

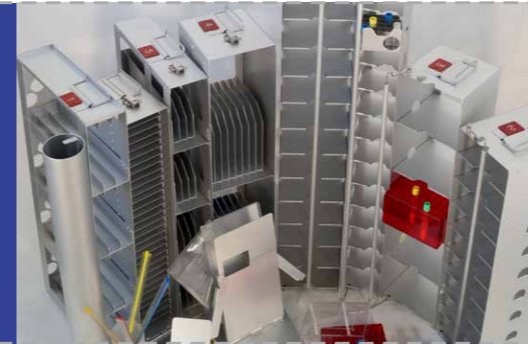
# RACK-SYSTEMS

The Suitable  
Storage System for  
Every Biological Sample



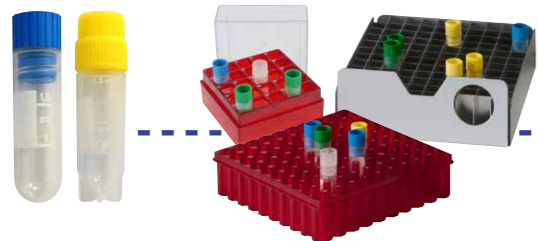


For Every Type of Usage



Highly Compact Storage for Vials, Freezing Bags and Straws

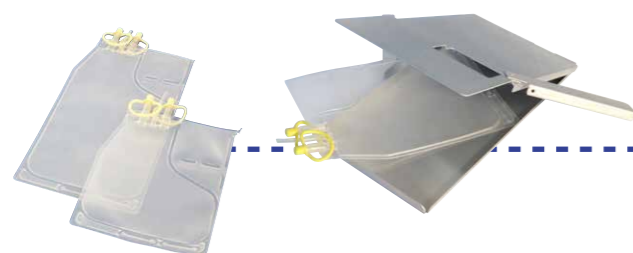
## Drawers and Cryoboxes for Vials / Cryotubes



- various sizes (1.0 – 5 ml) in drawers made of aluminium with separator grids or in cryoboxes
- drawers with openings for quick liquid draining and front with extraction opening for easy handling
- cryoboxes made of special plastic with circulation function and crystal clear lid



## Cassettes for Bags



- aluminium to create a definite layer thickness for controlled freezing
- **foldable** with hinge on the underside and lock with two **locking leaves** opposite each other
- **window** for label
- with ingenious stage to protect the ports



## SBS Racks (SBS Boxes) for Vials / Cryotubes



- storage of cryotubes in racks / boxes in SBS format
- suitable for all common manufacturers
- value-for-money, highly compact storage without locking at the individual levels
- highly compact and safe storage with spring clip at every individual level
- highly compact and doubly safe through retaining lip in every individual level and extra pivoting drawer bar for central locking
- maximum capacity as adjustable to every type and height

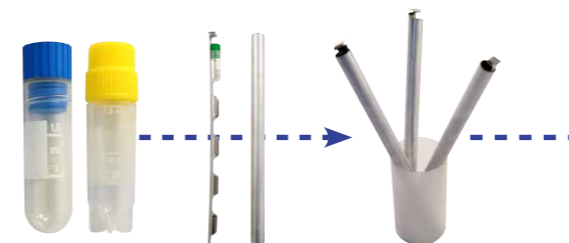


## Goblets for Straws



- cryo-conservation of semen samples for insemination
- colour coding

## Cane Holder with Cryosleeve in Goblets for Vials / Cryotubes



- for highly compact storage in canisters
- easy-to-handle due to lifter in the canisters
- various sizes: 1.0 – 5 ml



## Biological Samples Optimally Stored:

- Vials / Cryotubes
- Freezing Bags
- Straws



Simple, Flexible and with a System



### Convincing advantages:

- high storage capacity
- simple operation
- maximum protection for your samples
- safety through various locking points
- various set heights for flexible use and compatibility with all vessels
- variable arrangements for setting your own order system
- low tare weight due to sturdy aluminium construction
- clarity in the system
- transparency by means of sample management system
- high functionality
- customisation for any sample dimensions in request

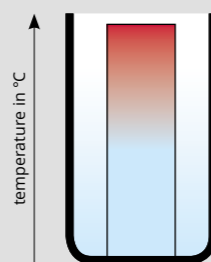
For the storage of biological samples in the liquid phase or in the gas phase of liquid nitrogen. There are a large number of diverse sample packages by various manufacturers.

In order to ensure an even distribution of heat within the storage racks they are made of aluminium. Another strong point of this material is its low weight and easier handling.

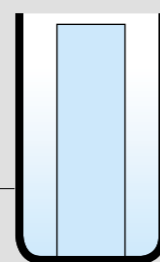
The Cryotherm-Module-System structures your vessels and makes safe storage easy and even more clear. All the storage racks ensure universal application.

Of course, customer specific solutions are possible – please ask for details!

Rack of **stainless steel** with **uneven** heat distribution:



Cryotherm rack of **aluminium** with **even** heat distribution:



Cryo vessels

## BIOSAFE® Vessels

were developed especially for cryogenic long-term preserving in laboratories and cryobanks.

Safe cold down to  $-180^{\circ}\text{C}$  in the gas phase and the inert atmosphere enable unproblematic freezing and storage of valuable medical and biological samples and materials.

- full storage capacity for gas phase storage
- nitrogen reserve under the platform suffices dependent on size of vessel for up to two weeks
- redundant hardware for software-independent monitoring of minimum- and maximum-alarm
- low temperatures of  $-180^{\circ}\text{C}$  whether in small or large vessels and whether in wide-neck vessels or vessels with a carousel
- service for initial start-up and execution of qualification (IQ/OQ)
- service hotline



# Stored Safely



With Cryo-Storage Handling Safety of the Samples is the Highest Priority



The Various Cryotherm Safety Systems Protect Your Material

Foldable handle for easy operation

Sealable safety locking system for foldable front door

Rack numbers individually attachable for clarity of storage

Pivoting drawer bar locks all drawers, cryoboxes and SBS racks during operation

Even when the clamp is open a 3 mm front retaining lip in every section floor secures the drawer, cryobox or SBS rack against inadvertent slippage

Drawer front view is optimised for easy handling

Double locking of the drawers, cryoboxes and SBS racks against inadvertent falling out



