# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A00072CE
Revision 9
Pilatus
PC-24
July 8, 2021

## TYPE CERTIFICATE DATA SHEET NO. A00072CE

This data sheet which is a part of Type Certificate No. A00072CE prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

TC Holder. Pilatus Aircraft Ltd

Stans, Switzerland

<u>Type Certificate Holder Record:</u> Pilatus Aircraft Ltd

Stans, Switzerland

I. Model PC-24 (Commuter Category), Approved: December 7, 2017

Engine. Number of Engines: 2

Engine Manufacturer: Williams International Engine Model Number: FJ44-4A-QPM

Fuel. Jet A, Jet A1, JP-8 and TS-1.

Engine Limits.

Operating condition	Thrust lbs.	N1%	N2%	ITT °C	Oil Pressure psi	Oil Temp. °C
Normal Takeoff	3420	104.7	100.8	855	40 - 120	10 - 135
Max Takeoff (ATR)	3600	104.7	100.8	855	40 - 120	10 - 135
Maximum Cont/Climb		104.7	100.8	835	40 - 120	10 - 135
Ground or Flight Idle (cont)					30 Min 120 Max	-40 - 135
QPM			45.4		30 - 120	10 - 135
Starting				See Airplane Flight Manual		-40 - 135
Transient High		105.7 (2min)	101.5 (2min)	855 (0s)	130	149
Transient Low					23	

Page No.	1	2	3	4	5	6	7	8		
Rev. No.	9	4	4	9	8	1	4	5		

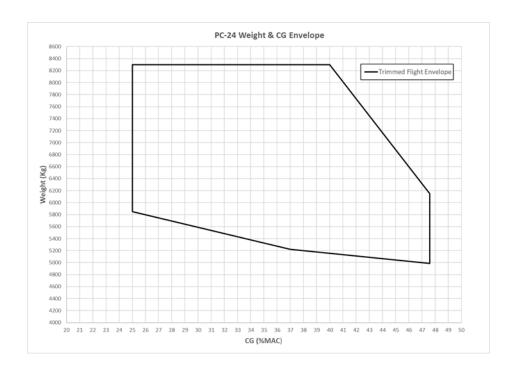
Page 2 of 8 A00072CE

## Airspeed Limits:.

Condition	Limit (design)	Limit (IAS)
VMO (maximum operating speed)	290 KEAS	290 KIAS
MMO (maximum operating Mach number)	0.74 Mach	0.74 Mach
VD (maximum dive speed)	360 KEAS	
MD (maximum operating Mach number)	0.81 Mach	
VA (maneuvering speed) at MTOW	185 KEAS	
VC (design cruising speed)	290 KEAS	
VFE (max. flap extended speed):  - 8° (Take-Off) Flap  - 15° (Approach) Flap  - 33° (Landing) Flap	200 KEAS 200 KEAS 175 KEAS	200 KIAS 200 KIAS 175 KIAS
VLO (maximum landing gear operating speed) - Extension - Retraction	250 KEAS 200 KEAS	250 KIAS 200 KIAS
VLE (maximum landing gear extended speed)	250 KEAS	250 KIAS
VSO (Stall speed (ISA, sea level, max. landing weight, landing configuration)) For aircraft 101-130 Pre SB 42-002	≤ 82 KCAS	
For aircraft 101 - 130 Post SB 42-002, and 131 - Up	81 KCAS	

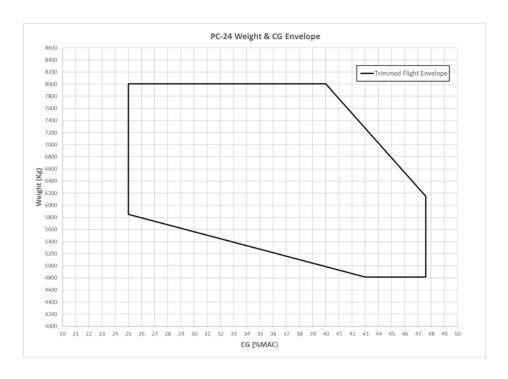
## Center of Gravity (C.G). Range.

For Aircraft 101 - 130 Post SB 42-002, and 131 – Up: (NOTE 6)



Page 3 of 8 A00072CE

## For Aircraft 101 - 130 Pre SB 42-002:



Empty Weight C.G. Range. None.

<u>Datum.</u> The Datum is 146.1 in (3,711 mm) forward of forward jacking point.

