

型号认可证数据单
THE VALIDATION DATA SHEET

编号/No: VTC0386A

版次/Revision: 0

型号/Type: BB

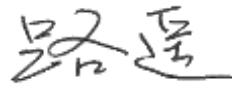
型别/Model:

BB E-Type

BB XR-Type

BB Z-Type

批准人/Approved By:



职务/Title: Deputy Director General

日期/Date: 2026年10月09日

本数据单是型号认可证（编号：VTC0386A）的组成部分，它规定了符合中国民用航空局的适航要求所颁发此型号认可证的产品状态和限制。

This data sheet, which is part of Validation of Type Certificate (No.: VTC0386A), prescribes condition and limitation under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号认可证持有人/Validation of Type Certificate Holder:

BALÓNY KUBÍČEK spol. s r.o.

Jarní 1003/2a Brno 614 00 CZECH REPUBLIC

第1部分 概述（所有型别） SECTION 1 General（ALL MODELS）

1. 型号认可证数据单版次信息以及修订记录/ Revision and Change Record of the Validation of Type Certificate Data Sheet

数据单版次信息/Revision of the Type Certificate Data Sheet

	中国民用航空局认可数据单号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and Issuance date	型号合格证数据单号，版次和颁发日期 Type Certificate Data Sheet Number, Revision and Issuance date
当前/ Current	VTC0386A, Revision 0, 2026年10月09日	EASA.BA.003, Issue 53, 2021.06.11

注：上表中出口国局方型号合格证数据单信息仅供参考

Note: Above TCDS information of Certification Authority is only for reference

认可数据单修订记录/ Change Record of the VTCDs

版次/ Revision	相对上一版的修订记录/Change Record	备注/Remark
版次0/Rev 0	首次发布/initial issue	

2. 适航类别/Airworthiness Category:

载人自由气球-热气球/Manned free balloons- Hot air balloons

3. 型号Type/型别Model

型号Type: BB

型别/Model: E-Type: BB9E, BB12E, BB16E, BB18E, BB20E, BB22E, BB26E, BB30E, BB34E

XR-Type: BB14XR, BB16XR, BB17XR, BB20XR, BB22XR, BB26XR, BB30XR

Z-Type: BB22Z, BB26Z, BB30Z, BB34Z, BB37Z, BB42Z, BB40Z, BB45Z, BB51Z, BB60Z, BB64Z, BB70Z, BB78Z, BB85Z, BB92Z, BB100Z

4. 认可当局/Validation Authority:中国民用航空局 / CAAC

审定当局/Certifying Authority:欧洲民用航空安全局 / EASA

5. 型号合格证持有人/Type Certificate Holder: BALÓNY KUBÍČEK spol. s r.o.

Jarní 1003/2a

Brno 614 00

CZECH REPUBLIC

6. 制造商/Manufacturer:

KUBÍČEK spol.s r.o.

Francouzská 81

Brno 602 00 (S/N1-140)

BALONY KUBÍČEK spol. s r.o.

Francouzská 81

Brno 602 00 (from S/N141 to S/N1555)

BALONY KUBÍČEK spol. s r.o.

Jarní 1003/2a

Brno 614 00 (S/N1555 and higher)

第2部分

SECTION 2

第一部分：型别技术数据/ SECTION A: Model TECHNICAL DATA

A I. 概述/General

在CAAC认可范围内的BB型热气球包含三类系列子型，分别是Z系列类、E系列类和XR系列类，其中Z系列类是通用构型，E系列类属于中小型球囊构型，XR系列类属于竞技用途构型。

The BB-Type family hot air balloons validated by CAAC include three -Type series: the Z-Type series, the E-Type series, and the XR-Type series. Among them, the Z-Type series are the most universal configuration, the E-Type series features a small to medium envelope configuration, and the XR-Type series is designed for competition purposes.