# Storage Capacity BIOSAFE® 120-220-420

## Storage in Drawers

Inside Height = 625 mm

Vials / Cryotubes of 2 ml: Racks with 10 Levels

Vials / Cryotubes of 5 ml: Racks with 5 Levels

## Storage in Cryoboxes

Inside Height = 625 mm

Vials / Cryotubes of 2 ml: Racks with 10 Levels

Vials / Cryotubes of 5 ml: Racks with 5 Levels



### Rack of aluminium with 10 levels for vials

and pivoting drawer bar for the storage of

a) 2 ml vials in drawers with grid

dimensions (HxWxD): 620 x 140 x 166 mm

b) 2 ml vials in drawers with grid

dimensions (HxWxD): 620 x 85 x 85 mm



### Rack of aluminium with 5 levels for vials

and pivoting drawer bar for the storage of

c) 5 ml vials in drawers with grid

dimensions (HxWxD): 620 x 140 x 166 mm

d) 5 ml vials in drawers with grid

dimensions (HxWxD): 620 x 85 x 85 mm



### Rack of aluminium with 10 levels for vials

and pivoting drawer bar for the storage of

e) 2 ml vials in cryoboxes

dimensions (HxWxD): 620 x 140 x 145 mm

f) 2 ml vials in cryoboxes

dimensions (HxWxD): 620 x 85 x 85 mm



### Rack of aluminium with 5 levels for vials

and pivoting drawer bar for the storage of

g) 5 ml vials in cryoboxes

dimensions (HxWxD): 620 x 140 x 145 mm

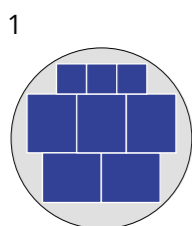
h) 5 ml vials in drawers with grid

dimensions (HxWxD): 620 x 85 x 85 mm

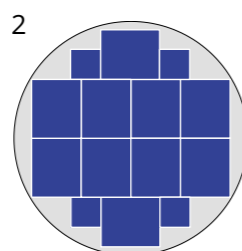
Vials / Cryotubes in Drawers Description	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 120 Capacity	BIOSAFE® 220 Capacity	BIOSAFE® 420 Capacity
a) rack for 2 ml vials in drawers, 10 levels	620 x 140 x 166	78202837	1, 2, 3	5	10	18
plus: drawer with grid for 2 ml vials, 120 pcs, Ø 12 mm	50 x 132 x 157	77031481		50	100	180
or drawer with grid for 2 ml vials, 80 pcs, Ø 14 mm	50 x 132 x 157	77031482		50	100	180
b) rack for 2 ml vials, 25 per level, 10 levels	620 x 85 x 85	78202835	1, 2, 3	3	4	6
plus: drawer with grid for 25 pcs 2 ml- / 5 ml vials	50 x 75 x 75	78202839		30	40	60
or cryobox, grid 5x5, for 25 pcs 2 ml vials	52 x 75 x 75	78212860		30	40	60
<b>maximum storage capacity for 2 ml vials, Ø 12 mm</b>				<b>6,750</b>	<b>13,000</b>	<b>23,100</b>
c) rack for 5 ml vials in drawers, 5 levels	620 x 140 x 166	78202838	1, 2, 3	5	10	18
plus: drawer with grid for 5 ml vials, 120 pcs, Ø 12 mm	100 x 132 x 157	77031483		25	50	90
or drawer with grid for 5 ml vials, 80 pcs, Ø 12 mm	100 x 132 x 157	77031484		25	50	90
d) rack for 5 ml vials, 25 per level, 5 levels	620 x 85 x 85	78202836	1, 2, 3	3	4	6
plus: drawer with grid for 25 pcs 2 ml- / 5 ml vials	50 x 75 x 75	78202839		15	20	30
<b>maximum storage capacity for 5 ml vials, Ø 12 mm</b>				<b>3,375</b>	<b>6,500</b>	<b>11,550</b>

Vials / Cryotubes in Cryoboxes Description	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 120 Capacity	BIOSAFE® 220 Capacity	BIOSAFE® 420 Capacity
e) rack for 2 ml vials in cryoboxes, 81/100, 10 levels	620 x 140 x 145	78202833	4, 5, 6	6	12	20
plus: cryobox grid 10x10 for 100 pcs 2 ml vials	53 x 132 x 132	78212859		60	120	200
or cryobox grid 9x9 for 81 pcs for 2 ml vials	53 x 132 x 132	78214364		60	120	200
f) rack for 2 ml vials, 25 per level, 10 levels	620 x 85 x 85	78202835	4, 5, 6	4	4	7
plus: cryobox grid 5x5 for 25 pcs 2 ml vials	52 x 75 x 75	78212860		40	40	70
<b>maximum storage capacity for 2 ml vials Ø 12 mm</b>				<b>7,000</b>	<b>13,000</b>	<b>21,750</b>
g) rack for 5 ml vials in cryoboxes 81, 5 levels	620 x 140 x 145	78202834	4, 5, 6	6	12	20
plus: cryobox grid 9x9 for 81 pcs 5 ml vials	95 x 132 x 132	78215707		30	60	100
h) rack for 5ml vials, 25 per level, 5 levels	620 x 85 x 85	78202836	4, 5, 6	4	4	7
plus: drawer with grid for 25 pcs 2 ml- / 5 ml vials	50 x 75 x 75	78202839		20	20	35
<b>maximum storage capacity for 5ml vials Ø 12 mm</b>				<b>2,930</b>	<b>5,360</b>	<b>8,875</b>

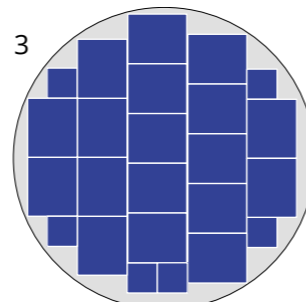
BIOSAFE® 120



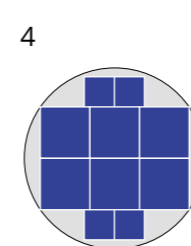
BIOSAFE® 220



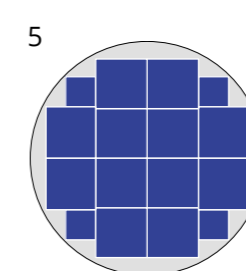
BIOSAFE® 420



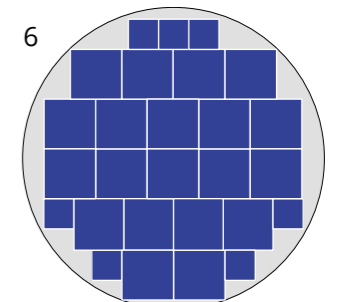
BIOSAFE® 120



BIOSAFE® 220



BIOSAFE® 420



## Storage of Freezing Bags in Cassettes

Inside Height = 625 mm  
with 32 Levels

### Freezing bag rack of aluminium with 32 levels

dimensions (HxWxD):  
575 x 95 x 165 mm



### Freezing bag rack of aluminium with 10 levels and pivoting drawer bar for the storage of

2 ml vials in drawers with grid

2 ml vials in drawers with grid

dimensions (HxWxD):  
620 x 85 x 85 mm

## Storage of Freezing Bags in Cassettes

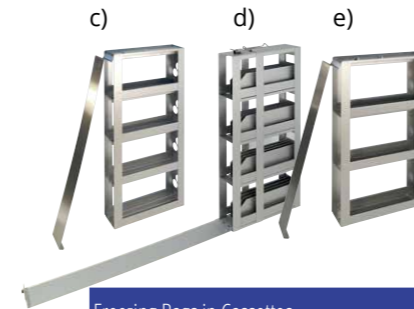
Inside Height = 625 mm  
in 3 and 4 Levels