<u>Levelling Means.</u> Levelling datum which is the seat rail behind the cargo door

# Maximum Weights

For aircraft 101 - 130 Post SB 42-002, and 131 – Up (NOTE 6):

Parameter	Metric	Imperial
Maximum Ramp Weight (MRW)	8,345 kg	18,400 lb.
Maximum certified Take-Off Weight (MTOW)	8,300 kg	18,300 lb.
Useable fuel[1]	2,705 kg	5,964 lb.
Maximum Zero-Fuel Weight (MZFW)	6,450 kg	14,220 lb.
Maximum Landing Weight (MLW)	7,665 kg	16,900 lb.
Minimum Flying Weight (MFW)	4,988 kg	11,000 lb.

## For aircraft 101 - 130 Pre SB 42-002:

Parameter	Metric	Imperial
Maximum Ramp Weight (MRW)	8,050 kg	17,750 lb.
Maximum certified Take-Off Weight (MTOW)	8,005 kg	17,650 lb.
Useable fuel[1]	2,705 kg	5,964 lb.
Maximum Zero-Fuel Weight (MZFW)	6,100 kg	13,450 lb.
Maximum Landing Weight (MLW)	7,370 kg	16,250 lb.
Minimum Flying Weight (MFW)	4,814 kg	10,613 lb.

A00072CE Page 4 of 8

Minimum Crew. One (1) pilot (left seat) -OR-

Two (2) pilots

Number of Seats. Executive Interiors Configuration: 8 seats excluding pilot seats.

Commuter Interiors Configuration: 10 seats excluding pilot seats

NOTE: Refer to the Airplane Flight Manual (02371) section 6 "Weight & Balance" for

seat locations and moment arms.

Maximum Compartment Weights.

1000 lb. (454 kg)

The standard cabin compartment configuration includes only 1 compartment. The

moment arms, depending on the restraint system (baggage net) used are.

	moment arm	maximum capacity
Small Net	413.8in (10510mm)	180kg
Large Net	408in (10363mm)	240kg

To reach the full baggage of 1000lb (454kg) a combination of the large net and tie down bars is required and the moment arm is 408in (10363mm).

Fuel Capacity.

Total capacity: 895 US gal (3389 Liters).

(5999.8 lb or 2721kg)

Usable quantity: 890 US gal (3369 Liters or 2705 kg)

Usable quantity each tank: 445 US gal

Moment arm for each usuable fuel tank: 317 in (8052mm) when full

Unusable quantity: 5.3 US gal (20 Liters or 16 kg)

Unusable quantity each tank: 2.65 US gal

Moment arm for each unusable fuel tank: 318.5 in (8089mm)

(see Note 1)

Oil Capacity.

Total capacity: 5.85 US qts. Usable quantity: 4.32 qts.

Moment arm for oil: 480.3 in (12200mm)

(see Note 1)

Hydraulic Capacity.

Total capacity: 1.14 US gal. Usable quantity: 1.14 US gal.

Moment arm for hydraulic: 316.9 in (8048mm)

Maximum Operating Altitude

45000ft (13716m)

Control Surface Movements.

Up 25° +1°/-0° Down 15° +1°/-0° Elevator: Aileron:  $Up \quad 25^{\circ} \pm 0.5^{\circ}$ Down  $15^{\circ} \pm 0.5^{\circ}$ Rudder: Right  $28^{\circ} \pm 0.5^{\circ}$ Left  $\text{-}28 \pm 0.5^{o}$ Stabilizer: A/C Nose up direction -10°

neutral  $0^{o}$ 

+05°

A/C Nose up direction Flaps: Up  $0^{o}$ Down  $33^{\circ} \pm 0.5^{\circ}$ 

Manufacturer's Serial Numbers

MSN 101 and up

Import Requirements.

A U.S. airworthiness certificate may be issued on the basis of the Swiss Certificate of Airworthiness for Export signed by a representative of the Swiss Federal Office of Civil Page 5 of 8 A00072CE

Aviation (FOCA) on behalf of the European Community, containing the following statement: 'The aircraft covered by this certificate has been examined, and found to comply with U.S. 14 CFR Part 23 covered under U.S. Type Certificate No. A00072CE and to be in a condition for safe operation.'

The U.S. airworthiness certification basis for this aircraft type certificated under FAR § 21.29 and exported by the country of manufacture is FAR § 21.183 (c). Per 21.50(b), Instructions for Continued Airworthiness (ICA) complying with FAR 23.1529, must be furnished before delivery of the first airplane or issuance of a US standard certificate of airworthiness, whichever occurs later. (NOTE 4)

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, Airworthiness Certification of Aircraft, for requirements for issuance of an airworthiness certificate for imported aircraft

#### **Certification Basis**

1) 14 CFR part 21.29, part 21.183(c) and 14 CFR Part 23, effective December 18, 1964, with amendments 1 through amendment 62 "Airworthiness Standards for Commuter Category Airplanes"

Additional airplanes with main rechargeable Lithium Batteries (NOTE 7) comply with §23.2010 and §23.2525 at amendment 23-64.

