5 % – 28.5 % M M.A.C. is 1 568 mm datum		mm aft reference
15. Datum:	The rear part of fire purpose of assigna dimensions.		
16. Control surface deflections:	Elevator deflection	up down	28° ± 1° 24° ± 1°
	Elevator trim tab	up down	25° ± 2° 40° ± 2°
	Rudder deflection	right and left	28° ± 2°
	Rudder trim tab	left right	5° +3° 30° ± 2°
			>

Ailerons deflection up

Wing flaps positions

17. Levelling Means:

TCDS EASA.A.353 Moravan Aviation
Issue 5 Z 26 - Series

Page 106 of 114 20 September 2013

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments:

None

22. Wheels and Tyres: The wheels K 12-0100.00 or K 420.1-00 of main

gear with tyre BARUM or MITAS 420x150-6.5 or

MITAS 420x150-6.5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

SIV. Operating and Service Instructions

1. Flight manual:

In Czech language
 Letová příručka Z 726, date of issue 1974

In English language
 Flight Manual Z 726 ZLIN UNIVERSAL,

date of issue 1977

2. Maintenance Manual:

In Czech language
 Technický popis a návod k obsluze Z 726,

Doc. No.: Do - Z 726 - 2011 date of issue 1974

In English language Technical Manual Z 726 ZLIN UNIVERSAL,

Doc. No.: Do – Z 726 – 2011 date of issue 1974

3. Overhaul Mnual:

In Czech language
 Opravárenská příručka Z 726 ZLIN

UNIVERSAL, issued 1978

4. Ilustrated parts catalogue:

In Czech, German and English language, issued 1975

Katalog Z 726 ZLIN UNIVERSAL

SV. Notes

None

SECTION T: Z 726 K

TI. General

1. a) Type: Z 26

b) Model: Z 726 K

2. Airworthiness category: Utility (U)

Normal (N)

3. Type Certificate Holder: ZLIN AIRCRAFT A.S.

Letiště 1578

765 81 Otrokovice Czech Republic

4. Manufacturer: Moravan, n. p.

Otrokovice

CZECHOSLOVAKIA

S/N: 1332

5. Certification Application

Date:

6. CAA CZ Type Certificate July 19 Jul

Date:

June 17, 1974

7. The EASA Type Certificate replaces the CAA CZ Type Certificate No. 74-01.

TII. <u>Certification Basis</u>

 Reference Date for determining the applicable requirements:

- 2. (Reserved)
- 3. (Reserved)

4. Airworthiness Requirements: FAR PART 23, Amdt. 23-13 included

5. Requirements elected to

comply:

None

6. EASA Special Conditions: None

7. EASA Exemtions: None

- 8. EASA Equivalent Safety Findings:
- § 23.177(a)(2), (3) Some requirements for directional and lateral stability and aileron control stick force curve in straight, steady slips are not fully met. It is admitted with regard to very good aircraft controllability and to the fact that dangerous tendencies do not occur and abnormal pilot's skills or effort are not needed.
- § 23.613(c), § 23.615 Materials and design values used for aircraft design and construction comply with the Czechoslovak State Standard and specifications valid for the Czechoslovak aviation industry. It is admitted with regard to the fact that the requirement sense is met.
- § 23.955(c) Requirement for flow rate of fuel supplied by fuel pump to the engine is not met. It is admitted with regard to the fact that fuel flow is higher than engine consumption at maximum power.
- § 23.991(b) The aircraft is not equipped with emergency pump for fuel supply recovery in case of main fuel pump failure. It is admitted with regard to these reasons:

The engine is equipped with high-pressure pump, which is joined with low-pressure pump to a single aggregate. A failure of this aggregate could cause contemporaneous break of fuel supply by both supply and injection pumps. In such case, no emergency pump could ensure sufficient fuel supply to finish the flight without abnormal pilot's skills or effort. A failure of low-pressure pump has not been occurred yet and its occurrence is extremely improbable.

- § 23.993(d), § 23.1183(a) Requirement for hoses fire resistance is not met. It is admitted with regard to experiences from operation of the aircraft of former type.
- § 23.1013(e), § 23.1019 Oil tank outlet is provided with the screen, which does not restrict oil flow. A surface of the screen is multiple bigger than cross section of the outlet fitting, thus safety level is kept.
- § 23.1145(c) Requirement for protection of magnetos changeover switch against dangerous change over is not met. It is admitted with regard to the shape and location of the changeover switch.

