

Vessels designed for long term storage of biological samples in straws or cryo-vials (medical – human)



GT line for extended holding time (Ø neck ≤ 50 mm)



Main characteristics include

- ▶ Aluminum vessels for both the long holding time and large capacity GT lines:
 - Long holding time (Ø neck ≤ 50 mm)
 - large capacity (Ø neck ≥ 80 mm)
- ▶ Light weight and resistant
- ▶ High quality polyurethane paint
- ▶ 14 different models

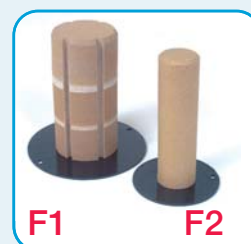
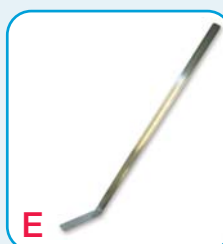
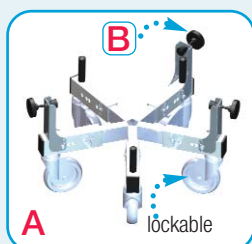
Carrying strap for GT2



- ▶ Maximum storage – 16,400 straws or 1,200 cryo-vials
- ▶ Vessels comply with the EC Medical Directive 93/42 EEC
- ▶ Level and temperature indicators on the NATAL 40
- ▶ Static holding time up to 350 days
- ▶ Plastic or stainless steel canisters
- ▶ Anti-float system for straws stored in plastic canisters
- ▶ Plastic level rod for measuring the liquid nitrogen level
- ▶ 6 year guarantee on the vacuum

Accessories

- A:** Roller base
- B:** Fixation kit for the roller base
- C:** Plastic goblet
- D:** Cryo-vial cane
- E:** Stainless steel lifter for goblets
- F1:** Lid for GTs with stainless steel canisters
- F2:** Lid for GTs with plastic canisters
- G:** Plastic level rod (included with GT except GT2)





Application areas include:
Life sciences, insemination centers,
egg and sperm banks, IVF,
pharmaceutical labs...

GT large capacity (Ø neck ≥ 80 mm)



The NATAL 40 is equipped with
level and temperature indicator
gauges and a RS485 connection
box for traceability of recorded
data.



Canister organization groove system
in the upper part of the GT neck
(canister organization system is
standard on all GT 14 / 6, 18, 26,
38, 40 and NATAL).



The GTs (except the
GT 2) can be closed
with a security lock on
the lid (the security
lock is not included)



Easy to identify number and color
code on the canisters in the long
holding time GT 3, 9, 11, 21
and 35

GT – for Animal Insemination

Vessels designed for storage and shipping of biological samples in straws or cryo-vials (veterinary – animal)



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GT line for extended holding time
(Ø neck ≤ 50 mm)



- ▶ Maximum storage 16,400 straws
- ▶ The GT line complies to international regulations for the transportation of dangerous materials by land, air, rail and water.
- ▶ Static holding time up to 350 days
- ▶ Plastic or stainless steel canisters with 1 or 2 levels
- ▶ Anti-float system for straws stored in plastic canisters
- ▶ Plastic level rod for measuring the liquid nitrogen level
- ▶ 6 year guarantee on the vacuum



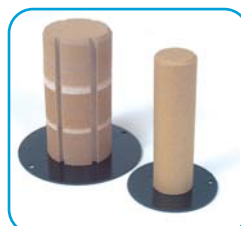
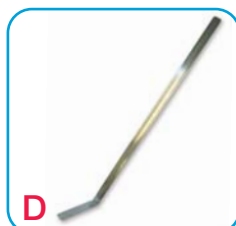
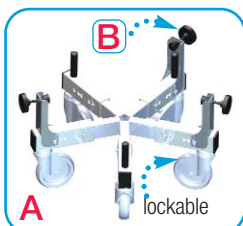
Main characteristics include

- ▶ Aluminum vessels for both the long holding time and large capacity GT lines:
 - Long holding time (Ø neck ≤ 50 mm)
 - large capacity (Ø neck ≥ 80 mm)
- ▶ Light weight and resistant
- ▶ High quality polyurethane paint
- ▶ 14 different models



Accessories

- | | |
|--|---|
| A: Roller base | E1: Lid for GTs with stainless steel canisters |
| B: Fixation kit for the roller base | E2: Lid for GTs with plastic canisters |
| C: Plastic goblet | F: Plastic level rod (included with GT / NATAL except GT2) |
| D: Stainless steel lifter for goblets | |





Animal Insemination

GT large capacity ($\varnothing$ neck ≥ 80 mm)



The GTs (except the GT 2) can be closed with a security lock on the lid (the security lock is not included)

Canister organization groove system in the upper part of the GT neck (canister organization system is standard on all GT 14 / 6, 18, 26, 38, 40 and NATAL



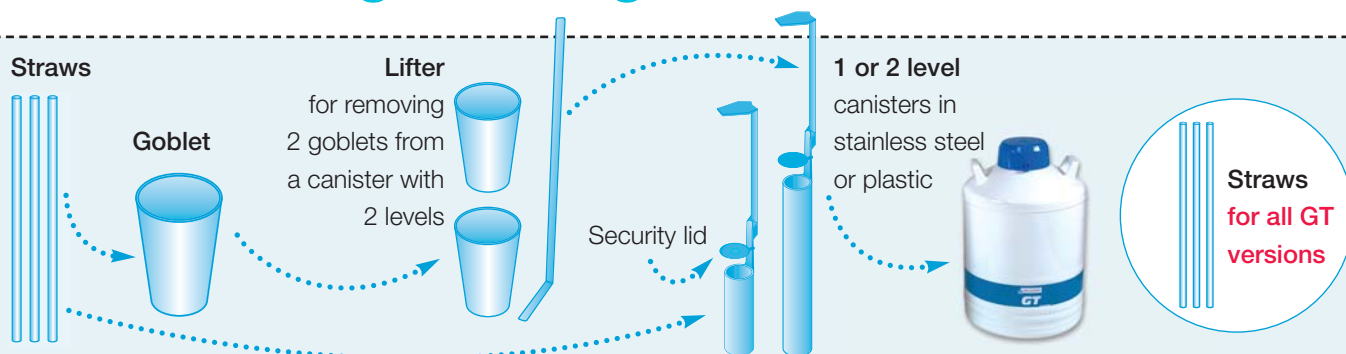
Easy to identify number and color code on the canisters in the long holding time GT 3, 9, 11, 21 et 35



The security lid is standard on the GT line, for options see accessories; only available for GT 3, 9, 11, 21 and 35



GT 2 – 35 long holding time – straws / vials



Long holding time ($\emptyset$ neck ≤ 50 mm)

		GT 2	GT 3	GT 9	GT 11	GT 21	GT 35
CHARACTERISTICS							
Liquid capacity	l	2	3.7	9.3	12.2	21.5	33.6
Diameter of neck	mm	30	50	50	50	50	50
Weight empty	kg	1.9	4.5	8.2	9.2	13	15
Canisters can be identified and organized from the support on the top of the neck of the GT							
Weight full	kg	3.5	7.5	15.7	19	30.4	43
External diameter	mm	174	248	358	308	388	468
Total height	mm	392	405	450	630	660	660
Daily evaporation rate	l/d ¹⁾	0.08	0.11	0.11	0.09	0.09	0.09
Static holding time	d	25	33	84	130	225	350
Dynamic holding time	d ²⁾	15	21	50	80	140	219
Number of canisters		3	6	6	6	6	6
STORAGE CAPACITY AND TYPE OD CANISTERS							
Plastic		✓	✓	✓	✓	✓	✓
Stainless steel		–	✓	✓	✓	✓	✓
Diameter of canisters	mm	26	38	38	38	38	38
Height of canisters	mm	120	120	120	120 or 280	120 or 280	120 or 280
Number of level of goblets ³⁾		1	1	1	1 or 2	1 or 2	1 or 2
Max. capacity of 0.25 ml straws		330	1,560	1,560	1,560/2,400	1,560/2,400	1,560/2,400
Max. capacity of 0.5 ml straws		150	720	720	720/1,200	720/1,200	720/1,200
Capacity of CBS™ straws (0.3 et 0.5 ml)		100	460	460	460/780	460/780	460/780
CTotal capacity of 2 ml cryo-vials (on canes in canisters with 2 levels)		–	–	–	180	180	180
PRODUCT REFERENCES							
GT with							
canisters – plastic and 1 level		GT2-1	GT3-1	GT9-1	GT11-1	GT21-1	GT35-1
canisters – stainless steel and 1 level		–	GT3-2	GT9-2	GT11-2	GT21-2	GT35-2
canisters – stainless steel 2 levels		–	–	–	GT11-3	GT21-3	GT35-3
canisters – plastic and 2 levels		–	–	–	GT11-4	GT21-4	GT35-4
MAIN ACCESSORY REFERENCES							
A: Roller base		–	–	–	–	ACC-ALU-29	
B: Fixation kit for the roller base (3 parts)		–	–	–	–	ACC-ALU-32	
C: Goblet $\emptyset$ 35 mm (20 per batch)		–	–	–	–	ACC-BOXTUBE-300	
D: Canes for cryo-vials (10 per batch)		–	–	–	–	ACC-BOXTUBE-411	
E: Lifter (for canister with 2 levels)		–	–	–	–	ACC-BOXTUBE-405	
F1: Lid for GTs with stainless steel canisters		–	ACC-GT-2	–	–	ACC-GT-1	
F2: Lid for GTs with plastic canisters		ACC-ALU-18	ACC-GT-4	–	–	ACC-GT-5	
G: Plastic level rod		–	–	–	–	ACC-GT-103	

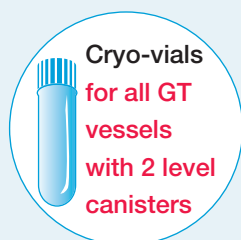
1) Daily evaporation and static holding time are given for the following conditions: 20°C, 1 013 mb, and vessel is stationary with lid closed. These are nominal values and may vary according to the history of the vessel and the manufacturing tolerances.

2) Indicative value may vary greatly based on the time the vessel did not have its lid closed.

3) Canister 1 level: number of straws stored loose.

Canister 2 levels: number of straws stored loose in goblet.