- 2) 14 CFR Part 34, effective September 10, 1990 including Amendments 34-1 through Amendment 34-5A "Fuel Venting and Exhaust Emission Requirements For Turbine Engine Powered Airplanes"
- 3) 14 CFR Part 36, effective December 1, 1969 with Amendments 36-1 through Amendment 36-30, Stage 4, "Noise Standards: Aircraft Type and Airworthiness Certification"
- 4) 14 CFR Part 21.16 Special Conditions (SC) issued in accordance with 14 CFR Part 11:
  - (a) SC 23-282-SC effective July 17, 2017 Electronic Engine Control (EEC)
  - (b) SC 23-283-SC effective July 17, 2017 Autothrust System
  - (c) SC 23-284-SC effective July 17, 2017 Pressure Defuel System
- 5) Equivalent Safety Findings (ELOS) according to the provisions of 14 CFR part 21.21(b)(1) for the following subjects:

### ELOS No., date and Subject

#### Regulation modified by ELOS

- (a) TC00607CE-A-G-9, dated Feb. 2017: Amendment 23-62 Corrections
- 14, §§ 23.45, 23.51, 23.63, 23.67, 23.73, 23.77, 23.161, 23.181, 23.221, 23.251; 23.253, 23.571, 23.785, 23.831, 23.1195, 23.1197, 23.1199, 23.1201; 23.1527, 23.1545, and 23.1583.
- (b) TC00607CE-A-F-3, dated April 18, 2017:

Use of 1-g Stall Speed Criteria

§§ 1.1, 1.2, 23.49, 23.69, 23.143, 23.145, 23.147, 23.149, 23.157, 23.175, 23.177, 23.201, 23.203, 23.207, 23.233, 23.729, 23.735, 23.1001, 23.1323, 23.1325, and 23.1587.

ELOS Memo TC00607CE-A-G-9 ES23.51, ES23.67, ES23.73,

ES23.161, and ES23.1545.

Page 6 of 8 A00072CE

c) TC00607CE-A-E-14, dated Feb. 24, § 23.1353(h)(1)(ii) 2017: Storage Battery Design and Installation (d) TC00607CE-A-E-6, dated Mar. 21, § 23.1357(b) 2017: Integrated Modular Avionics (IMA) circuit protection (e) TC00607CE-A-S-8, dated June 29, §§ 23.1305(a)(2), (a)(3), (c)(2), and 2017: (c)(5); and 23.1549(a), (b), and (c) Digital Only Powerplant Indications (f) TC00607CE-A-S-9, dated Oct. 26, 2017: § 23.1545(b)(4) Airspeed Indicator - Flap Markings (g) TC00607CE-A-S-15, Oct. 26 2017: §§ 23.1303 (g)(3)(i), (ii), and (iv) Third Attitude Instrument Without Independent Power Source (h) TC00607CE-A-S-21, Nov. 6, 2017: §23.1438(b)

6) No Exemptions.

Pressurization and Pneumatic Systems

- 7) The airplane is approved for flight into known or forecasted icing. Compliance has been demonstrated in accordance with 14 CFR § 23.1416 and 23.1419.
- 8). The airplane is approved for ditching. Compliance with the provisions for ditching equipment has been demonstrated in accordance with 14 CFR §§ 23.807 and 23.1415(a)(b).

EASA issued EASA type certificate EASA.A.594 dated December 7, 2017.

Date of Application for FAA Type Certificate: July 27, 2012.

Type Certificate No. A00072CE, issued December 7, 2017.

RVSM capability for PC-24 S/N P03, 101 and subsequent:

All airplanes equipped with Honeywell APEX system are RVSM approved provided the operator follows the Airplane Flight Manual (AFM) Issue 003 Revision 01 dated 12 July 2018 (or later revisions), and the Aircraft Maintenance Manual (AMM) Issue 005 Revision 00 dated 06 June 2018 (or later revisions). (NOTE 5)

Production Basis.

No FAA production certificate.

PC-24 airplanes, all series and models, are produced under production approval CH.21G.0002, issued by the Swiss Federal Office of Civil Aviation (FOCA).

Equipment.

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. An FAA approved (M)MEL may be used to operate the aircraft with inoperative equipment.