§ 23.1381 to 23.1401 – The aircraft is not equipped with lighting for night operation.

§ 23.1545(a), (b) – Requirement for a scale for CAS speed is not met. Airspeed indicator scale and its colour markings are done in IAS.

9. EASA Environmental Standards:

ICAO Annex 16, Volume I, Chapter 10

TIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: The specification list of Z 726 aircraft,

No. S-K 726.000

2. Description: The Z 726 K aircraft is two-seat, low wing,

single-engine, cantilever monoplane.

3. Equipment: Master equipment list is stated in document Flight

Manual Z 726 K, section 6.

4. Dimensions: Wing Span: 9.875 m

Length: 7.975 m Height: 2.060 m Wing Area: 14.890 m²

5. Engine:

5.1. Model: M 337 AK

5.2. Type Certificate: No. 72-08 issue by CAA CZ

5.3. Limitations: Max. Take-off power

Max. Power 154 kW (210 HP)
Max. Engine speed 2 750 1/min
Max. Consumption 56 I/hod
Max. Manifold pressure 118 kPa

Max. Continuous power

Max. Power 125 kW (170 HP)
Max. Engine speed 2 600 1/min
Max. Consumption 52 l/hod
Max. Manifold pressure 98 kPa

Max. Cruising power

Max. Power 103 kW (140 HP)
Max. Engine speed 2 400 1/min
Max. Consumption 42 l/hod
Max. Manifold pressure 90 kPa

6. Load factors: For category Utility (U) +4.4 g,

2.2 g

For category Normal (N) +3.8 g, -1.5 g

7. Propeller:

7.1 Model: V 500 A

7.2 Type Certificate: No 73-03 issued by CAA CZ

7.3 Number of blades: 2

7.4 Diameter: 2 000 mm

7.5 Sense of Rotation: Anticlockwise in flight direction

8. Fluids:

8.1 Fuel: Non-ethylated aviation gasoline, with minimum

72 octanes. Application of ethylated fuels is only permitted in case the T.E.L. content does not

exceed the value of 0.06% vol.

BL 78 BP 100L AVGAS 80 AVGAS 100 LL

(DEFENCE STANDARD 91/90, ASTM D910)

8.2 Oil: For engine operation are recommended mineral

oils with minimal kinematic viscosity of 20 mm² s⁻¹ at 100°C, which percentual carbon residue does

not exceed the value of 0.29 %.

MS 20 - Running in

AEROSHELL Oil 100 - Running in

Aeroshell W100

Aeroshell W120 (in tropical climates)

ELF Aviation AD 100

BP Aero D 100 TOTAL Aero D 100

8.3 Coolant: None

9. Fluid capacities:

9.1 Fuel: Total: for category U: 95.5 litres

for category N: 165.5 litres

Usable: for category U: 93 litres

for category N: 163 litres

2 x 45 litres in main fuel tanks 5.5 litres in connecting tank

2 x 35 litres in auxilitary wing tip tanks

9.2 Oil: Minimum 9 litres – Maximum 14 litres

9.3 Coolant system None

capacity:

TCDS EASA.A.353	Moravan Aviation
Issue 5	Z 26 - Series

Page 111 of 114 20 September 2013

10. Air Speeds:	Never Exceed Speed Limit V _{NE}	315 km/h IAS
	Normal Operating Speed V _{NC} Limit	227 km/h IAS
	Design Manoeuvring Speed Limit	V _A 200 km/h IAS
	Maximum Flaps Extended Speed Limit	V _{FE} 152 km/h IAS
	Maximum Open Landing Gear Speed	V _{LE} 300 km/h IAS
	Maximum Landing Gear V _{LO} Operating Speed	140 km/h IAS
Maximum Operating Altitude:	4 500 m	
12. Allweather Operations Capability:	The aircraft is approved for VFR	Day flights.
13. Maximum Weights:	Max. Take-off weight: - For category Utility (U) - For category Normal (N)	940 kg 1 000 kg
	Max. Landing weight:	

Max. Landing weight:
- For category Utility (U) 940 kg
- For category Normal (N) 950 kg

Max. Variable Load:

- For category Utility (U) 250 kg \pm 3 % - For category Normal (N) 300 kg \pm 3 %

14. Centre of Gravity Range: 17.5 % – 28.5 % MAC

M.A.C. is 1 568 mm; 0 % M.A.C. is 602 mm aft

reference datum.