### Freezing bag rack of aluminium

c) **with 4 levels** 620 x 80 x 280 mm

d) **with 4 levels** 620 x 80 x 285 mm

e) **with 3 levels** 580 x 80 x 305 mm



### Freezing bag rack of aluminium with pivoting drawer bar

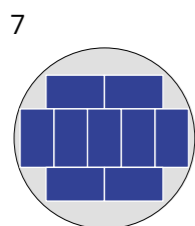
f) **with 10 levels**, 2 ml vials in drawers with grid  
620 x 85 x 85 mm

g) **with 5 levels**, 5 ml vials in drawers with grid  
620 x 85 x 85 mm

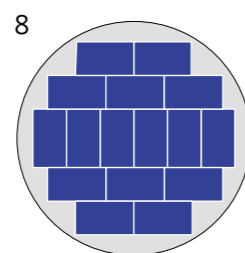
Freezing Bags in Cassettes Description	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 120 Capacity	BIOSAFE® 220 Capacity	BIOSAFE® 420 Capacity
a) rack freezing bags in 32 levels	575 x 95 x 165	77031511	7, 8, 9	9	16	26
plus: cassette for freezing bags 4R9951, CryoMACS 50	161 x 85 x 12	77031514		288	512	832
b) rack for 2 ml vials, 25 per level, 10 levels	620 x 85 x 85	78202835	9	---	---	6
or: rack for 5 ml vials, 25 per level, 5 levels	620 x 85 x 85	78202836	9	---	---	6
<b>maximum storage capacity for freezing bags 4R9951, CryoMACS 50</b>				<b>288</b>	<b>512</b>	<b>832</b>
<b>plus: maximum storage capacity for 2 ml vials Ø 12 mm</b>				---	---	<b>1,500</b>

Freezing Bags in Cassettes Description	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 120 Capacity	BIOSAFE® 220 Capacity	BIOSAFE® 420 Capacity
c) rack freezing bags in 4 levels, 4 x 3 double sections	620 x 80 x 280	78202831	10, 11, 12	6	10	20
plus: cassette for freezing bags 4R9955, 4R9953, CryoMACS 500	270 x 140 x 12	77031488		144	240	480
d) rack freezing bags in 4 levels, 4 x 5 single sections	620 x 80 x 285	78213389	10, 11, 12	6	10	20
plus: cassette for freezing bags 4R9955, 4R9953, CryoMACS 500	270 x 140 x 12	77031488		120	200	400
f) rack for 2 ml vials 25 per level, 10 levels	620 x 85 x 85	78202835	10, 11, 12	2	4	2
g) rack for 5 ml vials 25 per level, 5 levels	620 x 85 x 85	78202836	10, 11, 12	2	4	2
<b>maximum storage capacity for freezing bags 4R9955, 4R9953, CryoMACS 500</b>				<b>144</b>	<b>240</b>	<b>480</b>
<b>plus: maximum storage capacity for 2 ml vials Ø 12 mm</b>				<b>500</b>	<b>1,500</b>	<b>500</b>
e) rack freezing bags in 3 levels, for 15 pcs Hemofreeze type Z 2003 / DF 700	580 x 80 x 305	78202832	13, 14, 15	5	10	18
plus: cassette for freezing bags Hemofreeze type Z 2003 / DF 700	300 x 160 x 12	77031509		75	150	270
f) rack for 2ml vials 25 per level 10 levels	620 x 85 x 85	78202835	13, 14, 15	3	2	2
g) rack for 5ml vials 25 per level 5 levels	620 x 85 x 85	78202836	13, 14, 15	3	2	2
<b>maximum storage capacity for freezing bags Hemofreeze type Z 2003 / DF 700</b>				<b>75</b>	<b>150</b>	<b>270</b>
<b>plus: maximum storage capacity for 2 ml vials Ø 12 mm</b>				<b>750</b>	<b>500</b>	<b>500</b>

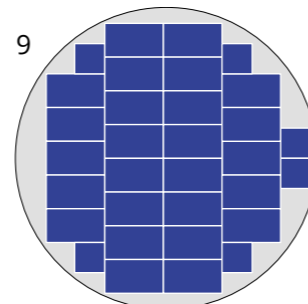
BIOSAFE® 120



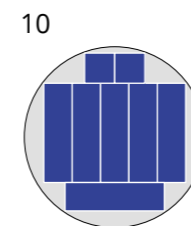
BIOSAFE® 220



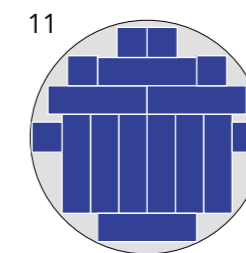
BIOSAFE® 420



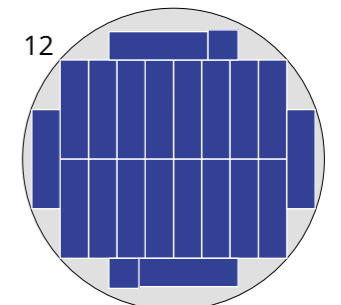
BIOSAFE® 120



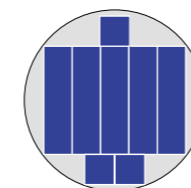
BIOSAFE® 220



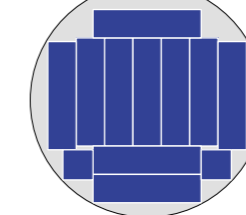
BIOSAFE® 420



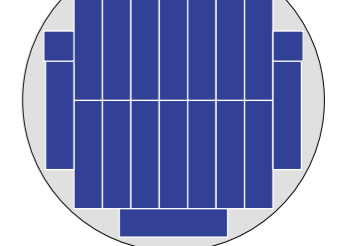
13



14



15



# Storage Capacity BIOSAFE® 120-220-420

Storage of Vials / Cryotubes in Boxes / Racks in SBS Format  
(Description: Matrixbox / Wellplate / Microtiterplates)  
with the Basic Dimensions 127.76 x 85.48 mm