Service Information

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA):

- · Service bulletins,
- Structural repair manuals,
- · Vendor manuals,
- Aircraft flight manuals, and

Page 7 of 8 A00072CE

· Overhaul and maintenance manuals.

The FAA accepts such documents and considers them FAA-approved for type design data only unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Available documents for the PILATUS PC-24 are:

#### Airplane Flight Manual Suite: (NOTE 6)

- Airplane Flight Manual (AFM) Report No. 02371, Issue 003 Revision 00 dated 24 January 2018 or later EASA approved revisions. (See NOTE 2)
- Flight Crew Operating Manual (FCOM) Report No. 02383, Issue 003 Revision 00 dated 24 January 2018 or later EASA approved revisions.
- Quick Reference Handbook (QRH) Report No. 02382, Issue 003 Revision 00 dated 24 January 2018 or later EASA approved revisions.

#### Instructions for Continued Airworthiness (ICA): (NOTE 4)

- Air Vehicle Maintenance (AM) / Aircraft Maintenance Manual (AMM) Report No. 02378, Issue 003 Revision 00 dated 24 January 2018 or later EASA approved revisions (Chapter 4 is FAA and EASA approved). (See Note 3)
- Illustrated Parts Data (IPD) / Illustrated Parts Catalogue (IPC) Report No. 02377, Issue 003 Revision 00 dated 24 January 2018 or later revisions.
- Air Vehicle Structural Repair (ASR) / Structural Repair Manual (SRM) Report No. 02379, Issue 003 Revision 00 dated 24 January 2018 or later revisions.
- Illustrated Tools and Equipment (ITE) / Illustrated Tools and Equipment Manual (ITEM) Report No. 02380, Issue 003 Revision 00 dated 24 January 2018 or later revisions.
- Wiring Data (WD) / Wiring Diagram Manual (WDM) Report No. 02381, Issue 003 Revision 00 dated 24 January 2018 or later revisions.

**NOTES** 

NOTE 1

A current weight and balance report, including a list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each airplane at the time of original certification. The Manufacturers Empty Weight (MEW) is the weighed weight of the aircraft without any fuel or oil. Unusable fuel quantity and unusable oil quantity shall be added to the certified empty a/c weight.

NOTE 2

All required placards are contained in Chapter 2 of the Airplane Flight Manual (AFM) Report No. 02371, Issue 003 Revision 00 dated 24 January 2018 or later approved revisions and must be installed in the appropriate locations. Revisions to this report may be approved by EASA on behalf of the FAA, unless they are changes to the limitation section. These changes require FAA approval for the US version.

NOTE 3

Mandatory retirement lives, required inspections, and inspection intervals of components are listed in the Airworthiness Limitations Section, Chapter 4, of the Airplane Maintenance Manual, document 02378, Issue 003 Revision 00 dated 24 January 2018 or later approved revisions. The Airworthiness Limitations Section was approved by EASA and the FAA. Revisions to this section must be approved by EASA and the FAA.

Page 8 of 8 A00072CE

NOTE 4

On January 19, 2018, the complete set of ICAs have been FAA accepted per 21.50 (b). The revised ALS Chapter 4, of the Airplane Maintenance Manual, document 02378, Issue 003 Revision 00 dated 24 January 2018 is part of the complete ICAs that will be effective for the first airplane delivery MSN 101. History - The ALS section of the ICA, chapter 4, dated November 29, 2017 was FAA approved on December 4, 2017, which was before the TC was issued, but the rest of the ICAs at that time had not been accepted yet per allowance of 21.50 (b).

The complete set of ICAs are identified above in section "Service Information".

NOTE 5

Operational approval to fly in RVSM airspace must still be granted by the cognizant Flight Standards organization and each operator must obtain RVSM operating approval directly from the FAA.

NOTE 6

Pilatus has increased the Maximum Take-off Weight and Max Zero Fuel Weight for MSN 101-130 when SB 42-002 is accomplished and for MSN 131 and subsequent at the factory. For these higher weights, the following AFM Report No. 02371 Temporary Revisions (TR) dated Oct. 1, 2018 or later AFM revisions must be followed. TR-003-01-03 - AFM section 2, TR-003-01-04 - AFM section 5, TR-003-01-05 - AFM section 6, TR-003-01-10 - AFM section 5, TR-003-01-11 - AFM section 2, TR-003-01-12 - AFM section 3A

NOTE 7

Pilatus has incorporated optional type design for installation of main ship Rechargeable Lithium Battery. This requires AMM Issue 005 revision 23 or later EASA approved revisions and AFM TR 02371-021 "Changes for Li-Ion Batteries" or later EASA approved revisions.

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