GT 14 – 40 large capacity – Straws / Vials



Cryo-vials



Canes¹⁾



Security lid
(only available
on plastic
canisters)

2 level
canisters in
stainless steel
or plastic



GT large capacity (Ø neck ≥ 80 mm)

		GT 14/6	GT 18	GT 26	GT 38	GT 40	NATAL NT
CHARACTERISTICS							
Liquid capacity	l	13.5	17.5	26.7	37	40	40
Diameter of neck	mm	80	80	80	80	120	120
Weight empty	kg	9.5	10.5	14.8	19	24	24
Canisters can be identified and organized from the support grooves in the top of the neck of the GT							
Weight full	kg	20.4	25	36	49	57	57
External diameter	mm	358	308	468	468	468	468
Total height	mm	455	580	460	715	710	710
Daily evaporation rate	l/d ²⁾	0.24	0.26	0.29	0.15	0.29	0.29
Static holding time	d	57	69	90	245	140	140
Dynamic holding time	d ³⁾	36	43	56	153	88	88
Number of canisters (only stainless steel)		6	6	9	6	10	10
STORAGE CAPACITY AND TYPE OD CANISTERS							
Diameter of canister	mm	67	67	67	67	73	73
Height of canister	mm	120	280	110	280	280	280
Number of level of goblets ⁴⁾		1	2	1	2	2	2
Max. capacity of 0.25 ml straws		4,920	9,840	7,380	9,840	16,400	16,400
Max. capacity of 0.5 ml straws		2,190	4,380	3,285	4,380	7,300	7,300
Capacity of CBS™ straws (0.3 et 0.5 ml)		1,350	2,700	2,025	2,700	4,500	4,500
Total capacity of 2 ml cryo-vials (on canes in canisters with 2 levels)		–	612	–	612	1,200	1,200
Total capacity of 5 ml cryo-vials (on canes in canisters with 2 levels)		–	306	–	306	600	600
Capacity level indicator with alarm		–	–	–	–	–	✓
Digital temperature indicator with alarm		–	–	–	–	–	✓
PRODUCT REFERENCES							
GT with							
1 level canister in stainless steel		GT14-1	–	GT26-1	–	–	
2 level canister in stainless steel		–	GT18-1	–	GT38-1	GT40-1	NATAL40-1
MAIN ACCESSORY REFERENCES							
A: Roller base		–			ACC-ALU-29		
B: Fixation kit for the roller base (3 parts)		–			ACC-ALU-32		
C: Goblet Ø 65 mm (20 per batch)					ACC-BOXTUBE-301		
C1: Goblet perce Ø 65 mm with lid (10 per batch)					ACC-BOXTUBE-415		
C2: Goblet "Marguerite" Ø 65 with lid (5 per batch)					ACC-BOXTUBE-302		
D: Canes for cryo-vials (10 per batch)		–	ACC-BOXTUBE-411	–		ACC-BOXTUBE-411	
E: Lifter (for canister with 2 levels)		–	ACC-BOXTUBE-405	–		ACC-BOXTUBE-405	
F1: Lid for GTs with stainless steel canisters		ACC-GT-6		ACC-GT-8	ACC-GT-9	ACC-GT-3	ACC-GT-3
G: Plastic level rod					ACC-GT-103		

1) Max. 6 2 ml cryo-vials per cane. Max. 3 5 ml cryo-vials per cane.

2) Daily evaporation and static holding time are given for the following conditions: 20°C, 1 013 mb, and vessel is stationary with lid closed.

These are nominal values and may vary according to the history of the vessel and the manufacturing tolerances.

3) Indicative value may vary greatly based on the time the vessel did not have its lid closed.

4) Canister 1 level: number of straws stored loose.

Canister 2 levels: number of straws stored loose in goblet.

ARPEGE

Vessels of 40 up to 170 litres designed for long term storage of biological samples in straws, cryo-vials and bags.



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Electronic

- ▶ Maximum storage – 6000 cryo-vials
- ▶ Storage in Gas or Liquid phase
- ▶ Vessels comply with the EC Medical Directive 93/42 EEC
- ▶ Static holding time up to 246 days
- ▶ A variety of electronic options on all models
- ▶ Rack or canister storage systems for the samples
- ▶ AIR LIQUIDE patented clip system to secure the sample boxes in the racks
- ▶ 6 year guarantee on the vacuum

Main characteristics include

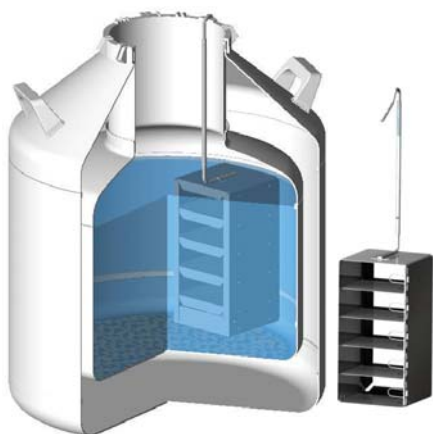
- ▶ Vessels delivered with the racks or canisters inside
- ▶ Option to buy the vessels without any electronic or storage system (see product table)
- ▶ Security lid with a lock point (not available on ARPEGE 55 & 75, lock not included)
- ▶ Made out of aluminum and composite materials provides for light weight and longer holding time





Application areas include:
Life sciences, insemination centers, egg
and sperm banks, IVF, pharmaceutical
labs...

ARPEGE liquid phase



ARPEGE gas phase

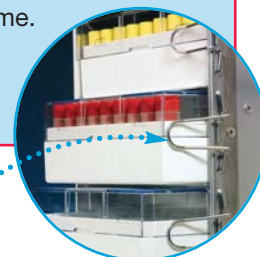


Maximizing security when
handling a rack and the sample
boxes in the rack. Thanks to
AIR LIQUIDE' s patented clip
closure system ®, each level of
the storage rack has its own clip
system to secure and keep the
storage boxes in each level of
the rack allowing the user to
access only one level of
a rack at a time.

Electronic options

- ▶ Level indicator and / or regulation and...
- ▶ Temperature indicator
- ▶ Level indicator – regulation (except ARPEGE 40)

A system designed to
secure and keep each
storage box in its place in
the rack.



		 Liquid phase	 Gas Phase	liquid							
ARPEGE				40	70	110	140	170	55	75	
CHARACTERISTICS				liquid and gas							
Liquid capacity	l			40	72	116	144	172	55	72	
					15	15	20	20			
Weight empty	kg			57	91	136	166	195	75	95	
					50	60	73	77			
Static holding time	d			140	130	193	222	246	23	29	
					25	23	30	28			
Diameter of neck	mm			120	215	215	215	215	378	378	
Weight empty	kg			25	33	42	50	56	31	37	
External diameter	mm			467	586	586	683	683	468	468	
Total height	mm			735	738	962	911	1 028	755	930	
Daily evaporation rate	l/d ⁽¹⁾			0.29	0.6	0.65	0.65	0.7	2.4	2.5	

1) Daily evaporation and static holding time are given for the following conditions: 20°C, 1 013 mb, and vessel is stationary with lid closed.

These are nominal values and may vary according to the history of the vessel and the manufacturing tolerances.

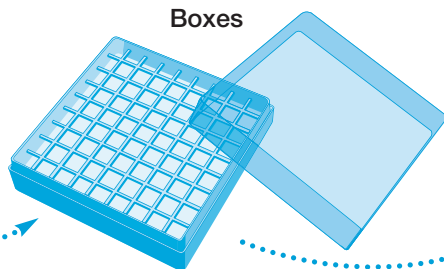
2) Indicative value may vary greatly based on the time the vessel did not have its lid closed.

ARPEGE 40 – 170 – Cryo-vials

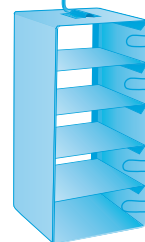
Cryo-vials



Boxes



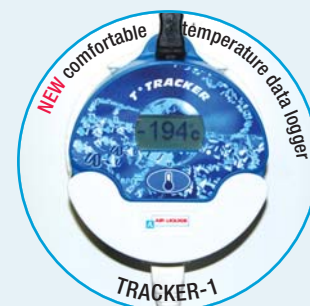
Rack



Rack clips ®
AIR LIQUIDE



OPTIMAL		Tele-Monitoring	
INITIAL / ESSENTIAL			
SIMPLE	BASIC	CHOICE I:	CHOICE II:
without racks without electronics	including racks without electronics	level indicator N temperature indicator T Automatic filling R	4/20mA box RS485 box



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Liquid phase



Gas Phase

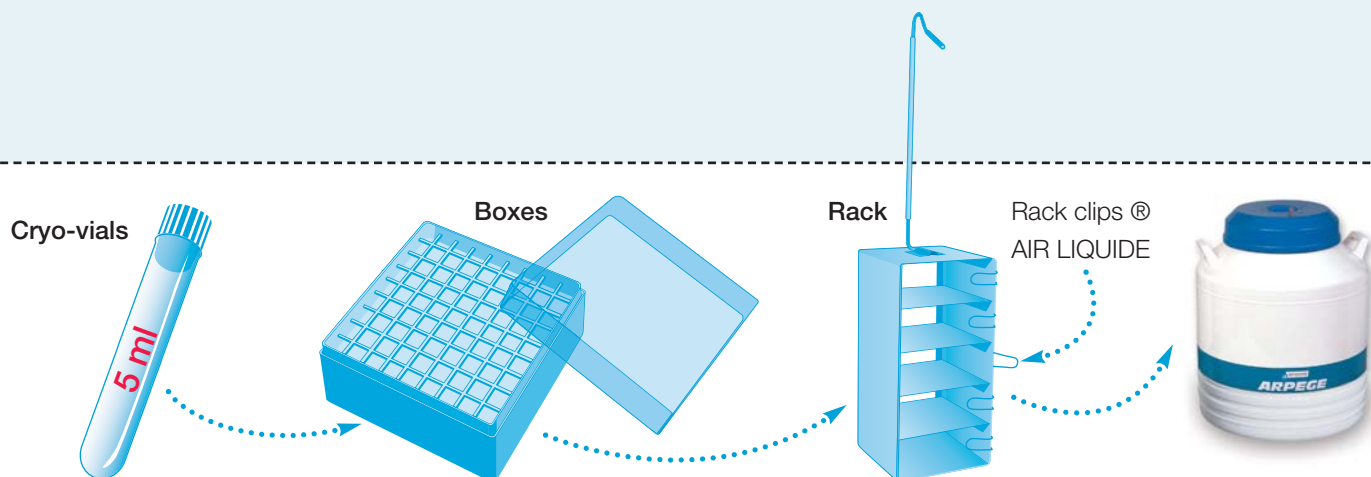
Arpege – Rack for cryo-vials 1.2 / 2ml			40	70	110	140	170
Number of racks			6	4	4	6	6
Number of cryo-vials per box of 25			25	81/100	81/100	81/100	81/100
Number of levels per rack			5	5	9	8	10
			—	4	8	7	9
Number of cryo-vials 1.2 / 2ml			750 ¹⁾	2,000 ²⁾	3,600 ²⁾	4,800 ²⁾	6,000 ²⁾
			—	1,600 ²⁾	3,200 ²⁾	4,200 ²⁾	5,400 ²⁾
SIMPLE without racks, without electronics			ARPEGE40-L-1	ARPEGE70-L-1	ARPEGE110-L-1	ARPEGE140-L-1	ARPEGE170-L-1
			—	ARPEGE70-G-1	ARPEGE110-G-1	ARPEGE140-G-1	ARPEGE170-G-1
BASIC includes: racks cryo-vials 2ml, without electronics			ARPEGE40-L-100	ARPEGE70-L-100	ARPEGE110-L-100	ARPEGE140-L-100	ARPEGE170-L-100
			—	—	—	—	—
INITIAL N + T			ARPEGE40-L-102	ARPEGE70-L-102	ARPEGE110-L-102	ARPEGE140-L-102	ARPEGE170-L-102
			—	—	—	—	—
ESSENTIAL N + T + R			—	ARPEGE70-L-104	ARPEGE110-L-104	ARPEGE140-L-104	ARPEGE170-L-104
			—	ARPEGE70-G-104	ARPEGE110-G-104	ARPEGE140-G-104	ARPEGE170-G-104
OPTIMAL N + T + R + 4/20mA box			—	ARPEGE70-L-107	ARPEGE110-L-107	ARPEGE140-L-107	ARPEGE170-L-107
			—	ARPEGE70-G-107	ARPEGE110-G-107	ARPEGE140-G-107	ARPEGE170-G-107
OPTIMAL N + T + R + RS485 box			—	ARPEGE70-L-108	ARPEGE110-L-108	ARPEGE140-L-108	ARPEGE170-L-108
			—	ARPEGE70-G-108	ARPEGE110-G-108	ARPEGE140-G-108	ARPEGE170-G-108