A II. 认可审定基础和生产依据/Validation Certification Basis and Production Basis

1.CAAC适用的适航标准/CAAC applicable airworthiness codes

EASA确定的有效审定申请之日有效的CAAC适用适航标准为CCAR-31。

The applicable Validation Authority (CAAC)'s airworthiness codes in effect on the effective certification date established by Certification Authority (EASA) is CCAR-31.

2.附加技术条件/Additional Technical Conditions.

CCAR21.29（五），机上所有对旅客进行的提示、警告和通知的文字标记和标牌应当至少有中文表述；机上所有向旅客或机外营救人员指示应急出口和门的位置以及开启方法的文字标记和标牌应当至少有中文表述；旅客可能使用的机上所有应急设备的操作、使用说明应当至少有中文表述。

As per CCAR 21.29(e), all literal markings and placards used for advising, warning and notifying passengers must be at least in Chinese. All literal markings and placards used for indicating passengers or outboard rescue personnel of the location of emergency exits and doors and their means of opening must be at least in Chinese, and all operation instructions of emergency equipment that may be used by passengers must be at least in Chinese.

3.等效安全/Equivalent Level of Safety

ELOS-31-02 对CCAR 31.47(d)条款的等效安全水平结论，2026年7月9日。

ELOS-31-02, Equivalent Level of Safety Finding (ELOS) to CCAR 31.47 (d), July 9th, 2026.

4.专用条件/Special Condition

无。

None.

5. 豁免Exemption

无

None.

A III. 技术特性和使用限制、型号设计定义/Technical Characteristics and Operational Limitations Type Design Definition

1. 型号设计定义 / Type Design Definition:

见附录1 / Refer to Appendix 1.

2. 概述 / Description:

BB型号系列热气球由球囊、吊篮、燃烧器、燃料箱及相关设备构成，其中BB型系列热气球包含容积从900至10000立方米多个类型的球囊，这些球囊使用双单元、三单元或四单元的IGNIS燃烧器或Sirius燃烧器作为热源，热气球吊篮由藤条制成，通过不锈钢或芳纶拉索与球囊连接。吊篮和燃烧器的类型应根据球囊的大小进行选择。燃料罐以及其他设备固定在吊篮内侧。

The BB-Type family hot air balloons consist of the envelope, basket, burner, fuel tanks, and related equipment. The BB-Type includes envelopes with volumes ranging from 900 to 10,000 cubic meters. These envelopes utilize Sirius burner or dual-unit, triple-unit, or quadruple-unit IGNIS burners as heat sources. The basket is cane-work connected to the envelope by means of stainless-steel or kevlar wires and karabiners with a screw gate. Preference of the basket and burner type shall be provided with respect to the envelope size. Fuel cylinders and other equipment are secured inside the basket.

3. 设备 / Equipment:

- 高度表 / Altimeter
- 上升和下降率指示器（垂直速度表） / A rate of climb indicator (variometer)
- 熔断安全链（用于检查球囊是否过热） / Melting link for the envelope overheating check
- 燃油量表 / Fuel quantity gauge
- 两套点火器 / Double fire equipment
- 逃生绳 / Drop line
- 灭火器 / Fire extinguisher
- 耐热布 / Heat-resistant cloth

4. 球囊 / Envelope:

详见附录1的表1、表4和表5（见VI.注释） / Refer to Appendix 1, see Table 1, 4 and 5 (see VI. Note)

5. 燃烧器 / Burner:

详见附录1的表2、表4和表5 / Refer to Appendix 1, see Table 2, 4 and 5

6. 吊篮 / Basket:

详见附录1的表3和表4 / Refer to Appendix 1, see Table 3 and 4

7. 燃料箱 / Fuel Cylinder:

详见附录1的表6 / Refer to Appendix 1, see Table 6

8. 重量 / Mass:

最大起飞重量 / Maximum take-off weight:

详见附录1的表1 / Refer to Appendix 1, see Table 1

9 球囊温度 / Envelope temperature:

球囊温度不得超过124℃ / The envelope temperature must not exceed 124° C

10. 最小飞行操作人员 / Minimum Flight Crew:

1人 / 1 Pilot

11. 最大搭载人员数量 / Maximum number of persons on board:

根据经批准的飞行手册规定 / In accordance with approved Flight Manual

12. 运行限制 / Operational Limitations:

本型号热气球仅限于目视飞行规则中规定的昼间飞行，禁止夜航/ The balloon is approved only for VFR-Day flight, night flying is prohibited.