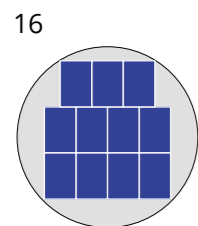
### Racks of aluminium for SBS racks

- a) with 19/14/9 levels without pivoting drawer bar  
620 x 89 x 130 mm
- b) with 19/14/9 levels with spring clips  
620 x 89 x 130 mm
- c) with 16/13/9 levels with pivoting drawer bar  
620 x 89 x 145 mm

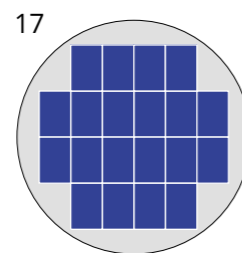
SBS Racks (127.76x85.48) in Racks Without Pivoting Drawer Bars or Spring Clips in Each Level or Level and Pivoting Drawer Bars	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 120 Capacity	BIOSAFE® 220 Capacity	BIOSAFE® 420 Capacity
a) rack for SBS racks (20-30 mm high), 19 levels without locking	620 x 89 x 130	*	16, 17, 18	11	20	40
rack for SBS racks (30-40 mm high), 14 levels without locking	620 x 89 x 130	*	16, 17, 18	11	20	40
rack for SBS racks (40-62 mm high), 9 levels without locking	620 x 89 x 130	*	16, 17, 18	11	20	40
b) rack for SBS racks (20-30 mm high), 19 levels with spring clips	620 x 89 x 130	*	16, 17, 18	11	20	40
rack for SBS racks (30-40 mm high), 14 levels with spring clips	620 x 89 x 130	*	16, 17, 18	11	20	40
rack for SBS racks (40-62 mm high), 9 levels with spring clips	620 x 89 x 130	*	16, 17, 18	11	20	40
c) rack for SBS racks (20-30 mm high), 16 levels with pivoting drawer bar	620 x 89 x 145	*	19, 20, 21	10	18	34
rack for SBS racks (30-40 mm high), 13 levels with pivoting drawer bar	620 x 89 x 145	*	19, 20, 21	10	18	34
rack for SBS racks (40-62 mm high), 9 levels with pivoting drawer bar	620 x 89 x 145	*	19, 20, 21	10	18	34

\* on request

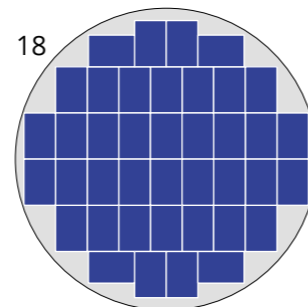
BIOSAFE® 120



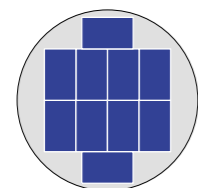
BIOSAFE® 220



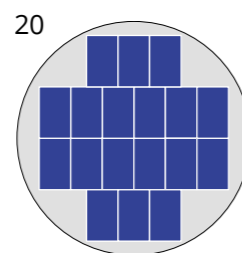
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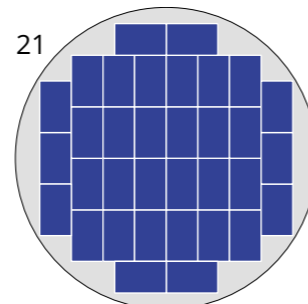
19



20



21



For the Storage of Straws (0.25 ml / 0.5 ml)  
in Flat Cassettes / Goblets

a)



**Canister of aluminium for goblets**  
with lifter  
Ø 70 x 620 mm

b)

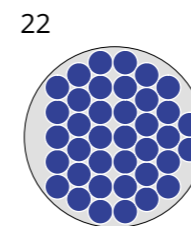


**Goblets**  
Ø 65 x 120 mm

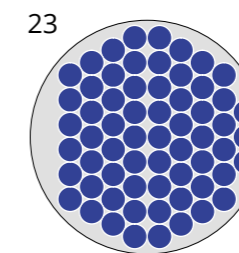
Straws in Canisters	Dimensions (Ø x H) [mm]	Article-No.	Layout	BIOSAFE® 120 Capacity	BIOSAFE® 220 Capacity	BIOSAFE® 420 Capacity
a) canister for goblets with lifter, 620 mm high, max. 4 goblets	Ø 70 x 620	78213016	22, 23, 24	38	63	110
plus: b) goblet diameter 65 mm, 120 mm high	Ø 65 x 120	78212792		152	252	440
<b>maximum storage capacity for straws 0.25 ml</b>				<b>85,120</b>	<b>141,120</b>	<b>246,400</b>
<b>maximum storage capacity for straws 0.5 ml</b>				<b>31,920</b>	<b>52,920</b>	<b>92,400</b>

Explanatory note: 1 goblet (Ø 65 x 120 mm) contains max. 560 pieces 0.25 ml straws or max. 210 pieces 0.5 ml straws

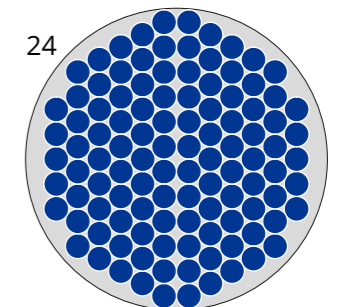
BIOSAFE® 120



BIOSAFE® 220



BIOSAFE® 420



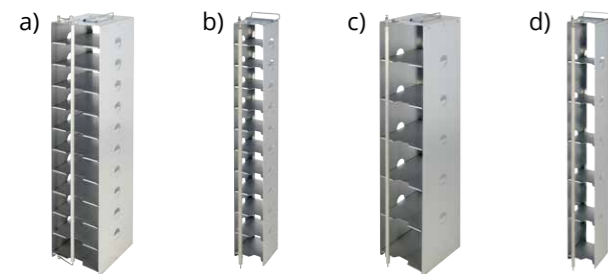
# Storage Capacity BIOSAFE® 500-600-1000-1400