MAIN ACCESSORY REFERENCES

A1: Roller base (height: 220 mm)	ACC-ALU-29	ACC-ALU-30
A1: Non magnetic roller base (height: 205 mm)	ACC-ALU-31	—
B: Fixation kit for the roller base (3 parts)		ACC-ALU-32
C: Flexible transfer hose with (DN10) – 180/180 for nitrogen length =1.5 m	— ³⁾	ACC-FL180180NL-15
D: Set of boxes	ACC-BOXTUBE-105 ⁴⁾	ACC-BOXTUBE-104 ⁵⁾

1) in boxes 76 x 76 x 51 mm (25) 2) in boxes 133 x 133 x 512 mm (81 or 100) 3) ARPEGE 40: automatic filling is not available

4) set of 8 boxes 76 x 76 x 51 mm (25) 5) set of 10 boxes 133 x 133x 512 mm (81 or 100)



OPTIMAL		Tele-Monitoring	
INITIAL / ESSENTIAL			
SIMPLE	BASIC	CHOICE I:	CHOICE II:
without racks without electronics	including racks without electronics	level indicator N temperature indicator T Automatic filling A	4/20mA box RS485 box

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Liquid phase



Gas Phase

Arpege – Rack for cryo-vials 5 ml

			70	110	140	170
Number of	racks		4	4	6	6
Number of	cryo-vials per box		81	81	81	81
Number of	levels per rack		3	5	4	5
			2	4	3	4
Number of	cryo-vials 5 ml		972	1,620	1,944	2,430
			648	1,296	1,458	1,944
SIMPLE	without racks, without electronics		ARPEGE70-L-1	ARPEGE110-L-1	ARPEGE140-L-1	ARPEGE170-L-1
			ARPEGE70-G-1	ARPEGE110-G-1	ARPEGE140-G-1	ARPEGE170-G-1
BASIC	includes: racks for cryo-vials 5 ml without electronics		ARPEGE70-L-200	ARPEGE110-L-200	ARPEGE140-L-200	ARPEGE170-L-200
			–	–	–	–
INITIAL	N + T		ARPEGE70-L-202	ARPEGE110-L-202	ARPEGE140-L-202	ARPEGE170-L-202
			–	–	–	–
ESSENTIAL	N + T + R		ARPEGE70-L-204	ARPEGE110-L-204	ARPEGE140-L-204	ARPEGE170-L-204
			ARPEGE70-G-204	ARPEGE110-G-204	ARPEGE140-G-204	ARPEGE170-G-204
OPTIMAL	N + T + R + 4/20mA box		ARPEGE70-L-207	ARPEGE110-L-207	ARPEGE140-L-207	ARPEGE170-L-207
			ARPEGE70-G-207	ARPEGE110-G-207	ARPEGE140-G-207	ARPEGE170-G-207
OPTIMAL	N + T + R + RS485 box		ARPEGE70-L-208	ARPEGE110-L-208	ARPEGE140-L-208	ARPEGE170-L-208
			ARPEGE70-G-208	ARPEGE110-G-208	ARPEGE140-G-208	ARPEGE170-G-208

MAIN ACCESSORY REFERENCES

A: Roller base lockable (height: 220 mm)	ACC-ALU-30
B: Fixation kit for the roller base (3 parts)	ACC-ALU-32
C: Flexible transfer hose with (DN10) – 180/180 for nitrogen length = 1.5m -1	ACC-FL180180NL-15
D: Set of 4 boxes 133 x 133 x 512 mm ¹⁾	ACC-BOXTUBE-107

1) 81 boxes

ARPEGE 55 and 75

Cryo-vials

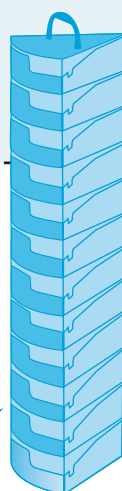
Cryo-vials



Rack type "Camembert"
or pie



Rack



OPTIMAL		Tele-Monitoring	
INITIAL / ESSENTIAL			
SIMPLE	BASIC	CHOICE I:	CHOICE II:
without racks	including racks	level indicator N	4/20mA box
without electronics	without electronics	temperature indicator T	RS 485 box
		Automatic filling A	



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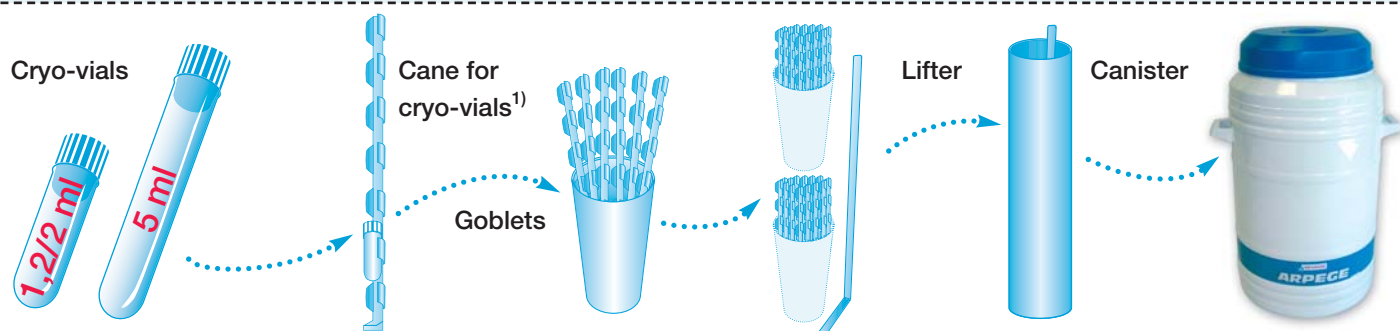
Liquid phase

Arpege – Rack for cryo-vials 1.2 / 2ml			55	75
Number of	racks		6 ¹⁾	6 ¹⁾
Number of	levels per rack		9	12
Number of	cryo-vials per box		67	67
Number of	cryo-vials 1.2 / 2ml		3,618	4,824
SIMPLE	without racks, without electronics		ARPEGE55-L-1	ARPEGE75-L-1
BASIC	includes: racks for cryo-vials 1.2 / 2ml, without electronic		ARPEGE55-L-100	ARPEGE75-L-100
INITIAL	N + T		ARPEGE55-L-102	ARPEGE75-L-102
ESSENTIAL	N + T + R		ARPEGE55-L-104	ARPEGE75-L-104
OPTIMAL	N + T + R + 4/20mA box		ARPEGE55-L-107	ARPEGE75-L-107
OPTIMAL	N + RA + RS485 box		ARPEGE55-L-108	ARPEGE75-L-108

MAIN ACCESSORY REFERENCES

A1: Roller base – lockable (height: 220 mm)	ACC-ALU-29
A1: Non magnetic roller base – lockable (height: 205 mm)	ACC-ALU-31
B: Fixation kit for the roller base (3 parts)	ACC-ALU-32
C: Flexible transfer hose with (DN10) – 180/180 for nitrogen length = 1.5m	ACC-FL180180NL-15

1) with electronic kit and maximum of 5 racks



OPTIMAL		Tele-Monitoring	
INITIAL / ESSENTIAL			
SIMPLE	BASIC	CHOICE I:	CHOICE II:
without racks	including racks	level indicator N	4/20mA box
without electronics	without electronics	temperature indicator T	RS 485 box
		automatic filling R	

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Liquid phase

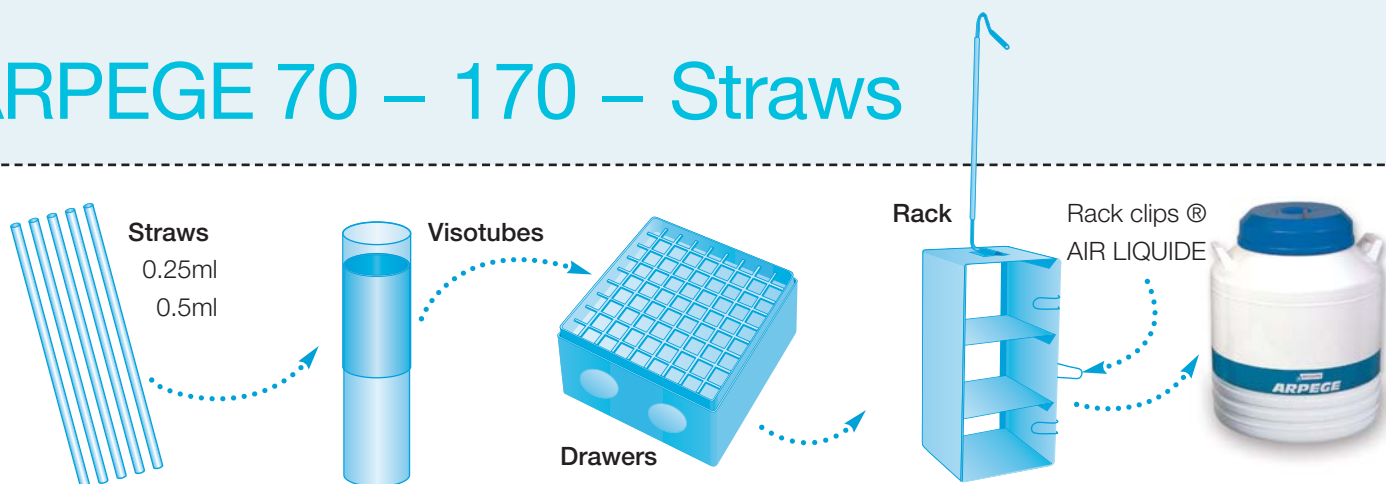
Arpege – Canisters pour cryo-tubes 2 / 5ml & gobelet		55	75
Number of canisters		21	21
Number of goblets per canister		1	2
Number of cryo-vial canes per goblet		17	17
Number of cryo-vials 1.2 / 2ml		2,142	4,284
Number of cryo-vials 5ml		1,071	2,142
BASIC includes. canisters for cryo-vials 2 / 5ml + gobelts + lifter		ARPEGE55-L-200	ARPEGE75-L-200
INITIAL N + T		ARPEGE55-L-202	ARPEGE75-L-202
ESSENTIAL N + T + R		ARPEGE55-L-204	ARPEGE75-L-204
OPTIMAL N + T + R + 4/20mA box		ARPEGE55-L-207	ARPEGE75-L-207
OPTIMAL N + T + R + RS485 box		ARPEGE55-L-208	ARPEGE75-L-208

MAIN ACCESSORY REFERENCES

A1: Roller base – lockable (height: 220 mm)	ACC-ALU-29
A2: Non magnetic roller base – lockable (height: 205 mm)	ACC-ALU-31
B: Fixation kit for the roller base (3 parts)	ACC-ALU-32
C: Flexible transfer hose with (DN10) – 180/180 for nitrogen length =1.5m	ACC-FL180180NL-15

1) Maximum 6 cryo-vials 2ml per cane. Maximum 3 cryo-vials 5ml per cane.