13. 其他限制/Other Limitations:

天气条件、燃料及压力、吊篮容积率及承载能力等限制详见热气球飞行手册（文件编号：B.3102，初版或后续经批准的修订版）第2章。

Limitations such as Weather Condition, fuel and pressure, basket occupancy and load capacity, etc are refer to section 2 in Flight Manual (Document No.: B.3102, initial issue or later approved revision)

A IV. 产品名称运行和服务说明/Aircraft name Operating and Service Instructions

适用于所有序列号

热气球飞行手册（文件编号：B.3102）-初版或后续经批准的修订版

热气球飞行手册补充（文件编号：B.3102-CHINA）-初版或后续经批准的修订版

热气球使用维护手册（文件编号：B.3202）-初版或后续经批准的修订版

Applicable to all S/N

Flight Manual for use with the hot air balloon (Document No.: B.3102) - initial issue or later approved revision- initial issue or later approved revision

Flight Manual Supplement for BB balloons registered in the People's Republic of China (Document No.: B.3102-CHINA)

Maintenance Manual for use with the hot air balloon (Document No.: B.3202) - initial issue or later approved revision

A.V.注释/Notes

关于每种经批准的热气球构型适用的燃烧器支架的信息，请参见飞行手册的最新可用修订版。

For information about suitable burner frame for each approved balloon configuration refer to the latest applicable revision of the Flight Manual.

第二部分：管理信息/SECTION B: ADMINISTRATIVE INFORMATION

B I.型号持有人记录/Type Certificate Holder Record

序号/No.	时间/Time	持证入名称/Name of Validation of Type Certificate Holder
1	2026 年 10 月 9 日 October 9, 2026	BALÓNY KUBÍČEK spol. s r.o

附录 1 BB 型号定义和批准数据 / BB Type definition and certification data

表1 球囊 / Table 1 : Envelopes

型别/Variant	体积/Volume [m3]	伞裆[片]/Gores [pcs.]	最大起飞重量/MTOM[kg]	图纸编号/Drawing No.
BB9E	900	8 E-type	295	55550.00 24.10.2016
BB12E	1200	8 E-type	385	55560.00 24.10.2016
BB14XR	1400	16 Z-type	420	54220.00 13.1.2021
BB16E	1600	8 E-type	470	55570.00 24.10.2016
BB16XR	1600	16 Z-type	470	54230.00 13.1.2021
BB17XR	1700	16 Z-type	495	53660.00 10.7.2009
				53660.00_1 13.1.2021
BB18E	1800	12 E-type	550	55580.00 24.10.2016
BB20E	2000	12 E-type	630	53630.00 18.9.2008
BB20XR	2000	20 Z-type	730	54140.00 28.1.2008
BB22E	2200	12 E-type	680	53620.00 18.9.2008
BB22Z	2200	24 Z-type	730	53300.00 12.7.2006
BB22XR	2200	24 Z-type	780	55400.00 3.7.2012
BB26E	2600	12 E-type	730	53610.00 18.9.2008
BB26Z	2600	24 Z-type	840	53305.00 12.7.2006
BB26XR	2600	24 Z-type	840	55410.00 3.7.2012
BB30Z	3000	24 Z-type	945	52640.00 15.10.2001
BB30XR	3000	24 Z-type	945	55420.00 3.7.2012
BB30E	3000	12 E-type	840	55560.00 24.10.2016
BB34Z	3400	24 Z-type	1040	52880.00 18.5.2005
BB34E	3400	12 E-type	945	55600.00 24.10.2016
BB37Z	3700	24 Z-type	1150	53315.00 12.7.2006
BB40Z	4000	24 Z-type	1310	53640.00 20.11.2008
BB42Z	4250	24 Z-type	1410	52950.00 26.10.2003
BB45Z	4500	24 Z-type	1520	53320.00 12.7.2006
BB51Z	5100	24 Z-type	1690	53430.00 24.10.2006

