

FLIGHT MANUAL SUPPLEMENT 8

Special Shape "Heart"

8.1 General Information

In this supplement are introduced the particular characteristics and limitations of the hot air balloons special Shapes F-26 "Heart" and F-39 "Heart XL".

It will be kept the same numbering of the different sections with the §8.X to know at which sections correspond of the Main Manual, accepting they are substituted or appended by the indicated in this supplement.

8.2 Limitations of use

F-26 and F-39 Special Shapes will have the vertical speeds of ascent and descent and the Maximum Wind speed at Take Off limited in the following manner:

Model	Vmax Ascent	Vmax Descent	Max Wind Speed
F-26	3 m/s	3 m/s	7 Knots
F-39	3 m/s	3 m/s	7 Knots

8.3 Emergency procedures

No change.

8.4 Standard procedures

No change.

8.5 Loading

For the calculations in the Load Chart of chapter 5 of the Flight Manual will be used the following characteristics:

Model	V	Basket	Pv	Lmax
F-26	29.9	C-3	284	950
		C-1	275	950
		C-10	303	950
		C-4	308	950
F-39	41	C-2	332	1088
		C-1	337	1369
		C-3	349	1400
		C-10	365	1365
		C-4	370	1400
		C-6	411	1400
		C-7	444	1400

V = volume [m³x100]

Pv = Empty weight (without any cylinder) [Kg]

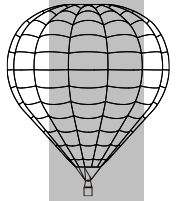
Lmax = Maximum authorised Lift [Kg]

The Standard burners for F-26 special shape envelope are:

- MK-21 Double
- BMK-008 Simple or Double

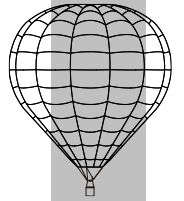
The Standard burners for F-39 special shape envelope are:

- MK-10 Double
- MK-21 Double
- MK-32 Double



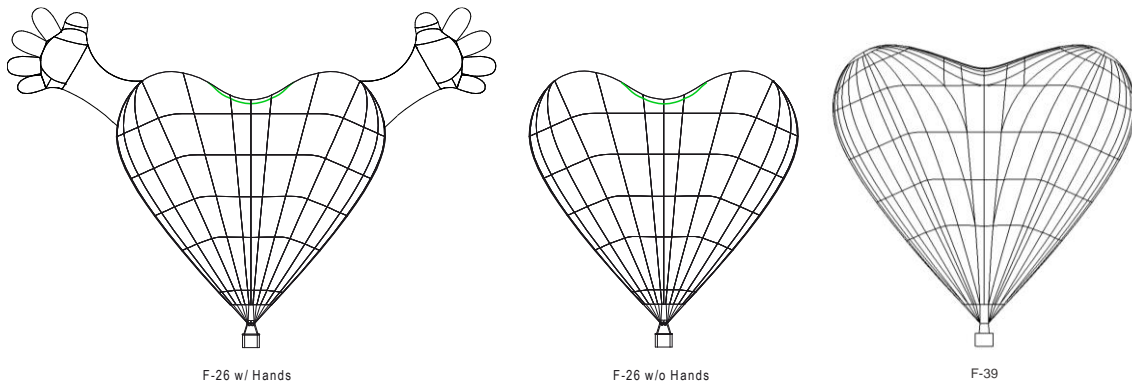
8.6 Balloon and Systems Description

See following table corresponding to mass and dimensions:



Type	SERIES F		
	26 w/ Hands	26 w/o Hands	39 XL
Vol. (m³)	3056	2995	4100
Effective vol. (m ³)		2995	4100
Number of gores		24	24
FAI class		AX8	AX10
Total height (m)	30.8	24.1	26.6
Standard basket		C-3	C-4
Weight in Standard configuration (Kg)		284	370
Envelope			
Height (m)	27.1	20.5	22.9
Max Length (m)	45.3	24.3	27.0
Diameter at the mouth (m)		3.8 - 2.0	3.8 – 2.65
Weight (Kg)		185	199
Parachute / FDS Diameter (F-26) / Rip Panel (F-39) (m)		6.0	4.0

Observe the differences between variants in the figure below:



SPECIAL SHAPE "HEART"

8.7 Balloon Maintenance, Handling and Care

Annual Inspection or every 100 hours (Type B)

All revisions will be type C (fabric grab test required). Grab test will be done also on top of the heart (excluding arms and hands, if present) in both sides.

8.8 Other manufacturer's equipment

No change.