ARPEGE 70 – 170 – Straws



OPTIMAL		Tele-Monitoring	
INITIAL / ESSENTIAL			
SIMPLE	BASIC	CHOICE I:	CHOICE II:
without racks	including racks	level indicators N	4/20mA box
without electronics	without electronics	temperature indicator T	RS 485 box
		automatic filling R	

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Liquid phase

Gas Phase

Arpege – Racks pour paillettes				70	110	140	170
Number of	racks			4	4	6	6
Number of	levels per rack ¹⁾			2	3	3	4
Number of	visotubes ²⁾ per level			85	85	85	85
Number of	0.25ml straws ¹⁾			15,040	23,460	35,190	46,920
Number of	0.5ml straws ¹⁾			6,120	9,180	13,770	18,360
Number of	CBS™ (0.3ml – 0.5ml) straws ¹⁾			4,080	6,120	9,180	12,240
SIMPLE	without racks, without electronics			ARPEGE70-L-1	ARPEGE110-L-1	ARPEGE140-L-1	ARPEGE170-L-1
				–	–	–	–
BASIC	includes. racks for straws, without electronics			ARPEGE70-L-300	ARPEGE110-L-300	ARPEGE140-L-300	ARPEGE170-L-300
				–	–	–	–
INITIAL	N + T			ARPEGE70-L-302	ARPEGE110-L-302	ARPEGE140-L-302	ARPEGE170-L-302
				–	–	–	–
ESSENTIAL	N + T + R			ARPEGE70-L-304	ARPEGE110-L-304	ARPEGE140-L-304	ARPEGE170-L-304
				ARPEGE70-G-304	ARPEGE110-G-304	ARPEGE140-G-304	ARPEGE170-G-304
OPTIMAL	N + T + R + 4/20mA box			ARPEGE70-L-307	ARPEGE110-L-307	ARPEGE140-L-307	ARPEGE170-L-307
				ARPEGE70-G-307	ARPEGE110-G-307	ARPEGE140-G-307	ARPEGE170-G-307
OPTIMAL	N + T + R + RS485 box			ARPEGE70-L-308	ARPEGE110-L-308	ARPEGE140-L-308	ARPEGE170-L-308
				ARPEGE70-G-308	ARPEGE110-G-308	ARPEGE140-G-308	ARPEGE170-G-308

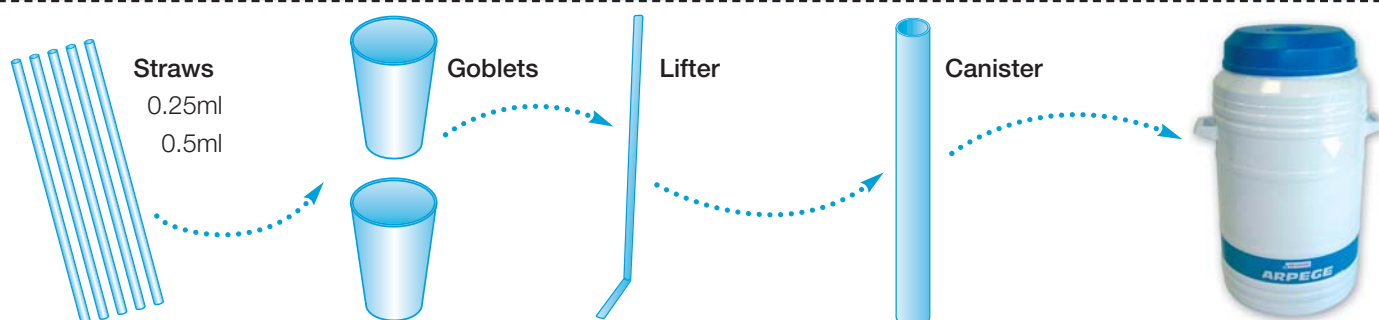
MAIN ACCESSORY REFERENCES

A: Roller base lockable (height: 220 mm)	ACC-ALU-30
B: Fixation kit for the roller base (3 parts)	ACC-ALU-32
C: Flexible transfer hose with (DN10) – 180/180 for nitrogen length = 1.5m	ACC-FL180180NL-15
D: Batch of 100 Visotubes with lids	ACC-BOXTUBE-5

1) Storage capacity of straws in liquid phase vessels, please contact AL DMC for storage capacity of straws in gas phase vessels.

2) Visotubes ø 12 mm with lid

ARPEGE 55 et 75 – Straws



OPTIMAL		Tele-Monitoring	
INITIAL / ESSENTIAL			
SIMPLE	BASIC	CHOICE I:	CHOICE II:
without canisters	includes: canisters	level indicator N	4/20mA box
without electronics	without electronics	temperature indicator T	RS485 box
		Automatic filling R	

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* page 54

Liquid phase

Arpege – Canisters pour paillettes & gobelets		55	75
Number of canisters		21	21
Number of goblets per canister		3	4
Number of 0.25ml straws		51,660	68,880
Number of 0.5ml straws		22,995	30,660
Number of CBS™ (0.3ml – 0.5ml) straws		14,175	18,900
SIMPLE without canisters, without electronics		ARPEGE55-L-1	ARPEGE75-L-1
BASIC includes: canisters for straws + goblets + lifter		ARPEGE55-L-300	ARPEGE75-L-300
INITIAL N + T		ARPEGE55-L-302	ARPEGE75-L-302
ESSENTIAL N + T + R		ARPEGE55-L-304	ARPEGE75-L-304
OPTIMAL N + T + R + 4/20mA box		ARPEGE55-L-307	ARPEGE75-L-307
OPTIMAL N + T + R + RS485 box		ARPEGE55-L-308	ARPEGE75-L-308

MAIN ACCESSORY REFERENCES

A1: Roller base – lockable (height: 220 mm)	ACC-ALU-29
A2: Non magnetic roller base – lockable (height: 205 mm)	ACC-ALU-31
B: Fixation kit for the roller base (3 parts)	ACC-ALU-32
C: Flexible transfer hose with (DN10) – 180/180 for nitrogen length =1.5m	ACC-FL180180NL-15
D: Grouped (canisters + goblets)	ACC-PLASCAN-109 ¹⁾ ACC-PLASCAN-107 ²⁾
E: Set of 10 marguerite goblets ø 65mm + lids	ACC-BOXTUBE-302

1) ARPEGE 55: 21 canisters + 63 goblets

2) ARPEGE 55: 21 canisters + 84 goblets

ESPACE

ESPACE 151 661 liquid and gas phase



- Large storage capacity for straws, cryo-vials and bags
- MDD 93/42/EEC compliant
- Storage in Gas or Liquid phase
- Easy to use. Immediate access to products and samples thanks to the wide neck opening of the ESPACE
- A variety of electronic options on all models
- 6 year guarantee on the vacuum



liquid phase



gas phase

ESPACE			151	331NC	331C	661
CHARACTERISTICS						
Liquid Nitrogen capacity	l		200	386	386	786
			33	68	68	222
Weight full without racks and samples	kg		326	505	545	920
			192	245	285	465
Static holding time	d		33	37	37	66
			5,5	7,5	7,5	19
Daily evaporation rate	l/d ¹⁾		6	9	9	11,5
Interior diameter	mm		538	771 ¹⁾ /740 ²⁾	771 ¹⁾ /740 ²⁾	1,003
Weight empty	kg		165	190	230	305
Access height	mm		1,205	1,172	1,172	1,355
External height	mm		1,350	1,310	1,310	1,505
External width	mm		650	886	932	1,150
External depth	mm		940	1,100	1,100	1,375

1) without rotating tray

2) with rotating tray PT

*) Daily evaporation and static holding time are given for the following conditions: 20°C, 1 013 mb, and vessel is stationary with lid closed. These are nominal values and may vary according to the history of the vessel and the manufacturing tolerances.

Main characteristics include

- Choice of rack storage systems base on product or sample type.
- Specific storage system can also be developed
- ESPACE 331 has the options of being fitted with or without casing and with or without a rotating tray
- Stainless steel construction

* page 38-41



RCB 500 1001 phase liquid et gas phase

- Large storage capacity for straws, cryo-vials and bags
- MDD 93/42/EEC compliant
- Storage in Gas or Liquid phase
- Low consumption thanks to the narrow neck and opening design which greatly reduces evaporation of Nitrogen
- Specifically designed for the long term storage of samples and products
- A variety of electronic options on all models
- 6 year guarantee on the vacuum



liquid phase



gas phase

Main characteristics include

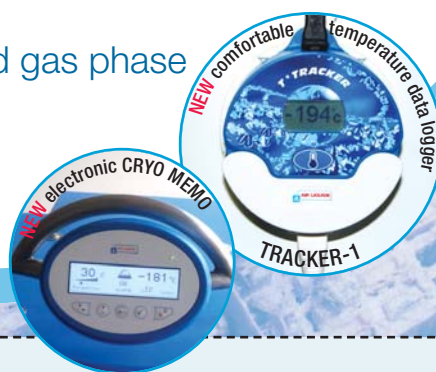
- Choice of rack storage systems based on product or sample type
- Specific storage system can also be developed
- The RCB vessels can also be equipped with a compensated lid for easier use

RCB			500	600	1000	1001
CHARACTERISTICS						
Liquid Nitrogen capacity	l		500	575	1 020	1,110
				115		280
Weight full without racks and samples	kg		654	735	1 239	1,641
				337		671
Static holding time	d		111	127	127	138
			—	25	—	35
Daily evaporation rate	l/d ^{*)}		4,5	4,5	8	8
Interior diameter	mm		850	850	1,150	1,150
Weight empty	kg		250	270	415	445
Access height	mm		1,260	1,440	1,300	1,377
External height	mm		1,320	1,500	1,340	1,440
External width	mm		1,100	1,100	1,320	1,320
External depth	mm		1,200	1,200	1,400	1,400

*) Daily evaporation and static holding time are given for the following conditions: 20°C, 1 013 mb, and vessel is stationary with lid closed. These are nominal values and may vary according to the history of the vessel and the manufacturing tolerances.

ESPACE 151 and 331 with casing

ESPACE liquid and gas phase
with casing



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OPTIMAL			
ESSENTIAL			
BASIC with: T° Tracker	T°	INITIAL without racks, with:	with:
		level & temperature indicator	overflow kit
		filling security	output for 4/20 mA & rs485
		server option	Memo Traceability
		second temperature	
		NT	D
		R	SO
		S	
		2T	M

liquid phase

gas phase

ESPACE 151 liquid or gas – without rotating tray (PT)			
			151
BASIC	T° Tracker	liquid phase	ESP151N-LC-1
INITIAL	NT + R + S + 2T	liquid phase	ESP151N-LC-2
		gas phase	ESP151N-GC-1
ESSENTIAL	NT + R + S + 2T + D + SO	liquid phase	ESP151N-LC-5
		gas phase	ESP151N-GC-4
OPTIMAL	NT + R + S + 2T + D + SO + M	liquid phase	ESP151N-LC-7
		gas phase	ESP151N-GC-6

ESPACE 331 liquid or gas – without rotating tray (PT)			
			331
BASIC	T° Tracker	liquid phase	ESP331N-LC-1
INITIAL	NT + R + S + 2T	liquid phase	ESP331N-LC-3
		gas phase	ESP331N-GC-1
ESSENTIAL	NT + R + S + 2T + D + SO	liquid phase	ESP331N-LC-9
		gas phase	ESP331N-GC-7
OPTIMAL	NT + R + S + 2T + D + SO + M	liquid phase	ESP331N-LC-13
		gas phase	ESP331N-GC-11

ESPACE liquid



Samples and products
are emerged completely
in liquid Nitrogen.

ESPACE gas



Samples and products
have no contact with liquid
Nitrogen.

ESPACE 331 with rotating tray PT

ESPACE 331 liquid or gas – with rotating tray (PT)			
			331
BASIC	T° Tracker	liquid phase	ESP331N-LC-2
INITIAL	NT + R + S + 2T	liquid phase	ESP331N-LC-4
		gas phase	ESP331N-GC-2
ESSENTIAL	NT + R + S + 2T + D + SO	liquid phase	ESP331N-LC-10
		gas phase	ESP331N-GC-8
OPTIMAL	NT + R + S + 2T + D + SO + M	liquid phase	ESP331N-LC-14
		gas phase	ESP331N-GC-12

Other storage configurations are possible, please contact CRYOPAL directly.

