

Cryopal

Oxygen Therapy
Base units and Portable



Freelox

Breathe freely

oxygen therapy



Index

Freelox Portable units

6

Freelox Base units

10





Features that make the difference

- > Easy to clean and disinfect
- > Ergonomic flow control valve
- > Ergonomic condensation collector easy to remove
- > Felt condensation collection cloth
- > Easy to read & accurate electronic level indicator
- > Electronic display with capacitiv gauge or spring balance
- > Simple and quick maintenance
- > Plastic supports strengthened
- > All needed accessories available
 - Rolling cart & backpack
 - Tubing & cannula



Device presentation

- Designed for the storage of liquid oxygen at -183°C
- Volumes of 0,5L or 1,2L
- Pressurized mobility device (1,45 bar for operating pressure)
- Flow ranges : 0,25/0,5/1/1,5/2/2,5/3/4/5/6/7
- 7 h of autonomy for a 1,2L at 2L/min
- Evaporation rate $<0,5\text{L/day}$
- Stainless steel double walled container with vacuum interspace
- Vacuum 5 years warranty
- Medical Device 93/42/CEE

Used materials

- Polycarbonate
- Aluminium alloys
- Brass
- PCTFE
- Stainless steel
- Felt
- PTFE
- Silicone

Display

- Appliance type (B-BF-CF ref IEC 62-5 standards): IIB
- Electrical supply : Direct Current
- Battery : 1 alkaline battery 9V

Storage conditions

- Ambient temperature : from -40°C to 70°C
- Relative humidity : from 0 to 95% without any condensation
- Atmospheric pressure : from 700 to 1060 hPa

Operating conditions

- Ambient temperature : from $+10^{\circ}\text{C}$ to 40°C
- Relative humidity : from 30% to 75%
- Atmospheric pressure : from 700 to 1060 hPa



Volume	US Connexion	CE Connexion
Electronic gauge		
0,5L	LF136902	LF137001*
1,2L	LF137500	LF137600*
Spring balance		
0,5L	LF137200	LF137101*
1,2L	LF137800	LF137701*



*For some country only :
 LF137001 : LF137400 or LF137000
 LF137600 : LF138000 or LF137601
 LF137101 : LF137300 or LF120000 or LF137100
 LF137701 : LF137900 or LF120100 or LF137700

Technical characteristics	Unit	0,5L	1,2L
Liquid capacity	L	0,5	1,2
Gaseous capacity	L	429	1029
Height	mm	310	380
Lenght	mm	197	
Width	mm	131	
Weight, empty	Kg	1,75	2,2
Weight, full	Kg	2,3	3,6
Operating pressure	bar	1,45	
Maximal pressure	bar	2	
Evaporation rate (liquid)	SLPD	$<0,5$	
Evaporation rate (gas)	SLPD	<429	
Normal Evaporation Rate (NER)	kg/Day	0,57	
Average fill time (20°C)	s	45	60
Flow control range	SLPM	0 to $7 \pm 10\%$	
Flow settings	SLPM	0,25/0,5/1/1,5/2/2,5/3/4/5/6/7	
Primay valve	PSI	21	
Safety valve	PSI	30	

Autonomy		
Flows (SLPM) +/- 10%	0,5L	1,2L
0,25	14h	30h
0,5	10h	20h
1	4h30	13h
1,5	3h45	9h
2	2h30	7h
2,5	2h15	5h30
3	1h45	4h30
4	1h30	3h30
5	1h15	3h
6	45min	2h
7	35min	1h30

Primary valve ensures the working optimum pressure of the device and, the safety one prevents sudden pressure rises in addition to the primary, especially to ensure safety measures during transfer from the base unit

100% MANUFACTURED
IN FRANCE



Freelox

BASE UNITS



Features that make the difference

> Maximum ease of use

- Easy to read electronic level indicator
- Easy to adjust flow control valve
- Easy to remove condensation collector

> Simplified maintenance

- Safety valves calibrated in factory, no required adjustment
- Limited spare parts

> Enhanced safety

- Innovative filling connector:
 - To limit humidity and the risk of freezing
 - To avoid accidental liquid spray
 - To improve filling time
- 360° hand rail and handles

> Compatibility

- Cover with a universal shape to fit all portable units on the market*
- Universal cap for both CE and US connectors

Universal compatibility for all liquid oxygen portable units*



> Device presentation

- Trolley base available in option
- Designed to store liquid oxygen at -183°C
- Volumes of 20, 32 or 44L
- Pressurized tank (operating pressure of 1,35 bar)
- Flow ranges : 0,25/0,5/0,75/1/1,5/2/2,5/3/4/5/6
- Autonomy : 11 days for a 44L tank at 2L/min
- Evaporation rate <0,7L/day
- Vacuum 5 years warranty
- Medical Device 93/42/CEE
- Electronic level indicator with capacitive gauge
- Stainless steel, double-walled container with vacuum interspace

Vacuum interspace limits heating and therefore prevents excessive evaporation of oxygen from the liquid. FREELOX RESERVE units are equipped with an economizer that regulates the internal pressure and feeds excess evaporated gaseous oxygen back into the tank.

> Used materials

- Polycarbonate
- Aluminium alloys
- PTFE
- Silicone
- Stainless steel
- Brass
- PCTFE

> Storage conditions

- Ambient temperature : from -40°C to 70°C
- Relative humidity : from 0 to 95% without any Condensation
- Atmospheric pressure : from 700 to 1060 hPa

> Operating conditions

- Ambient temperature : from +10°C to 40°C
- Relative humidity : from 30% to 75%
- Atmospheric pressure : from 700 to 1060 hPa

Liquid capacity	US Connexion	CE Connexion
20L	LF122701	LF109401*
32L	LF107201	LF105102*
44L	LF107300	LF105201*

*For some country only :
LF105102 : LF135200 or LF135700 or LF135101
LF105201 : LF135300 or LF135800 or LF105200



Technical characteristics	Unit	20L	32L	44L
Liquid capacity	L	19,8	31,3	43,3
Gaseous capacity	L	17000	27200	37400
Height	mm	677	817	957
Lenght	mm	430		
Width	mm	363		
Weight, empty	Kg	17,2	20,8	24,4
Weight, full	Kg	39,6	56,6	73,6
Operating pressure	bar	1,35		
Maximal pressure	bar	2		
Evaporation rate (liquid)	SLPD	<0,7		
Evaporation rate (gas)	SPLD	0,55	0,62	0,71
Normal Evaporation Rate (NER)	kg/Day	0,63	0,71	0,81
Average fill time (20°C)	min	<5	<8	<11
Flow control range	SLPM	0 to 6 ± 10%		
Flow settings	SLPM	0,25 / 0,5 / 0,75 / 1 / 1,5 / 2 / 2,5 / 3 / 4 / 5 / 6		
Primay valve	PSI	22		
Safety valve	PSI	30		

Quality System
Certified ISO 13485

MD 93/42/CEE
GMED CE 0459

TPED 2010/35/UE
APRAGAZ π 0029

Autonomy (Days)

Flows (SLPM) +/- 10%	20L	32L	44L
0,25	25	40	50
0,5	19	30	38
0,75	12	22	28
1	10	15	20
1,5	7	10	14
2	5	7	11
2,5	4	6,5	8
3	3	5,5	7
4	2,5	4	5,5
5	2	3	4,5
6	1,5	2,5	3,5

100% MANUFACTURED
IN FRANCE

Primary valve ensures the working optimum pressure of the device and, the safety one prevents sudden pressure rises in addition to the primary, especially to ensure safety measures during the filling of the base unit.

* With compatible filling connector. US or CE

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