## Storage in Drawers

Inside Height = 680, 800, 1100 mm

Vials / Cryotubes with 2 ml: Racks with 12, 13, 18 Levels

Vials / Cryotubes with 5 ml: Racks with 6, 7, 10 Levels



### Rack of aluminium for vials

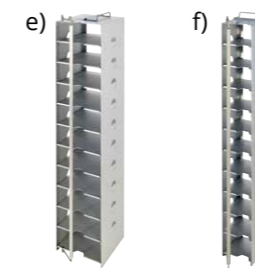
- a) for 2 ml vials with 12/13/18 levels in drawers
- b) for 2 ml vials with 11/13/18 levels, 25 per level
- c) for 5 ml vials with 6/7/10 levels in drawers
- d) for 5 ml vials with 6/7/10 levels, 25 per level

Vials / Cryotubes in Drawers	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 500 Capacity	BIOSAFE® 600 Capacity	BIOSAFE® 1000 Capacity	BIOSAFE® 1400 Capacity
a) rack for 2 ml vials in drawers, 12 levels	727 x 140 x 166	78220222	26, 27	---	24	34	---
rack for 2 ml vials in drawers, 13 levels	800 x 140 x 166	78214754	25	16	---	---	---
rack for 2 ml vials in drawers, 18 levels	1100 x 140 x 166	78221089	27	---	---	---	34
plus: drawer with grid for 2 ml vials, 120 pcs, Ø 12 mm	50 x 132 x 157	77031481		208	288	408	612
plus: drawer with grid for 2 ml vials, 80 pcs, Ø 14 mm	50 x 132 x 157	77031482		208	288	408	612
b) rack for 2 ml vials 25 per level, 11 levels	680 x 85 x 85	78213481	26, 27	---	4	8	---
rack for 2 ml vials 25 per level, 13 levels	800 x 85 x 85	78214755	25	4	---	---	---
rack for 2 ml vials 25 per level, 18 levels	1100 x 85 x 85	78221090	27	---	---	---	8
plus: drawer with grid for 25 pcs, 2 ml / 5 ml vials	50 x 75 x 75	78202839		52	44	88	144
or cryobox, grid 5x5 for 25 pcs, 2 ml vials	52 x 75 x 75	78212860		52	44	88	144
<b>maximum storage capacity for 2 ml vials Ø 12 mm</b>				<b>26,260</b>	<b>35,660</b>	<b>51,160</b>	<b>77,040</b>
c) rack for 5 ml vials in drawers 6 levels	680 x 140 x 166	77031480	26, 27	---	24	34	---
rack for 5 ml vials in drawers 7 levels	800 x 140 x 166	78215713	25	16	---	---	---
rack for 5 ml vials in drawers 10 levels	1100 x 140 x 166	78209913	27	---	---	---	34
plus: drawer with grid for 5 ml vials 120 pcs, Ø 12 mm	100 x 132 x 157	77031483		112	144	204	340
or drawer with grid for 5 ml vials 80 pcs Ø 14 mm	100 x 132 x 157	77031484		112	144	204	340
d) rack for 5 ml vials 25 per level, 6 levels	680 x 85 x 85	78215714	26, 27	---	4	8	---
rack for 5 ml vials 25 per level, 7 levels	800 x 85 x 85	78215715	25	4	---	---	---
rack for 5 ml vials 25 per level, 10 levels	1100 x 85 x 85	78215716	27	---	---	---	8
plus: drawer with grid for 25 pcs 2 ml / 5 ml vials	50 x 75 x 75	78202839		28	24	48	80
<b>maximum storage capacity for 5 ml vials Ø 12 mm</b>				<b>14,140</b>	<b>17,880</b>	<b>25,680</b>	<b>42,800</b>

## Storage in Cryoboxes

Inside Height = 680, 800, 1100 mm

Vials / Cryotubes with 2 ml: Racks with 12, 13, 18 Levels

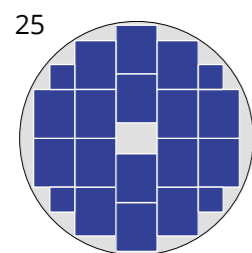


### Rack of aluminium for vials

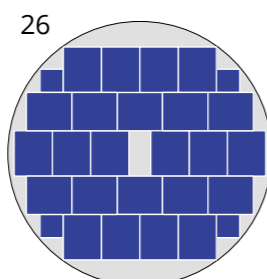
- e) for 2 ml vials with 12/13/18 levels in cryoboxes
- f) for 2 ml vials with 11/13/18 levels, 25 per level

Vials / Cryotubes in Cryoboxes	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 500 Capacity	BIOSAFE® 600 Capacity	BIOSAFE® 1000 Capacity	BIOSAFE® 1400 Capacity
e) rack for 2 ml vials in cryoboxes, 81/100, 12 levels	727 x 140 x 145	78215717	29, 30	---	26	38	---
rack for 2 ml vials in cryoboxes, 81/100, 13 levels	800 x 140 x 145	78213935	28	16	---	---	---
rack for 2 ml vials in cryoboxes, 81/100, 18 levels	1100 x 140 x 145	78215718	30	---	---	---	38
plus: cryobox grid 10x10 for 100 pcs 2 ml vials	53 x 132 x 132	78212859		208	312	456	684
or cryobox grid 9x9 for 81 pcs 2 ml vials	53 x 132 x 132	78214364		208	312	456	684
f) rack for 2 ml vials 25 per level, 11 levels	680 x 85 x 85	78213481	29, 30	---	12	4	---
rack for 2 ml vials 25 per level, 13 levels	800 x 85 x 85	78214755	28	6	---	---	---
rack for 2 ml vials 25 per level, 18 levels	1100 x 85 x 85	78221090	30	---	---	---	4
plus: drawer with grid for 25 pcs 2 ml / 5 ml vials	50 x 75 x 75	78202839		78	132	44	72
or cryobox grid 5x5 for 25 pcs, 2 ml vials	52 x 75 x 75	78212860		78	132	44	72
<b>maximum storage capacity for 2 ml vials Ø 12 mm</b>				<b>22,750</b>	<b>32,100</b>	<b>46,700</b>	<b>70,200</b>