型别/Variant	体积/Volume [m3]	伞裆[片]/Gores [pcs.]	最大起飞重量/MTOM[kg]	图纸编号/Drawing No.
BB60Z	5950	24 Z-type	1940	53000.00 1.12.2004
BB64Z	6400	24 Z-type	2100	55490.00 18.8.2016
BB70Z	7000	24 Z-type	2300	52990.00 24.5.2004
BB78Z	7800	24 Z-type	2600	55470.00 18.8.2016
BB85Z	8500	28 Z-type	2820	52850.00 1.2.2005
BB92Z	9200	28 Z-type	3000	55500.00 18.8.2016
BB100Z	10000	28 Z-type	3200	54100.00 10.12.2007

表2 燃烧器 / Table 2 : Burners

型号/ Model	图纸编号/ Drawing No.	适用的燃烧器支架/ Applicable burner frames
IGNIS	53115.00 53128.00 53241.00 56001.00 54810.00 54894.00	Fixed / Vario Frame – basic (2 units), K25P (2 or 3 units), K32T(2 or 3 units), K40Y (3 units), K50 (2, 3 or 4 units), K60 (3 or 4 units), K70 (3 or 4 units), K80 (3 or 4 units), K60 STRONG (3 or 4 units), K32TT (2, 3 or 4 units), K50TT (2, 3 or 4 units), K100 (3 or 4 units), K100 STRONG (3 or 4 units)
SIRIUS	57880.01	Fixed frame - Sirius

表3 吊篮（序列号为400及以上的吊篮）/ Table 3: Baskets (basket s/n from 400 and higher)

型别/ Model	尺寸/ Dimension	图纸编号/ Drawing document No.	适用的燃烧器支架/ Applicable burner frames
K7	0.85 x 0.85m, height 1.10 m	50072.00 10.3.1993	Fixed / Vario Frame - basic
K10	0.86 x 1.16 m, height 1.10 m	50097.00 rev.e 27.7.2011	Fixed / Vario Frame - basic
K10S	0.86 x 1.16 m, height 1.0 m	57860.00 3.1.2019	Fixed / Vario Frame - basic
K11	0.98 x 1.16 m, height 1.10 m	54200.00 21.1.2008	Fixed / Vario Frame - basic
K12	1.16 x 1.16 m, height 1.10 m	50556.00 10.3.1993	Fixed / Vario Frame - basic
K12A	1.16 x 1.16 m, height 1.10 m	50556.02 10.3.1993	Fixed / Vario Frame - basic
K13	1.16 x 1.25 m, height 1.10 m	54300.00 21.1.2008	Fixed / Vario Frame - basic
K13S	1.00 x 1.2 m, height 1.0 m	54450.00 rev.c 15.9.2010	Fixed / Vario Frame - basic
K14	1.35 x 1.16 m, height 1.10 m	57850.00 3.1.2019	Fixed / Vario Frame - basic
K15	1.16 x 1.35 m, height 1.10 m	50111.00 rev.f 13.6.2011	Fixed / Vario Frame - basic
K16	1.16 x 1.45 m, height 1.10 m	50125.00 rev.f 20.5.2011	Fixed / Vario Frame - basic
K17	1.16 x 1.45m, height 1.10 m	54400.00 21.1.2008	Fixed / Vario Frame - basic
K18	1.16 x 1.55 m, height 1.10 m	50135.00 10.3.1993	Fixed / Vario Frame - basic
K19	1.16 x 1.55 m, height 1.10 m	57300.00 21.3.2016	Fixed / Vario Frame - basic
K19L	1.16 x 1.62 m, height 1.10 m	57330.00 21.3.2016	Fixed / Vario Frame - basic
K22	1.25 x 1.80 m, height 1.10 m	52680.00 rev.a 14.2.2011	Fixed / Vario Frame - basic
K23	1.25 x 1.8 m, height 1.10 m	57350.00 21.3.2016	Fixed Frame – K23 - type
K25P	1.25 x 2.10 m, height 1.10 m P- Partition	52650.00 rev.d 22.2.2011	Fixed Frame - K25P - type
K28	1.60 x 2.20 m, height 1.10 m	57100.00 1.6.2011	Fixed Frame - K32T - type
K28H	1.6x 2.35 m, height 1.10 m	57400.00 21.3.2016	Fixed Frame - K32T - type
K30PP	1.25 x 2.6 m ,height 1.10 m, PP partition	57450.00 21.3.2016	Fixed Frame – K30PP - type
K32T	1.60 x 2.40 m, height 1.10 m, T- Partition	53050.00 rev.c 25.1.2011	Fixed Frame - K32T - type
K32Y	1.60 x 2.40 m, height 1.10 m, Y- Partition	53050.02 1.8.2011	Fixed Frame - K32T - type
K32TT	1.60 x 2.50 m, height 1.10 m, TT- Partition	54950.00 15.6.2010	Fixed Frame - K32TT - type K50TT - type
K40T	1.60 x 2.70 m, height 1.10 m, T-	52090.02 rev.a	Fixed Frame K50 – type