ESPACE 331 and 661 without casing



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ESPACE liquid and gas phase without casing

OPTIMAL			
ESSENTIAL			
BASIC with: T° Tracker	T°	INITIAL without racks, with: level & temperature indicator filling security server option second temperature	NT R S 2T
		with: overflow kit output for 4/20 mA & RS485	D SO
		with: Memo Traceability	M

liquid phase

gas phase

ESPACE 331 liquid or gas – without rotating tray (PT)			331
BASIC	T° Tracker		ESP331N-LNC-1
INITIAL	T + R + S + 2T	 	ESP331N-LNC-3 ESP331N-GNC-1
ESSENTIAL	NT + R + S + 2T + D + SO	 	ESP331-LNC-9 ESP331-GNC-7
OPTIMAL	NT + R + S + 2T + D + SO + M	 	ESP331-LNC-13 ESP331-GNC-11

ESPACE 661 liquid or gas – with rotating tray (PT)			661
BASIC	T° Tracker		ESP661N-LNC-1
INITIAL	T + R + S + 2T	 	ESP661N-LNC-2 ESP661N-GNC-1
ESSENTIAL	NT + R + S + 2T + D + SO	 	ESP661N-LNC-5 ESP661N-GNC-4
OPTIMAL	NT + R + S + 2T + D + SO + M	 	ESP661N-LNC-7 ESP661N-GNC-6

ESPACE 331 with rotating tray PT

ESPACE 331 liquid or gas – with rotating tray (PT)			331
BASIC	T° Tracker		ESP331N-LNC-2
INITIAL	T + R + S + 2T	 	ESP331N-LNC-4 ESP331N-GNC-2
ESSENTIAL	NT + R + S + 2T + D + SO	 	ESP331N-LNC-10 ESP331N-GNC-8
OPTIMAL	NT + R + S + 2T + D + SO + M	 	ESP331N-LNC-14 ESP331N-GNC-12

Other storage configurations are possible, please contact CRYOPAL directly.

ESPACE liquid



Samples and products are emerged completely in liquid Nitrogen.

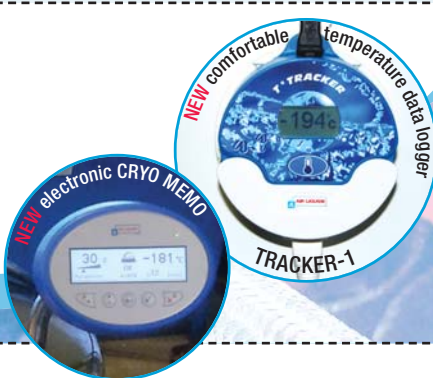
ESPACE gas



Samples and products have no contact with liquid Nitrogen.

RCB 500 and 600

RCB liquid or gas
with rotating tray



BASIC with: T° Tracker T°	OPTIMAL
SIMPLE with: standard lid without racks without electronics	ESSENTIAL
	INITIAL without racks, with: compensated lid B level & temperature indicator NT filling security R
	with: overflow kit D output for 4/20 mA & RS485 SO
	with: Memo Traceability M

liquid phase

RCB 500 liquid – with rotating tray (PT)		500
SIMPLE		RCB500N-L-1
BASIC T°		RCB500N-L-3
INITIAL B + NT + R		RCB500N-L-6
ESSENTIAL B + NT + R + D + SO		RCB500N-L-12
OPTIMAL B + NT + R + D + SO + M		RCB500N-L-16

liquid phase

RCB 600 liquid – with rotating tray (PT)		600
SIMPLE		RCB600N-L-1
BASIC T°		RCB600N-L-3
INITIAL B + NT + R		RCB600N-L-6
ESSENTIAL B + NT + R + D + SO		RCB600N-L-12
OPTIMAL B + NT + R + D + SO + M		RCB600N-L-16

RCB liquid



Samples and products
are emerged completely
in liquid Nitrogen.

RCB gas



Samples and products
have no contact with liquid
Nitrogen.

gas phase

RCB 600 gas – with rotating tray (PT)		600
INITIAL B + NT + R		RCB600N-G-2
ESSENTIAL B + NT + R + D + SO		RCB600N-G-8
OPTIMAL B + NT + R + D + SO + M		RCB600N-G-12

Other storage configurations are possible, please contact CRYOPAL directly.

RCB 1000 and 1001



RCB liquid or gas
with rotating tray

BASIC with: T° Tracker T°	OPTIMAL		
SIMPLE with: standard lid without racks without electronics	ESSENTIAL		
	INITIAL without racks, with: compensated lid B level & temperature indicator NT filling security R	with: overflow kit D output for 4/20 mA & RS485 SO	with: Memo Traceability M

liquid phase

RCB 1000 liquid – with rotating tray (PT)		1000
SIMPLE		RCB1000N-L-1
BASIC T°		RCB1000N-L-3
INITIAL B + NT + R		RCB1000N-L-6
ESSENTIAL B + NT + R + D + SO		RCB1000N-L-12
OPTIMAL B + NT + R + D + SO + M		RCB1000N-L-16

liquid phase

RCB 1001 liquid – with rotating tray (PT)		1001
SIMPLE		RCB1001N-L-1
BASIC T°		RCB1001N-L-3
INITIAL B + NT + R		RCB1001N-L-6
ESSENTIAL B + NT + R + D + SO		RCB1001N-L-12
OPTIMAL B + NT + R + D + SO + M		RCB1001N-L-16

RCB liquid



Samples and products
are emerged completely
in liquid Nitrogen.

RCB gas



Samples and products
have no contact with liquid
Nitrogen.

gas phase

RCB 1001 gas – with rotating tray (PT)		1001
INITIAL B + NT + R		RCB1001N-G-2
ESSENTIAL B + NT + R + D + SO		RCB1001N-G-8
OPTIMAL B + NT + R + D + SO + M		RCB1001N-G-12

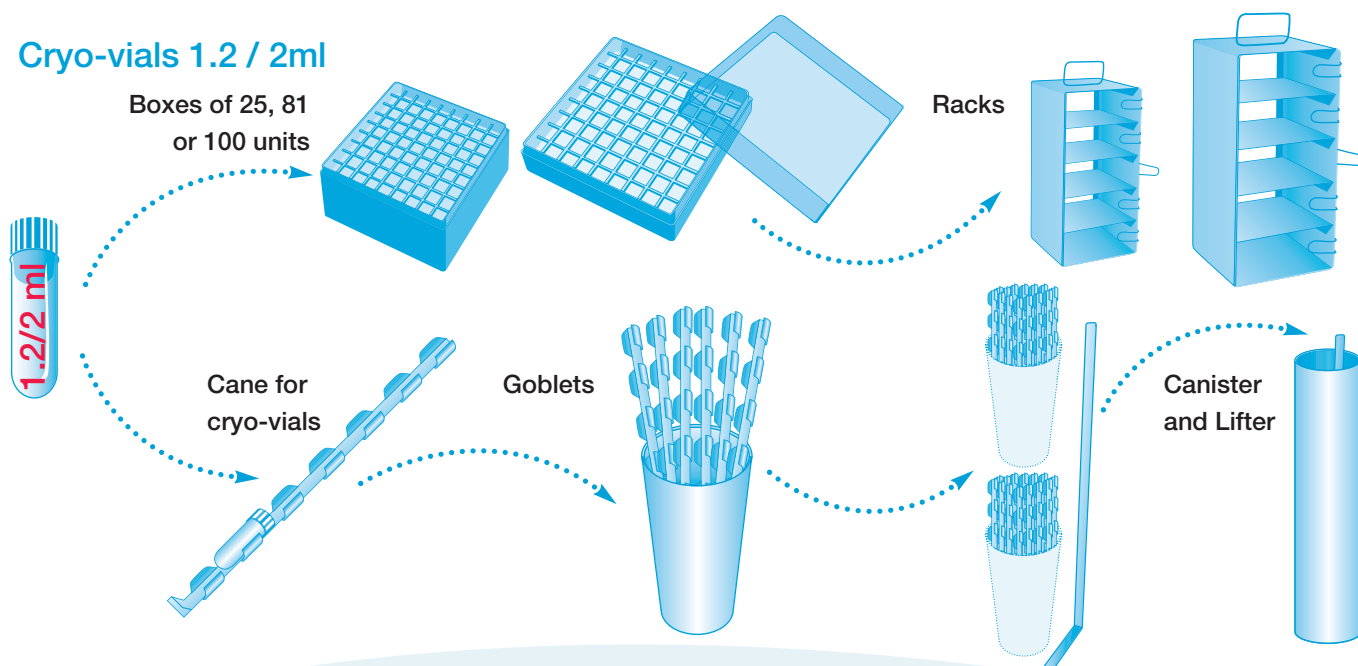
Other storage configurations are possible, please contact CRYOPAL directly.