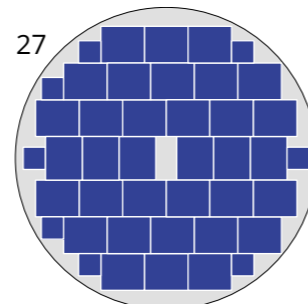
BIOSAFE® 500



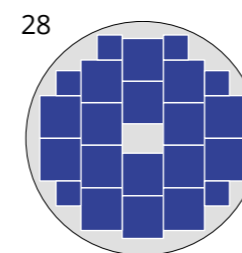
BIOSAFE® 600



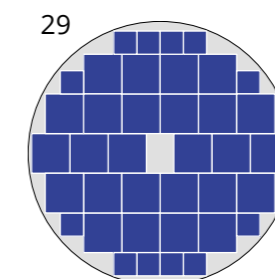
BIOSAFE® 1000/1400



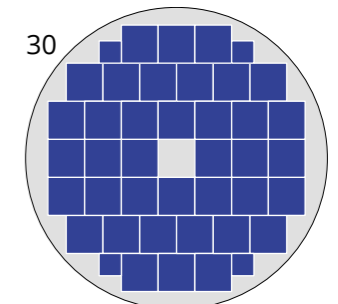
BIOSAFE® 500



BIOSAFE® 600

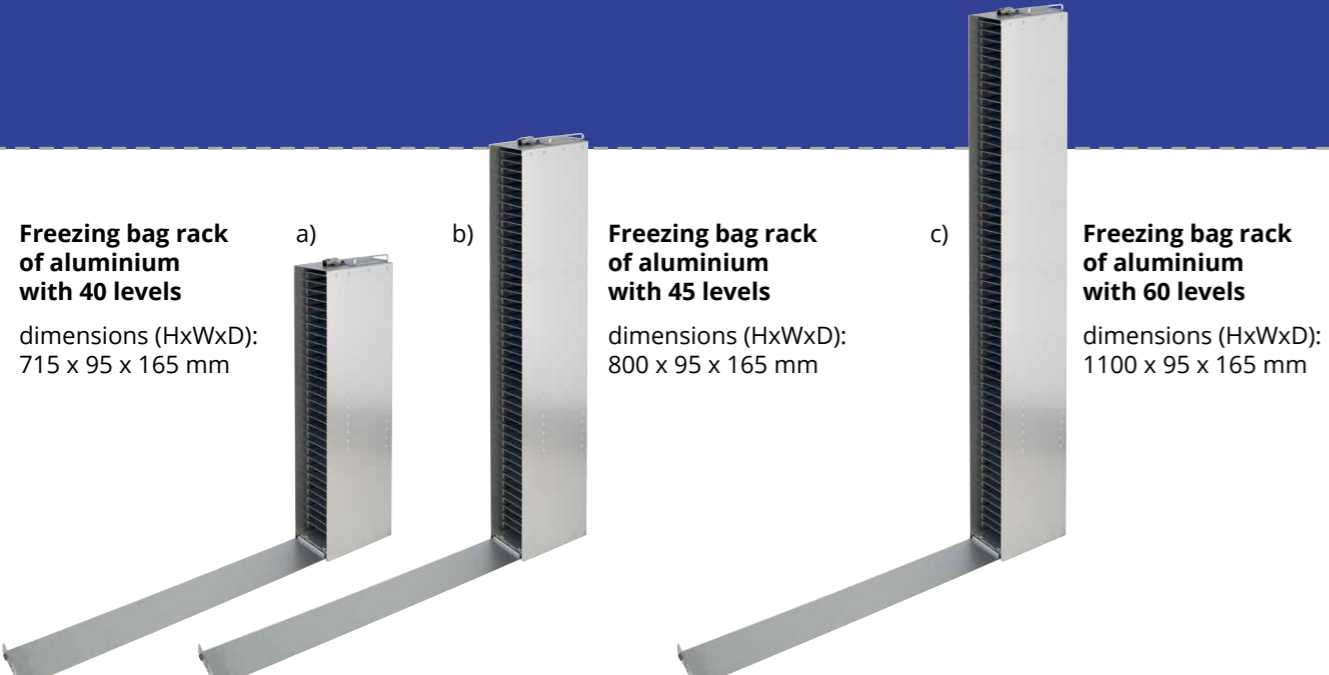


BIOSAFE® 1000/1400





## Racks for Freezing Bags in Cassettes



**Freezing bag rack of aluminium with 40 levels**

dimensions (HxWxD):  
715 x 95 x 165 mm

**Freezing bag rack of aluminium with 45 levels**

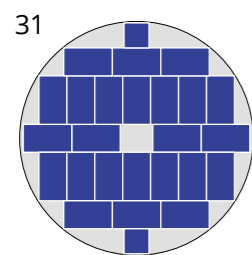
dimensions (HxWxD):  
800 x 95 x 165 mm

**Freezing bag rack of aluminium with 60 levels**

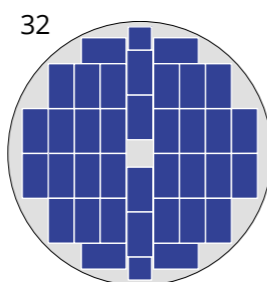
dimensions (HxWxD):  
1100 x 95 x 165 mm

Freezing Bags in Cassettes	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 500 Capacity	BIOSAFE® 600 Capacity	BIOSAFE® 1000 Capacity	BIOSAFE® 1400 Capacity
a) rack for freezing bags in 40 levels	715 x 95 x 165	78215708	32, 33	---	36	52	---
b) rack for freezing bags in 45 levels	800 x 95 x 165	78215709	31	24	---	---	---
c) rack for freezing bags in 60 levels	1100 x 95 x 165	78215710	33	---	---	---	52
plus: cassette for freezing bags 4R9951, CryoMACS 50	161 x 85 x 12	77031514		1,080	1,440	2,080	3,120
rack for 2 ml vials 25 per level, 11 levels	680 x 85 x 85	78213481		---	2	---	---
rack for 2 ml vials 25 per level, 13 levels	800 x 85 x 85	78214755		2	---	---	---
rack for 2 ml vials 25 per level, 18 levels	1100 x 85 x 85	78221090		---	---	---	---
plus: drawer with grid for 25 pcs 2 ml / 5 ml vials	50 x 75 x 75	78202839		26	22	---	---
or cryobox grid 5x5 for 25 pcs, 2 ml vials	52 x 75 x 75	78212860		26	22	---	---
<b>maximum storage capacity for freezing bags 4R9951, CryoMACS 50</b>		<b>77031514</b>		<b>1,080</b>	<b>1,440</b>	<b>2,080</b>	<b>3,120</b>
<b>plus: maximum storage capacity for 2 ml vials Ø 12 mm</b>				<b>650</b>	<b>550</b>	---	---