型别/ Model	尺寸/ Dimension	图纸编号/ Drawing document No.	适用的燃烧器支架/ Applicable burner frames
	Partition	10.3.2011	
K40Y	1.60 x 2.70 m, height 1.10 m, Y- Partition	52090.00 rev.j 10.3.2011	Fixed Frame K50 – type
K40TTA	2.7 x 1.60 m, height 1.10 m TT- partition	57800.00 3.1.2019	Fixed Frame – K50 – type
K50	1.60 x 3.00m, height 1.10 m, Y-partition or T-partition	54500.00 9.6.2008	Fixed Frame K50 – type
K50TT	1.60 x 3.00 m, height 1.10 m, TT- partition	54900.00 15.6.2010	Fixed Frame - K32TT – type K50TT - type
K50TTA	3.0 x 1.60 m, height 1.10 m TT- partition	57810.00 3.1.2019	Fixed Frame – K50TT – type
K50TT8	1.60 x 3.00 m, height 1.10 m, TT- partition	54900.03 21.3.2016	Fixed Frame K60 – type K60 STRONG - type
K55X	1.60 x 3.45m, height 1.10 m	57500.00 21.3.2016	Fixed Frame K60X – type
K55TTA	3.40 x 1.60 m, height 1.10 m TT- partition	57820.00 3.1.2019	Fixed Frame – K60 – type K60 STRONG - type
K58HH	1.60 x 3.80 m, height 1.10 m, HH- partition	57550.00 21.3.2016	Fixed Frame K60 – type K60 STRONG - type
K60	1.60 x 3.80 m height 1.10 m, TT-partition	54600.00 rev.a 11.4.2011	Fixed Frame K60 – type K60 STRONG - type
K60X	1.60 x 3.90m, height 1.10 m	57600.00 21.3.2016	Fixed Frame K60X – type
K65TTA	4.1 x 1.60 m, height 1.10 m TT- partition	57830.00 3.1.2019	Fixed Frame – K60 – type K60 STRONG - type
K70	1.60 x 4.40 m height 1.10 m, TT-partition	54850.00 rev.a 10.5.2011	Fixed Frame K60 – type K60 STRONG - type
K70TTA	4.4 x 1.60 m, height 1.10 m TT- partition	57840.00 3.1.2019	Fixed Frame – K60 – type K60 STRONG - type
K80	1.60 x 4.80 m height 1.10 m, TT-partition	54800.00 rev.a 5.9.2011	Fixed Frame K60 – type K60 STRONG - type
K85	1.6x5.2 m height 1.10 m TT- partition	57150.00 19.01.2012	Fixed Frame - K100 type K100 STRONG - type
K90	1.6x5.2 m height 1.10 m DTT- partition	57250.00 19.01.2012	Fixed Frame - K100 type K100 STRONG -type
K100	1.60 x 6.10 m height 1.10 m, TT partition	54890.00 1.9.2010	Fixed Frame - K100 type K100 STRONG - type
K110	1.60 x 6.60 m height 1.10 m, TT partition	54980.00 19.11.2010	Fixed Frame - K100 type K100 STRONG - type