15. Datum: The rear part of fire wall; from it are measured, for

purpose of assignation of Gravity Centre, all lateral

dimensions.

16. Control surface deflections: Elevator deflection up $28^{\circ} \pm 1^{\circ}$

down $24^{\circ} \pm 1^{\circ}$ up $25^{\circ} \pm 2^{\circ}$

Elevator trim tab up $25^{\circ} \pm 2^{\circ}$ down $40^{\circ} \pm 2^{\circ}$

Rudder deflection right and left $28^{\circ} \pm 2^{\circ}$ Rudder trim tab left $5^{\circ} + 3^{\circ}$

right $30^{\circ} \pm 2^{\circ}$

Ailerons deflection up 108 mm (+ 5; - 3)

mm

down 98 mm (+ 5; - 3)

mm

0°

Wing flaps positions ref

retracted

take-off $15^{\circ} \pm 2^{\circ}$

landing 40° (+ 5°; - 3°)

17. Leveling Means: Levelling points on left and right side of airplane

fuselage to be levelled. Measurement plane to be

min. 850 mm below.

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger

Seating Capacity:

2 (including crew)

20. (Reserved)

21. Baggage/Cargo

Compartments:

None

22. Wheels and Tyres: The wheels K 12-0100.00 or K 420.1-00 of main

gear with tyre BARUM or MITAS 420x150-6.5 or

MITAS 420x150-6.5 TL with tube 420x150;

The wheels K 13-0000.00 or K 34-990 of tail gear with tyre BARUM or MITAS 260x85-4 with tube

260x85.

TIV. Operating and Service Instructions

1. Flight manual:

In Czech language
 Letová příručka Z 726 K, Issue Ref.

No. 2264/704/74

In English language
 Flight Manual Z 726 ZLIN UNIVERSAL,

date of issue 1977

2. Maintenance Manual:

In Czech language Technický popis a návod k obsluze Z 726,

Doc. No.: Do - Z 726 - 2011 date of issue 1974

- Technický popis Z 726 K, date of issue 1983

Technical Manual Z 726 ZLIN UNIVERSAL,

In English language

Doc. No.: Do – Z 726 – 2011 date of issue 1974

3. Overhaul Mnual:

In Czech language
 Opravárenská příručka Z 726 ZLIN

UNIVERSAL, issued 1978

4. Ilustrated parts catalogue:

In Czech, German and English language, issued 1975
 Katalog Z 726 ZLIN UNIVERSAL

TV. Notes

None

ADMINISTRATIVE SECTION

I Acronyms

N/A

II Type Certificate Holder Record

Current: ZLIN AIRCRAFT A.S. Letiště 1578 765 81 Otrokovice Czech Republic

Former:

Moravan, n. p. Gottwaldov – Otrokovice CZECHOSLOVAKIA

Moravan, n.p. Letiště 1578 765 81 Otrokovice CZECHOSLOVAKIA

Moravan, k.p. Letiště 1578, 765 81 Otrokovice CZECHOSLOVAKIA

Moravan, a.s. Letiště 1578, 765 81 Otrokovice CZECH REPUBLIC

MORAVAN – AEROPLANES, a.s. Letiště 1578 765 81 Otrokovice CZECH REPUBLIC

MORAVAN – AVIATION, s.r.o. Letiště 1578 765 81 Otrokovice CZECH REPUBLIC

III Change Record

Issue	Date	Changes
Issue 1	27-Mar-2007	Transfer of Z 26 - Series Type Design to EASA
Issue 2	14-Apr-2008	Page1: updated Page 2: updated Page 57, HIII. Tech. Charact. and Oper. Limitation, Item 10: value for v _{NO} corrected Page 92, MV. Notes: Note 2 added Page 139, Change Record: updated All: minor corrections of formatting, different page breake, total page number now 139
Issue 3	24-Aug-2009	Incorporation of changed company name
Issue 4	23 July 2010	Editorial corrections and revision into standard EASA TCDS format
Issue 5	20-Sep-2013	Editorial corrections of typo errors – correction of TC No. for M 137 A engines.