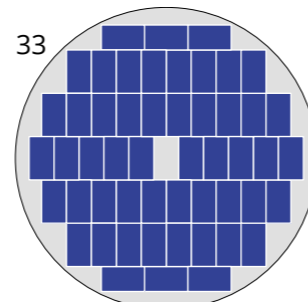
BIOSAFE® 500



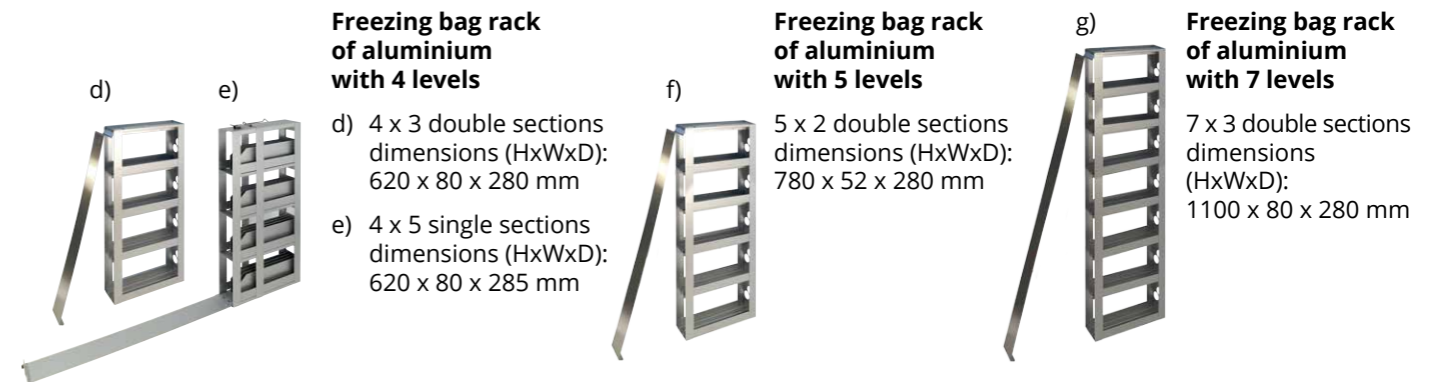
BIOSAFE® 600



BIOSAFE® 1000/1400



## Racks for Freezing Bags in Cassettes



**Freezing bag rack of aluminium with 4 levels**

d) 4 x 3 double sections  
dimensions (HxWxD):  
620 x 80 x 280 mm

e) 4 x 5 single sections  
dimensions (HxWxD):  
620 x 80 x 285 mm

**Freezing bag rack of aluminium with 5 levels**

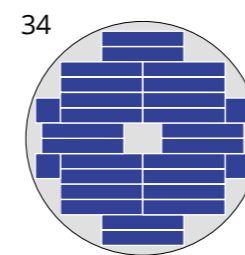
f) 5 x 2 double sections  
dimensions (HxWxD):  
780 x 52 x 280 mm

**Freezing bag rack of aluminium with 7 levels**

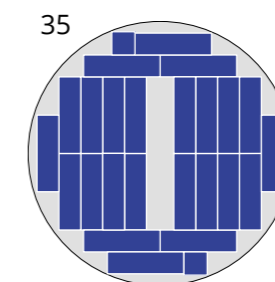
g) 7 x 3 double sections  
dimensions (HxWxD):  
1100 x 80 x 280 mm

Freezing Bags in Cassettes	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 500 Capacity	BIOSAFE® 600 Capacity	BIOSAFE® 1000 Capacity	BIOSAFE® 1400 Capacity
d) rack for freezing bags in 4 levels 4 x 3 double sections	620 x 80 x 280	78202831	35, 36	---	24	36	---
plus: cassette for freezing bags 4R9955, 4R9953, CryoMACS 500	270 x 140 x 12	77031488		---	576	864	---
e) rack for freezing bags in 4 levels 4 x 5 single sections	620 x 80 x 285	78213389		---	24	36	---
plus: cassette for freezing bags 4R9955, 4R9953, CryoMACS 500	270 x 140 x 12	77031488		---	480	720	---
f) rack for freezing bags in 5 levels 5 x 2 double sections	780 x 52 x 280	78214757	34	24	---	---	---
plus: cassette for freezing bags 4R9955, 4R9953, CryoMACS 500	270 x 140 x 12	77031488		480	---	---	---
g) rack for freezing bags in 7 levels 7 x 3 double sections	1100 x 80 x 280	78215711	36	---	---	---	36
plus: cassette for freezing bags 4R9955, 4R9953, CryoMACS 500	270 x 140 x 12	77031488		---	---	---	1,512
rack for 2 ml vials 25 per level, 11 levels	680 x 85 x 85	78213481	35, 36	---	2	4	---
rack for 2 ml vials 25 per level, 13 levels	800 x 85 x 85	78214755		4	---	---	---
rack for 2 ml vials 25 per level, 18 levels	1100 x 85 x 85	78221090	36	---	---	---	4
plus: drawer with grid for 25 pcs 2 ml / 5 ml vials	50 x 75 x 75	78202839		52	22	44	72
or cryobox grid 5x5 for 25 pcs, 2 ml vials	52 x 75 x 75	78212860		52	22	44	72
<b>max. storage capacity f. freezing p. 4R9955, 4R9953, CryoMACS 500</b>		<b>77031488</b>		<b>480</b>	<b>576</b>	<b>864</b>	<b>1,512</b>
<b>plus: maximum storage capacity for 2 ml vials Ø 12 mm</b>				<b>1,300</b>	<b>550</b>	<b>1,100</b>	<b>1,800</b>