ESPACE et RCB – Storage systems

Storage systems
cryo-vials 2ml / 5ml

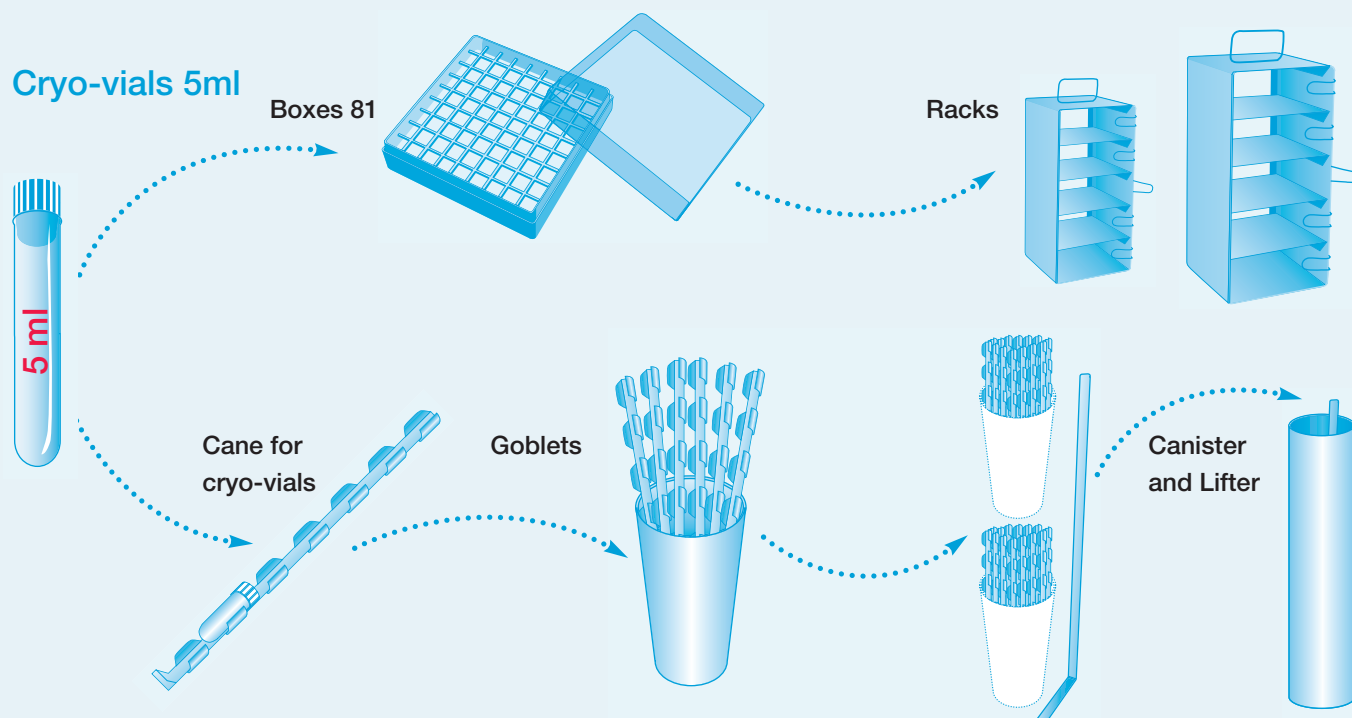
Cryo-vials 1.2 / 2ml

Boxes of 25, 81
or 100 units

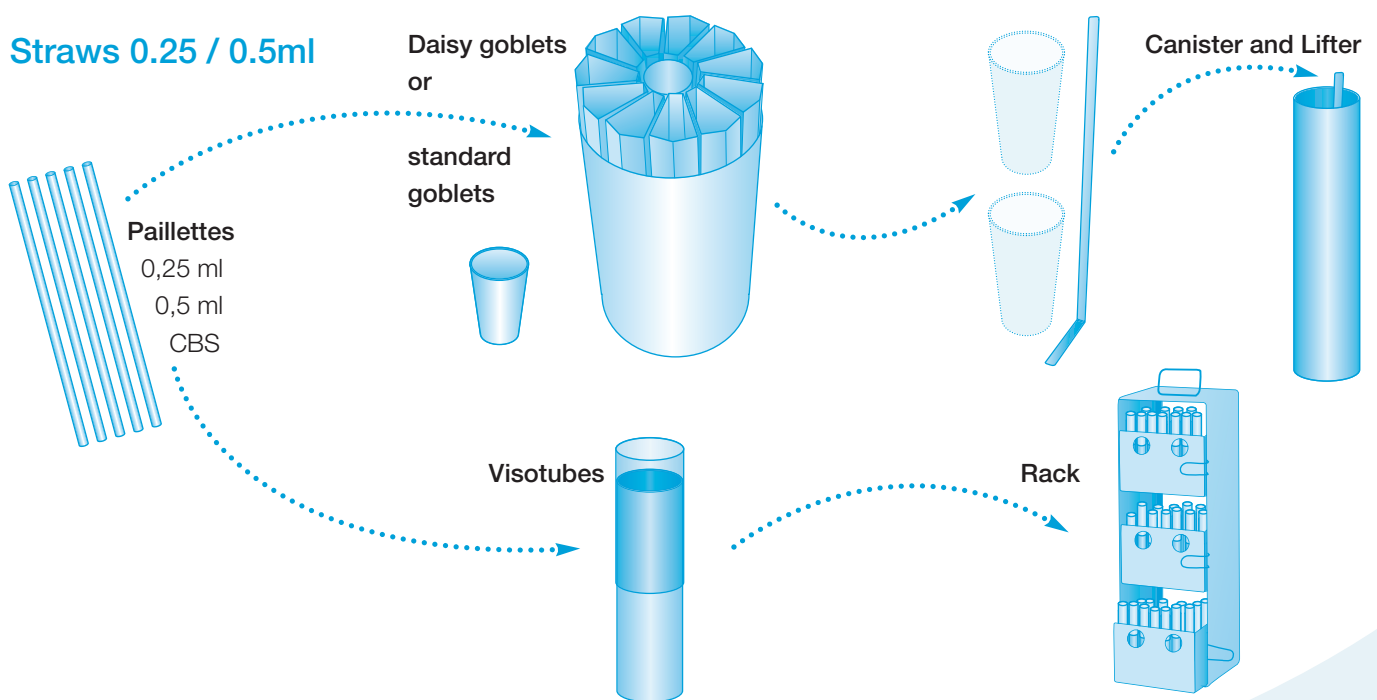


Cryo-vials 5ml

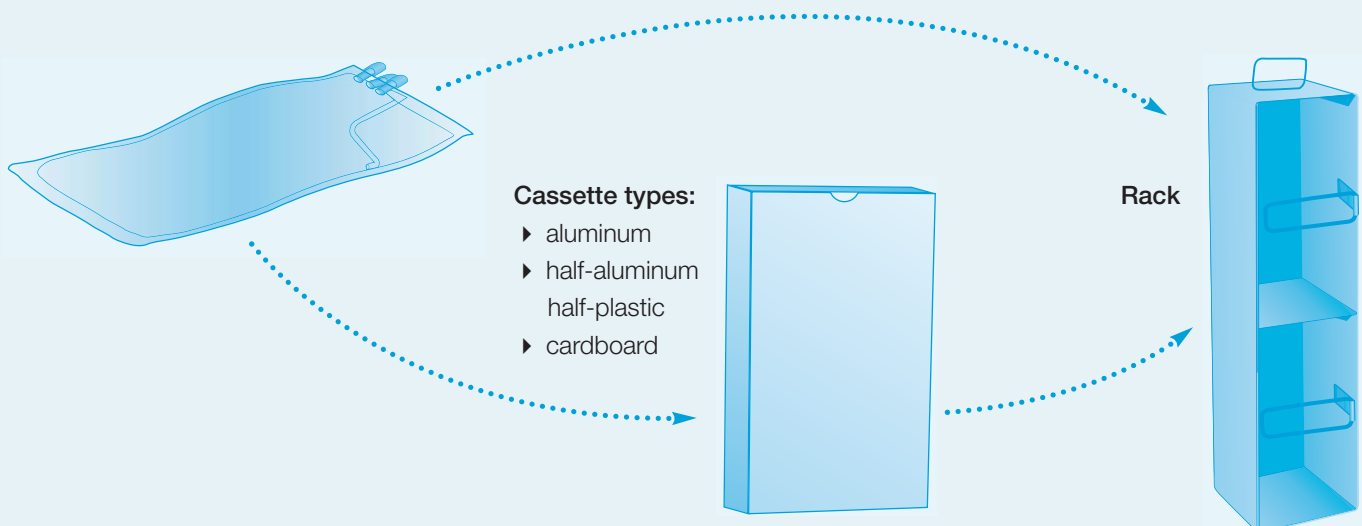
Boxes 81



Storage systems straws and bags



Bags 25 – 1000ml



ESPACE 151 / 331 / 661

Storage systems for cryo-vials

1.2/2 ml

Storage systems for Cryo-vials 1.2 / 2ml	ESPACE 151 without PT ¹⁾	ESPACE 331 without PT ¹⁾	ESPACE 331 with PT ¹⁾	ESPACE 661 with PT ¹⁾
Number of racks	7 + 4 ²⁾	17 + 6 ³⁾	15 + 6 ⁴⁾	31 + 4 ⁵⁾
Number of levels per rack	13	12	12	12
Number of cryo-vials	10,400 ⁶⁾	22,200 ⁶⁾	19,800 ⁶⁾	38,400 ⁶⁾
MAIN ACCESSORY REFERENCES				
Complete set of racks	ACC-RACK-146	ACC-RACK-148	ACC-RACK-150	ACC-RACK-152
Rack for cryo-vial boxes 81 / 100 (units per box)	ACC-RACK-6	ACC-RACK-5	ACC-RACK-5	ACC-RACK-5
Rack for cryo-vial boxes 25 (units per box)	ACC-RACK-9	ACC-RACK-8	ACC-RACK-8	ACC-RACK-8
Boxes				
complete set of 10 boxes 133 x 133 x 51 (100 units per box)	ACC-BOXTUBE-104			
complete set of 8 boxes 76 x 76 x 51 (25 units per box)	ACC-BOXTUBE-105			
complete set of 4 boxes 133 x 133 x 51 (81 units per box)	ACC-BOXTUBE-106			
Cryo-vials 1.2 / 2ml	on request			

1) PT: rotating tray

2) 7 racks (81 / 100 boxes) and 4 racks (25 boxes)

3) 17 racks (81 / 100 boxes) and 6 racks (25 boxes)

4) 15 racks (81 / 100 boxes) and 6 racks (25 boxes)

5) 31 racks (81 / 100 boxes) and 4 racks (25 boxes)

6) ESPACE 151: 10,400 cryo-vials 2ml (100 boxes) or 8,671 cryo-vials 2ml (81 boxes)

ESPACE 331: 22,200 cryo-vials 2ml (100 boxes) or 18,324 cryo-vials 2ml (81 boxes)

ESPACE 331 PT: 19,800 cryo-vials 2ml (100 boxes) or 16,380 cryo-vials 2ml (81 boxes)

ESPACE 661: 38,400 cryo-vials 2ml (100 boxes) or 31,332 cryo-vials 2ml (81 boxes)

5 ml

Storage systems for Cryo-vials 5ml	ESPACE 151 without PT	ESPACE 331 without PT	ESPACE 331 with PT	ESPACE 661 with PT
Number of racks	7	17	15	31
Number of levels per rack	7	6	6	6
Number of cryo-vials	3,969	8,262	7,290	15,066
MAIN ACCESSORY REFERENCES				
Complete set of racks	ACC-RACK-147	ACC-RACK-149	ACC-RACK-151	ACC-RACK-153
Rack for cryo-vial boxes 81 (units per box)	ACC-RACK-29	ACC-RACK-28	ACC-RACK-28	ACC-RACK-28
Boxes				
complete of 4 boxes 133 x 133 x 95 (81 units per box)	ACC-BOXTUBE-107			
Cryo-vials 5ml	on request			

Storage systems for straws

Storage systems for straws with visotubes / racks	ESPACE 151 without PT ¹⁾	ESPACE 331 without PT ¹⁾	ESPACE 331 with PT ¹⁾	ESPACE 661 with PT ¹⁾
Number of racks	7	17	15	31
Number of levels per rack	4	4	4	4
Number of visotubes per rack	85	85	85	85
Number of 0.25 ml straws	54,740	132,940	117,300	242,420
Number of 0.25 ml straws per visotube Ø 12 mm	28	28	28	28
Number of 0.5 ml straws	21,420	52,020	45,900	94,860
Number of 0.5 ml straws per visotube Ø 12 mm	10	10	10	10
Number of 0.3 – 0.5ml CBS™	14,280	34,680	30,600	63,240
Number of 0.3 – 0.5ml CBS™ per visotube Ø 12 mm	7	7	7	7
MAIN ACCESSORY REFERENCES				
Complete set of racks	ACC-RACK-196	ACC-RACK-197	ACC-RACK-198	ACC-RACK-199
Individual rack per unit	ACC-RACK-39			
Visotube with lid Ø 12 mm (batch of 100 units)	ACC-BOXTUBE-5			

Storage systems for straws in goblets / canisters	ESPACE 151 sans PT ¹⁾	ESPACE 331 sans PT ¹⁾	ESPACE 331 avec PT ¹⁾	ESPACE 661 avec PT ¹⁾
Number of canisters	46	97	88	163
Number of goblets	230	485	440	815
Number of levels of goblets	5	5	5	5
Number of 0.25 ml straws per vessel	188,600	397,700	360,800	668,300
Number of 0.25 ml straws per goblet	820	820	820	820
Number of 0.5 ml straws	83,950	177,025	160,600	297,475
Number of 0.5 ml straws per goblet	365	365	365	365
Number of 0.3 – 0.5ml CBS™ straws	51,750	109,125	99,000	183,375
Number of 0.3 – 0.5ml CBS™ straws per goblet	225	225	225	225
MAIN ACCESSORY REFERENCES				
Complete set of canisters and goblets	ACC-PLASCAN-116	ACC-PLASCAN-105	ACC-PLASCAN-104	ACC-PLASCAN-106
Plastic canisters per unit	ACC-PLASCAN-3			
Goblet Ø 65 mm (batch of 20)	ACC-BOXTUBE-301			
Goblet Ø 65 mm "Daisy" (batch of 5)	ACC-BOXTUBE-302			
Goblet with whole Ø 65 mm + lid (batch of 10)	ACC-BOXTUBE-415			