表4 BB型号热气球经批准的球囊和吊篮组合 / Table 4: Approved combinations of envelopes and baskets for BB models

球囊型号/ Envelope Model	吊篮型 别 / Basket model																	
	K7	K10S	K10	K11, K12, K12A	K13, K13S	K14, K15, K16, K17, K18, K19, K19L, K22	K23	K25P, K28, K28H, K30PP	K32T, K32Y	K32TT	K40T, K40Y, K40TTA, K50, K50TTA	K50TT	K50TT8, K55X, K55TTA, K58HH	K60, K60X	K65TTA	K70, K70TTA	K80	K85, K90, K100, K110
BB9E																		
BB12E																		
BB14XR																		
BB16E, BB16XR																		
BB17XR																		
BB18E																		
BB20E																		
BB20XR																		
BB22E, BB22Z,																		
BB26E, BB26Z,																		
BB30Z, BB30XR,																		
BB34Z, BB34E																		
BB37Z								RV	RV									
BB40Z								RV	RV									
BB42Z								RV	RV									
BB45Z								RV	RV	RV	RV	RV	RV					
BB51Z								RV	RV	RV	RV	RV	RV					
BB60Z								RV	RV	RV	RV	RV	RV	RV	RV	RV		
BB64Z									RV	RV	RV	RV	RV	RV	RV	RV		
BB70Z									RV	RV	RV	RV	RV	RV	RV	RV	RV	
BB78Z										RV	RV	RV	RV	RV	RV	RV	RV	
BB85Z										RV	RV	RV	RV	RV	RV	RV	RV	
BB92Z											RV		RV	RV	RV	RV	RV	
BB100Z													RV	RV	RV	RV	RV	RV

注释 / Explanation:

	= 经批准的组合 / Approved combination
RV	= 旋转放气口必须固定 / Rotation vent must be fitted

表5 BB型号热气球经批准的球囊和燃烧器组合 / Table 5: Approved combinations of envelopes and burners for BB models

球囊型号/ Envelope Model	燃烧器/Burner			
	SIRIUS	IGNIS 2 units	IGNIS 3 units	IGNIS 4 units
BB9E				
BB12E				
BB14XR				
BB16E				
BB16XR				
BB17XR				
BB18E				
BB20E				
BB20XR				
BB22E, BB22Z				
BB22XR				
BB26E, BB26Z, BB26XR				
BB30Z, BB30XR, BB30E				
BB34Z, BB34E				
BB37Z				
BB40Z				
BB42Z				
BB45Z				
BB51Z				
BB60Z				
BB64Z		*		
BB70Z		*		
BB78Z		*		
BB85Z				
BB92Z			*	
BB100Z			*	

注释 / Explanation:

	= 经批准的组合 / Approved combination
*	= 适用于序列号为516及以上的IGNIS燃烧器 / Applicable for the Ignis burners of s/n 516 and higher

表6 燃料箱 / Table 6: Fuel Cylinders

型别/ Model	体积/ Volume	工作压力/ PW	图纸编号/ Drawing document No.
KB72L	72L	15bar	55120.00 17.6.2016
KB85L	85L	15bar	55120.00 17.6.2016
KB97L	97L	15bar	55120.00 17.6.2016

----结束----
----END----