TCDS No.:EASA.BA.524 FlyDOO

Issue: 01 Date: 18 July 2023



# TYPE-CERTIFICATE DATA SHEET

NO. EASA.BA.524

for **HOT AIR BALLOONS** 

Type Certificate Holder FlyDOO Sarl

205 Chemin des Clots 05130, Lettret France

For models: WeDOO (WD)

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## SECTION A: FLYDOO MODEL WeDOO (WD)

## A.I General

Model WeDOO
 Airworthiness Category Standard
 Type Certificate Holder FlyDOO Sarl

205 Chemin des Clots

05130, Lettret

France

4. Manufacturer See A.I.3

5. Type Certification Application Date 19 December 2019

6. State of Design Authority EASA

7. EASA Type Certification Date 18 July 2023

## A.II EASA Certification Basis

Reference Date for determining the applicable requirements

Airworthiness Requirements CS-31HB, Amdt. 1

Fuel cylinders only: LFHB (LBA), 23 February 1982

3. Special Conditions SC-CS31HB.28-01 Launch Restraint

4. Equivalent Safety Findings none5. Exemptions none6. Deviations none



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

1. Type Design Definition WD22-TLC-01\_00 Top Level Configuration

2. Description Free hot air balloon with a natural shaped envelope

of 2 200 m<sup>3</sup> volume, available as standard version with conventional load tapes, or, ultralight version (UL) with a combination of conventional sewn load

tapes and novel 'floating' load lines, with

conventional controls.; single coil double burner; stainless steel fuel cylinders; basket with PVC-lined foam walls and a tubular steel frame. Refer to Table

1\_for the configuration details of variants;.

3. Equipment Standby source of ignition for the pilot light or

burner

Envelope temperature indicator

Rate of climb/descent indicator (variometer)

Fire extinguisher

Pressure gauge for each burner

Fuel quantity gauge for each fuel cylinder Launch restraint with quick-release

4. Envelope Definition: MDL-WD22-16-00

Volume: 2 200 m<sup>3</sup>

17.4 m Height from mouth

16.6 m Width 600 kg MTOM:

5. Burner PockJET2

Definition: MDL-PKJ2-00\_C1

6. Basket EXplorer1200

Definition: MDL-EX120-00 C1

127 cm x 95 cm Floor dimensions: (internal) 79 kg Basket mass: (including load frame)

500 kg Payload: Load frame: P/N EX120-BF:

85.7 x 65.0 cm dimensions

7. Fuel Cylinder Definition: FD50\_FD\_70 and

FD50\_FD70 Cylinders Parts Catalog

Volume: 2 200 m<sup>3</sup> MTOM: 600 kg

FD50:

Capacity: 21.2 kg Height: 88 cm

- FD70:

Capacity: 30.0 kg Height: 92 cm



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8. Mass 600 kg

MTOM for launch field elevation (launch altitude) and corresponding ambient air temperature according to approved Flight Manual data

Envelope Temperature Maximum 120°C
 Maximum Operating Altitude 10 000 ft (3 048 m)

11. Minimum Flight Crew 1 pilot

12. Maximum number of persons on board 3 persons, according to approved Flight Manual

13. Other limitations VFR day, free flight (non-tethered)

14. Life-limited Parts Refer to the approved Airworthiness Limitation

Section (ALS) of the Maintenance Manual

## A.IV Operating and Service Instructions

1. Flight Manual For WD22-16 and WD22-16UL:

AFM\_01\_00, Ed.1 Rev.0, or later approved revisions

2. Maintenance Manual For WD22-16 and WD22-16UL:

AMM ENV\_01\_00, Ed.1 Rev.0, or later accepted

revisions.

For EXplorer1200:

AMM-BAS 01 00, Ed.1 Rev.0, or later accepted

revisions.
For PockJET2:

AMM BUR 01 00, Ed.1 Rev.0, or later accepted

revisions.

3. Service Letters and Service Bulletins As published by FlyDOO Sarl.

#### A.V Notes

Manufacturing is conditioned to the obtention of a production organisation approval, a valid letter of agreement in accordance with Part 21 Subpart F, or a valid declaration in accordance with 21L subpart G, with satisfactory coordination between design and production (ref. EU No. 748/2012).

Manufacturer's eligible serial numbers:

- Envelope WeDOO, s/n WD-C-001 and following
- Burner PockJET2 model 'PKJ2', s/n PJ02002, and following
- Basket EXplorer1200 (Type EX Model 120), s/n 002, and following

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# A.VI FlyDOO WeDOO (WD) variants details

WD envelopes denomination: WD[XX-YY(UL)]:(XX for volume, YY for number of gores, UL for the Ultralight version)

Variant	Vol. (m³)	MTOM (kg)	Envelope mass (kg)	MLM (kg)	Burner	Basket	Certification Date	CS-31HB Amdt
WD22-16	2 200	600	65	200	PockJET2	EXplorer1200	18-07-23	1
WD22-16UL	2 200	600	55	200	PockJET2	EXplorer1200	18-07-23	1

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Table 1 Variant information and equipment compatibility

For more information, please refer to the approved AFM and Maintenance Manuals

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# SECTION B: <u>ADMINISTRATIVE SECTION</u>

## **B.I** Acronyms & Abbreviations

MTOM Maximum Take-Off Mass

Amdt. Amendment

LBA Luftfahrt-Bundesamt (Germany)

LFHB Lufttüchtigkeitsforderungen für Heißluftballone (Germany)

P/N Part number s/n Serial number VFR Visual Flight Rules

## **B.II** Type Certificate Holder Record

Type Certificate Holder	Period
FlyDOO Sarl, 205 Chemin des Clots, 05130, Lettret, France	from 18 July 2023

# **B.III** Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	18 July 2023	Initial Issue of EASA TCDS	Initial Issue,
			18 July 2023