1) PT: rotating tray

ESPACE 151 / 331 / 661

Storage systems for bags

ESPACE 151 – 331 – 661 – Bags		ESPACE 151 without PT ¹⁾	ESPACE 331 without PT ¹⁾	ESPACE 331 with PT ¹⁾	ESPACE 661 with PT ¹⁾
25ml – maximum capacity bags / bags with cassette					
PALL	Number of racks	15	36	32	62
	Number of levels per rack	7	6	6	7
	Number of bags with cassettes	735	1,512	1,344	3,038
	Rack per unit	ACC-RACK-204	ACC-RACK-203	ACC-RACK-203	ACC-RACK-204
THERMOGENESIS	Number of racks	24	57	52	99
	Number of levels per rack	8	7	7	7
	Number of bags with cassettes	960	1,995	1,820	3,465
	Rack per unit	ACC-RACK-195	ACC-RACK-202	ACC-RACK-202	ACC-RACK-202
BIOSAFE	Number of racks	24	57	52	99
	Number of levels per rack	8	7	7	7
	Number of bags with cassettes	768	1,596	1,456	2,772
	Rack per unit	ACC-RACK-195	ACC-RACK-202	ACC-RACK-202	ACC-RACK-202
Cardboard cassette (9 x 76 x 92 mm) batch of 700 units		ACC-BOXTUBE-254			
Rack number labels for ESPACE / RCB (1 to 100)		ACC-RACK-223			
50ml – maximum capacity bags / bags with cassette					
Baxter R4R9951	Number of racks	14	30	29	56
	Number of levels per rack	7	7	7	7
	Number of bags with cassettes	294	630	609	1,176
	Number of bags without cassettes	392	840	812	1,568
Complete set of racks		ACC-RACK-119	ACC-RACK-127	ACC-RACK-135	ACC-RACK-142
Rack per unit		ACC-RACK-37			
Cardboard cassettes (14 x 83 x 166 mm) batch of 600 units		ACC-BOXTUBE-250			
Aluminum-plastic cassettes (17 x 92 x 173 mm) per unit		ACC-BOXTUBE-203			
Aluminum cassettes (17 x 92 x 173 mm) per unit		ACC-BOXTUBE-200			
Rack number labels for ESPACE / RCB (1 to 100)		ACC-RACK-223			
200ml / 250ml – maximum capacity bags / bags with cassette					
Gambro DF200 / Baxter R4R9954	Number of racks	12	27	25	50
	Number of levels per rack	4	4	4	4
	Number of bags with cassettes	144	324	300	600
	Number of bags without cassettes	192	432	400	800
Complete set of racks		ACC-RACK-115	ACC-RACK-123	ACC-RACK-131	ACC-RACK-138
Rack per unit		ACC-RACK-38			
Cardboard cassettes (14 x 155 x 188 mm) batch of 380 units		ACC-BOXTUBE-251			
Aluminum-plastic cassettes (17 x 164 x 194 mm) per unit		ACC-BOXTUBE-204			
Aluminum cassettes (17 x 164 x 194 mm) per unit		ACC-BOXTUBE-205			
Rack number labels for ESPACE / RCB (1 to 100)		ACC-RACK-223			

1) PT: rotating tray

Storage systems for bags

ESPACE 151 – 661 – Bags		ESPACE 151 without PT ¹⁾	ESPACE 331 without PT ¹⁾	ESPACE 331 with PT ¹⁾	ESPACE 661 with PT ¹⁾
500ml – maximum capacity bags / bags with cassette					
Baxter R4R9955	Number of racks	7	16	16	28
	Number of levels per rack	4	4	4	4
	Number of bags with cassettes	140	320	320	560
	Number of bags without cassettes	168	384	384	672
	Complete set of racks	ACC-RACK-121	ACC-RACK-129	ACC-RACK-129	ACC-RACK-129
	Rack per unit	ACC-RACK-34			
	Cardboard cassettes (12 x 138 x 236 mm) batch of 300 units	ACC-BOXTUBE-252			
	Aluminum-plastic cassettes (15 x 147 x 244 mm) per unit	ACC-BOXTUBE-202			
	Aluminum cassettes (15 x 147 x 244 mm) per unit	ACC-BOXTUBE-201			
	Rack number labels for ESPACE / RCB (1 to 100)	ACC-RACK-223			
750ml – maximum capacity bags / bags with cassette					
Baxter R4R9957	Number of racks	7	13	12	23
	Number of levels per rack	4	4	4	4
	Number of bags with cassettes	0	0	0	0
	Number of bags without cassettes	112	208	192	368
	Complete set of racks	ACC-RACK-122	ACC-RACK-130	ACC-RACK-137	ACC-RACK-144
	Rack per unit	ACC-RACK-35			
	Cardboard cassettes (15 x 155 x 281 mm) batch of 300 units	ACC-BOXTUBE-253			
	Aluminum-plastic cassettes (17 x 164 x 288 mm) per unit				
	Aluminum cassettes (17 x 164 x 288 mm) per unit				
	Rack number labels for ESPACE / RCB (1 to 100)	ACC-RACK-223			
700ml – maximum capacity bags / bags with cassette					
Gambro DF700	Number of racks (vertical / horizontal)	10 / 8	21 / 18	20 / 16	38 / 32
	Number of levels per rack (vertical / horizontal)	2 / 4	2 / 4	2 / 4	2 / 4
	Number of bags per cassette (vertical / horizontal)	/ 96	/ 216	/ 192	/ 384
	Number of bags without (vertical / horizontal)	120 / 128	252 / 288	240 / 256	456 / 512
	Complete set of vertical racks	ACC-RACK-116	ACC-RACK-124	ACC-RACK-132	ACC-RACK-139
	Complete set of horizontal racks	ACC-RACK-174	ACC-RACK-175	ACC-RACK-176	ACC-RACK-177
	Vertical racks per unit	ACC-RACK-32			
	Horizontal racks per unit	ACC-RACK-36			
	Cardboard cassettes (15 x 155 x 281 mm) batch of 300 units	ACC-BOXTUBE-253			
	Aluminum-plastic cassettes (17 x 164 x 288 mm) per unit horizontal format	ACC-BOXTUBE-207			
	Aluminum cassettes (17 x 164 x 288 mm) per unit horizontal format	ACC-BOXTUBE-206			
	Rack number labels for ESPACE / RCB (1 to 100)	ACC-RACK-223			

1) PT: rotating tray

RCB 500 / 600 / 1000 / 1001

Storage systems for cryo-vials

1.2/2 ml

Storage systems for Cryo-vials 1.2 ml / 2ml	RCB 500	RCB 600	RCB 1000	RCB 1001
	with rotating tray			
Number of racks	20 + 4 ¹⁾	20 + 4 ¹⁾	40 ²⁾	40 ²⁾
Number of levels per rack	13	14	12	12
Number of cryo-vials	27,300 ³⁾	29,400 ^{3) 4)}	48,000 ⁴⁾	48,000 ⁴⁾
MAIN ACCESSORY REFERENCES				
Complete set of racks	ACC-RACK-168	ACC-RACK-170	ACC-RACK-172	ACC-RACK-172
Vertical racks per unit	ACC-RACK-6	ACC-RACK-30	ACC-RACK-5	ACC-RACK-5
Boxes				
complete set of 10 boxes 133 x 133 x 51 (100 units per box)	ACC-BOXTUBE-104			
complete set of 8 boxes 76 x 76 x 51 (25 units per box)	ACC-BOXTUBE-105			
complete set of 4 boxes 133 x 133 x 51 (81 units per box)	ACC-BOXTUBE-106			
Cryo-vials 1.2 / 2ml	on request			

- 1) 20 racks (81/100 boxes) and 4 racks (25 boxes) 4) RCB 500: 26,000 cryo-vials 2ml (100 boxes) or 21,600 cryo-vials 2ml (81 boxes) et 1,300 cryo-vials 2ml (25 boxes)
 2) 40 racks (81/100 boxes) RCB 600: 28,000 cryo-vials 2ml (100 boxes) or 22,680 cryo-vials 2ml (81 boxes) et 1,400 cryo-vials 2ml (25 boxes)
 3) RCB 600 gas: 27,300 cryo-vials 2ml RCB 1000 / 1001: 48,000 cryo-vials 2ml (100 boxes) or 38,800 cryo-vials 2ml (81 boxes)

5 ml

Storage systems for Cryo-vials 5ml	RCB 500	RCB 600	RCB 1000	RCB 1001
	with rotating tray			
Number of racks	20	20	40	40
Number of levels per rack	7	8	7	7
Number of cryo-vials	11,340	12,960 ^{*)}	22,680	22,680
MAIN ACCESSORY REFERENCES				
Complete set of racks	ACC-RACK-169	ACC-RACK-171	ACC-RACK-173	ACC-RACK-173
Vertical racks per unit	ACC-RACK-29	ACC-RACK-3	ACC-RACK-29	ACC-RACK-29
Boxes				
complete set of 4 boxes 133 x 133 x 95 (81 units per box)	ACC-BOXTUBE-107			
Cryo-tubes 5ml	on request			

*) RCB 600 gas: 11,340 cryo-vials 2ml

Storage systems for straws

Storage systems for straws with visotubes / racks	RCB 500	RCB 600	RCB 1000	RCB 1001
	with rotating tray			
Number of racks	20	20	40	40
Number of levels per rack	4	4	4	4
Number of visotubes per rack	85	85	85	85
Number of 0.25 ml straws	156,400	156,400	312,800	312,800
Number of 0.25 ml straws per visotube	28	28	28	28
Number of 0.5 ml straws	61,200	61,200	122,400	122,400
Number of 0.5 ml straws per visotube	10	10	10	10
Number of 0.3 – 0.5ml CBS™	40,800	40,800	81,600	81,600
Number of 0.3 – 0.5ml CBS™ per visotube	6	6	6	6

MAIN ACCESSORY REFERENCES

Rack per unit	ACC-RACK-200	ACC-RACK-200	ACC-RACK-201	ACC-RACK-201
Vertical racks per unit	ACC-RACK-39			
Visotube with lid Ø 10 mm (batch of 100 units)	ACC-BOXTUBE-5			

Storage systems for straws in goblets / canisters	RCB 500	RCB 600	RCB 1000	RCB 1001
	with rotating tray			
Number of canisters	120	120	225	225
Number of goblets	575	580	1,125	1,125
Number of levels of goblets	5	6	5	5
Number of 0.25 ml straws per vessel	471,500	570,720	922,500	922,500
Number of 0.25 ml straws per goblet	164	164	164	164
Number of 0.5 ml straws	209,875	254,040	410,625	410,625
Number of 0.5 ml straws per goblet	73	73	73	73
Number of 0.3 – 0.5ml CBS™ straws	129,375	156,600	253,125	253,125
Number of 0.3 – 0.5ml CBS™ straws per goblet	45	45	45	45

MAIN ACCESSORY REFERENCES

Complete set of canisters and goblets	ACC-PLASCAN-100	ACC-PLASCAN-101	ACC-PLASCAN-102	ACC-PLASCAN-102
Plastic canisters per unit	ACC-PLASCAN-3	ACC-PLASCAN-5	ACC-PLASCAN-3	ACC-PLASCAN-3
Goblet Ø 65 mm (batch of 20)	ACC-BOXTUBE-301			
Goblet Ø 65 mm "Daisy" (batch of 5)	ACC-BOXTUBE-302			
Goblet with whole Ø 65 mm + lid (batch of 10)	ACC-BOXTUBE-415			

RCB 500 / 600 / 1000 / 1001

Storage systems for bags

liquid phase

gas phase

RCB 500 – 600 – 1000 – 1001 – Bags

RCB 500

RCB 600

RCB 600

RCB 1000

RCB 1001

RCB 1001

with rotating tray

25ml – maximum capacity bags / bags with cassette

PALL	Number of racks	42	42	42	82	82	82
	Number of levels per rack	7	8	8	7	7	7
	Number of bags with cassettes	2,058	2,352	2,352	4,018	4,018	4,018
	Rack per unit	ACC-RACK-204	ACC-RACK-206	ACC-RACK-205	ACC-RACK-204	ACC-RACK-205	ACC-RACK-204
THERMOGENESIS	Number of racks	68	68	68	126	126	126
	Number of levels per rack	8	9	9	8	8	8
	Nombre de poches avec étuis 	2,720	3,060	3,060	5,040	5,040	5,040
	Rack per unit	ACC-RACK-195	ACC-RACK-193	ACC-RACK-194	ACC-RACK-195	ACC-RACK-194	ACC-RACK-195
BIOSAFE	Number of racks	68	68	68	126	126	126
	Number of levels per rack	8	9	9	8	8	8
	Number of bags with cassettes	2,176	2,448	2,448	4,032	4,032	4,032
	Rack per unit	ACC-RACK-195	ACC-RACK-193	ACC-RACK-194	ACC-RACK-195	ACC-RACK-194	ACC-RACK-195

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Cardboard cassette (9 x 76 x 92 mm) batch of 700 units

ACC-BOXTUBE-254

Rack number labels for ESPACE / RCB (1 to 100)

ACC-RACK-223

50ml – maximum capacity bags / bags with cassette

Baxter R4R9951	Number of racks	36	36	30	70	70	70
	Number of levels per rack	7	7	7	7	7	7
	Number of bags with cassettes	756	756	756	1,470	1,470	1,470
	Number of bags without cassettes 	1,008	1,008	1,008	1,960	1,960	1,960
	Complete set of racks	ACC-RACK-157	ACC-RACK-157	ACC-RACK-157	ACC-RACK-164	ACC-RACK-164	ACC-RACK-164
	Rack per unit	ACC-RACK-37					
	Cardboard cassettes (14 x 83 x 166 mm) batch of 600 units	ACC-BOXTUBE-250					
	Aluminum-plastic cassettes (17 x 92 x 173 mm) per unit	ACC-BOXTUBE-203					
	Aluminum cassettes (17 x 92 x 173 mm) per unit	ACC-BOXTUBE-200					
	Rack number labels for ESPACE / RCB (1 to 100)	ACC-RACK-223					

200ml / 250ml – maximum capacity bags / bags with cassette

Gambro DF200 / Baxter R4R9954	Number of racks	32	32	32	62	62	62
	Number of levels per rack	4	4	4	4	4	4
	Number of bags with cassettes	384	384	384	749	749	749
	Number of bags without cassettes 	512	512	512	992	992	992
	Complete set of racks	ACC-RACK-154	ACC-RACK-154	ACC-RACK-154	ACC-RACK-161	ACC-RACK-161	ACC-RACK-161
	Rack per unit	ACC-RACK-38					
	Cardboard cassettes (14 x 155 x 188 mm) batch of 380 units	ACC-BOXTUBE-251					
	Aluminum-plastic cassettes (17 x 164 x 194 mm) per unit	ACC-BOXTUBE-204					
	Aluminum cassettes (17 x 164 x 194 mm) per unit	ACC-BOXTUBE-205					
	Rack number labels for ESPACE / RCB (1 to 100)	ACC-RACK-223					

Storage systems for bags

liquid phase

gas phase

RCB 500 – 600 – 1000 – 1001 – Bags

RCB 500

RCB 600

RCB 600

RCB 1000

RCB 1001

RCB 1001

with rotating tray

500ml – maximum capacity bags / bags with cassette

Number of racks	18	18	18	36	36	36
Number of levels per rack	4	4	4	4	4	4
Number of bags with cassettes	360	360	360	720	720	720
Number of bags without cassettes	432	432	438	864	864	864
Complete set of racks	ACC-RACK-159	ACC-RACK-159	ACC-RACK-159	ACC-RACK-166	ACC-RACK-166	ACC-RACK-166
Rack per unit	ACC-RACK-34					
Cardboard cassettes (12x138x236 mm) batch of 300 units	ACC-BOXTUBE-252					
Aluminum-plastic cassettes (15x147x244 mm) per unit	ACC-BOXTUBE-202					
Aluminum cassettes (15x147x244 mm) per unit	ACC-BOXTUBE-201					
Rack number labels for ESPACE / RCB (1 to 100)	ACC-RACK-223					

750ml – maximum capacity bags / bags with cassette

Number of racks	14	14	14	30	30	30
Number of levels per rack	4	4	4	4	4	4
Number of bags with cassettes						
Number of bags without cassettes	224	224	224	480	480	480
Complete set of racks	ACC-RACK-160	ACC-RACK-160	ACC-RACK-160	ACC-RACK-167	ACC-RACK-167	ACC-RACK-167
Rack per unit	ACC-RACK-35					
Cardboard cassettes (15x155x281 mm) batch of 300 units	ACC-BOXTUBE-253					
Aluminum-plastic cassettes (17x164x288 mm) per unit						
Aluminum cassettes (17x164x288mm) per unit						
Rack number labels for ESPACE / RCB (1 to 100)	ACC-RACK-223					

700ml – maximum capacity bags / bags with cassette

Number of racks (vertical / horizontal)	26 / 20	26 / 20	26 / 20	50 / 38	50 / 38	50 / 38
Number of levels per rack (vertical / horizontal)	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4
Number of bags per cassette (vertical / horizontal)	/ 240	/ 240	/ 240	/ 1456	/ 1456	/ 1456
Number of bags without (vertical / horizontal)	312 / 320	312 / 320	312 / 320	600 / 608	600 / 608	600 / 608
Complete set of vertical racks	ACC-RACK-156	ACC-RACK-156	ACC-RACK-156	ACC-RACK-163	ACC-RACK-163	ACC-RACK-163
Complete set of horizontal racks	ACC-RACK-178	ACC-RACK-178	ACC-RACK-178	ACC-RACK-179	ACC-RACK-179	ACC-RACK-179
Vertical racks per unit	ACC-RACK-32					
Horizontal racks per unit	ACC-RACK-36					
Cardboard cassettes (15x155x281 mm) batch of 300 units	ACC-BOXTUBE-253					
Aluminum-plastic cassettes (17x164x288 mm) per unit(horizontal)	ACC-BOXTUBE-207					
Aluminum cassettes (17x164x288mm) per unit (horizontal)	ACC-BOXTUBE-206					
Rack number labels for ESPACE / RCB (1 to 100)	ACC-RACK-223					

ESPACE and RCB

Options and accessoires



Rotating tray makes it easier to store and access samples and products (ESPACE 331 option ??? ESPACE 661 and included in the RCB line).



Flexible cryogenic hose to connect the storage vessels to the Nitrogen source.

1.1 m: ACC-FL180180NL-11
1.5 m: ACC-FL180180NL-15
2.0 m: ACC-FL180180NL-20
3.0 m: ACC-FL180180NL-30
4.0 m: ACC-FL180180NL-40



Portable step platform making it easier to store and access samples and products (available for ESPACE 661 and the RCB line).

ESPACE 661: ACC-ESP-341
RCB 600: ACC-RCB-213
RCB 1000/1001: ACC-RCB-212



Manual level ruler for measuring the liquid Nitrogen level in a vessel.
ACC-BOXTUBE-412



Compensated lid for easier use.
RCB 500 / 600: ACC-RCB-215
RCB 1001 / 1001: ACC-RCB-214



Tank dividers to facilitate sample and product storage management and traceability. **RCB 500 / 600**

double partition: ACC-RCB-5
triple partition: ACC-RCB-6
quadruple partition: ACC-RCB-7

RCB 1000 / 1001

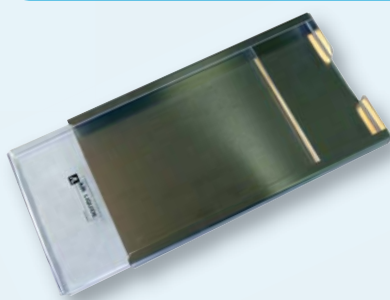
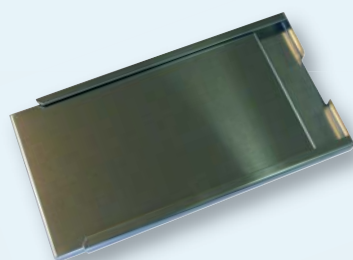
double partition: ACC-RCB-8
triple partition: ACC-RCB-9
quadruple partition: ACC-RCB-10

Storage cassettes

Protecting your biological samples
for cryogenic storage



- ▶ **Less expensive and disposable:**
available in cardboards
- ▶ **For all types of bio-storage bags:**
from 25 ml up to 1000 ml
- ▶ **Compact and easy to stock**



Main Characteristics

- ▶ 6 times lighter than traditional aluminum cassettes making it much easier and safer for operators when handling the storage racks
- ▶ Use in all types of cryogenic storage freezers and freezer racks, in liquid and gas phase
- ▶ Easy to identify: bar code, specific label or hand written with a standard ink pen
- ▶ Printing option to personalize the cassettes (minimum order of 20,000 units)

Storal	Bag Size	Manufacturer	Bags	Ref of Article
CHARACTERISTICS				
Set of 700 Cardboard cassette	25 ml	PALL	PALL25	ACC-BOXTUBE-254
Set of 600 Cardboard cassette	50 ml	BAXTER MACO-PHARMA	CRYOCYTE 50 GSR1000AU	ACC-BOXTUBE-250
Set of 380 Cardboard cassette	200/250 ml	BAXTER GAMBRO MACO-PHARMA	CRYOCYTE 250 DF200 GSR2000AU	ACC-BOXTUBE-251
Set of 380 Cardboard cassette	500 ml	BAXTER GAMBRO MACO-PHARMA	CRYOCYTE 500 DF170 GSR5000AU	ACC-BOXTUBE-252
Set of 300 Cardboard cassette	700/750 ml	BAXTER GAMBRO MACO-PHARMA	CRYOCYTE 750 DF700 GSR7000AU	ACC-BOXTUBE-253
Set of 300 Cardboard cassette	1,000 ml	GAMBRO	DF1000	ACC-BOXTUBE-255
Aluminium cassette	50 ml	BAXTER	BAXTER 50	ACC-BOXTUBE-200
Aluminium cassette	200 ml		DF200	ACC-BOXTUBE-205
Aluminium cassette	500 ml	BAXTER	BAXTER 500	ACC-BOXTUBE-201
Aluminium cassette	700 ml		DF 700	ACC-BOXTUBE-206
Mid-Aluminium mid-Plastic cassette	50 ml	BAXTER	BAXTER 50	ACC-BOXTUBE-203
Mid-Aluminium mid-Plastic cassette	200 ml		DF200	ACC-BOXTUBE-204
Mid-Aluminium mid-Plastic cassette	500 ml	BAXTER	BAXTER 500	ACC-BOXTUBE-202
Mid-Aluminium mid-Plastic cassette	700 ml		DF 700	ACC-BOXTUBE-207
Mid-Aluminium mid-Plastic cassette	1,000 ml		DF 1000	ACC-BOXTUBE-208