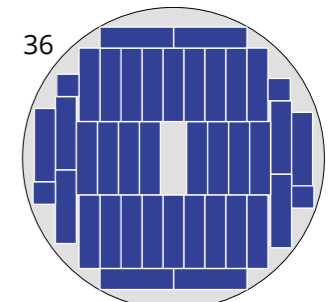
BIOSAFE® 500



BIOSAFE® 600



BIOSAFE® 1000/1400

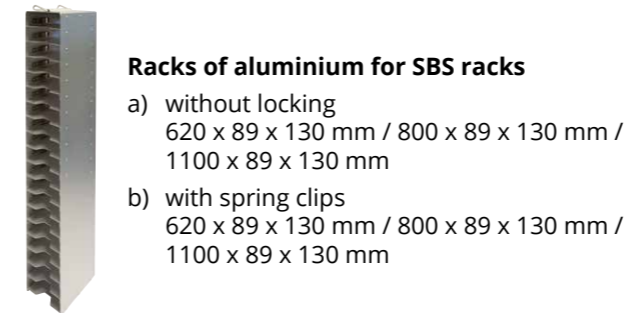


## Racks for Freezing Bags in Cassettes



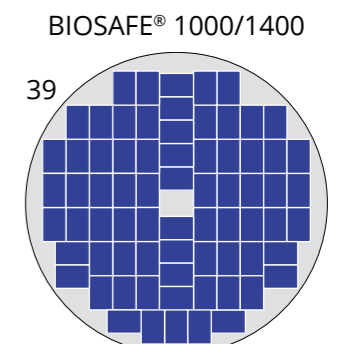
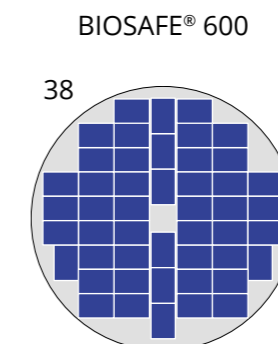
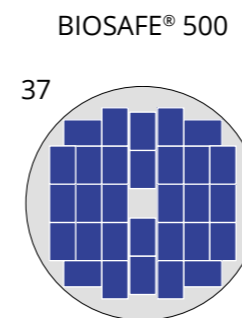
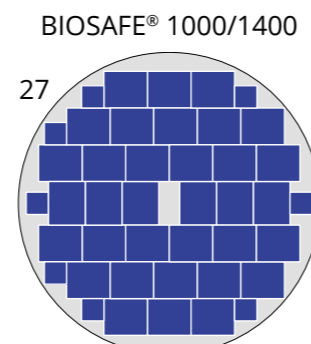
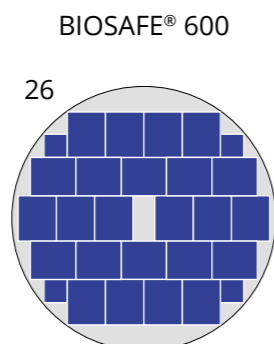
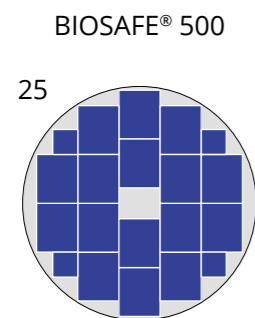
Freezing Bags in Cassettes	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 500 Capacity	BIOSAFE® 600 Capacity	BIOSAFE® 1000 Capacity	BIOSAFE® 1400 Capacity
a) rack for freezing bags in 2 levels, for 18 pcs Hemofreeze type Z 2003	680 x 140 x 166	77031508	25, 26, 27	16	24	34	---
b) rack for freezing bags in 3 levels, for 27 pcs Hemofreeze type Z 2003	1100 x 140 x 166	78215712	27	---	---	---	34
plus: cassette for freezing bags Hemofreeze type Z 2003	300 x 160 x 12	77031509		288	432	612	918
rack for 2 ml vials 25 per level, 11 levels	680 x 85 x 85	78213481	26	--	4	8	--
rack for 2 ml vials 25 per level, 13 levels	800 x 85 x 85	78214755	25	4	--	--	--
rack for 2 ml vials 25 per level, 17 levels	1100 x 85 x 85	78213385	27	--	--	--	8
plus: drawer with grid for 25 pcs 2 ml / 5ml vials	50 x 75 x 75	78202839		52	44	88	144
or cryobox grid 5x5 for 25 pcs, 2 ml vials	52 x 75 x 75	78212860		52	44	88	144
<b>maximum storage capacity f. freezing p. Hemofreeze type Z 2003</b>		<b>77031509</b>		<b>288</b>	<b>432</b>	<b>612</b>	<b>918</b>
<b>plus: maximum storage capacity for 2 ml vials Ø 12 mm</b>				<b>1,300</b>	<b>1,100</b>	<b>2,200</b>	<b>3,600</b>

For Storage of Vials / Cryotubes in Boxes / Racks in SBS Format (Description: Maxtrixbox / Wellplate / Microtiterplates) with the Basic Dimensions = 127.76 x 85.48 mm



SBS Racks (127.76 x 85.48) in Racks Without Locking or with Spring Clips in Each Level or with Levels and Clamps	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 500 Capacity	BIOSAFE® 600 Capacity	BIOSAFE® 1000 Capacity	BIOSAFE® 1400 Capacity
a) rack for SBS racks (20-30 mm high) 21 levels, without locking	680 x 89 x 130	*	38, 39	---	48	72	---
rack for SBS racks (30-40 mm high) 16 levels, without locking	680 x 89 x 130	*	38, 39	---	48	72	---
rack for SBS racks (40-62 mm high) 10 levels, without locking	680 x 89 x 130	*	38, 39	---	48	72	---
rack for SBS racks (20-30 mm high) 24 levels, without locking	800 x 89 x 130	*	37	30	---	---	---
rack for SBS racks (30-40 mm high) 18 levels, without locking	800 x 89 x 130	*	37	30	---	---	---
rack for SBS racks (40-62 mm high) 12 levels, without locking	800 x 89 x 130	*	37	30	---	---	---
rack for SBS racks (20-30 mm high) 12 levels, without locking	1100 x 89 x 130	*	39	---	---	---	72
rack for SBS racks (30-40 mm high) 26 levels, without locking	1100 x 89 x 130	*	39	---	---	---	72
rack for SBS racks (40-62 mm high) 17 levels, without locking	1100 x 89 x 130	*	39	---	---	---	72
b) rack for SBS racks (20-30 mm high) 21 levels, with spring clips	680 x 89 x 130	*	38, 39	---	48	72	---
rack for SBS racks (30-40 mm high) 16 levels, with spring clips	680 x 89 x 130	*	38, 39	---	48	72	---
rack for SBS racks (40-62 mm high) 10 levels, with spring clips	680 x 89 x 130	*	38, 39	---	48	72	---
rack for SBS racks (20-30 mm high) 24 levels, with spring clips	800 x 89 x 130	*	37	30	---	---	---
rack for SBS racks (30-40 mm high) 18 levels, with spring clips	800 x 89 x 130	*	37	30	---	---	---
rack for SBS racks (40-62 mm high) 12 levels, with spring clips	800 x 89 x 130	*	37	30	---	---	---
rack for SBS racks (20-30 mm high) 12 levels, with spring clips	1100 x 89 x 130	*	39	---	---	---	72
rack for SBS racks (30-40 mm high) 26 levels, with spring clips	1100 x 89 x 130	*	39	---	---	---	72
rack for SBS racks (40-62 mm high) 17 levels, with spring clips	1100 x 89 x 130	*	39	---	---	---	72

\* on request



# Storage Capacity BIOSAFE® 500-600-1000-1400

For Storage of Vials / Cryotubes in Boxes / Racks in SBS Format  
(Description: Maxtribox / Wellplate / Microtiterplates)  
with the Basic Dimensions = 127.76 x 85.48 mm

For Storage of Straws (0.25 ml / 0.5 ml)  
in Flat Cassettes / Goblets

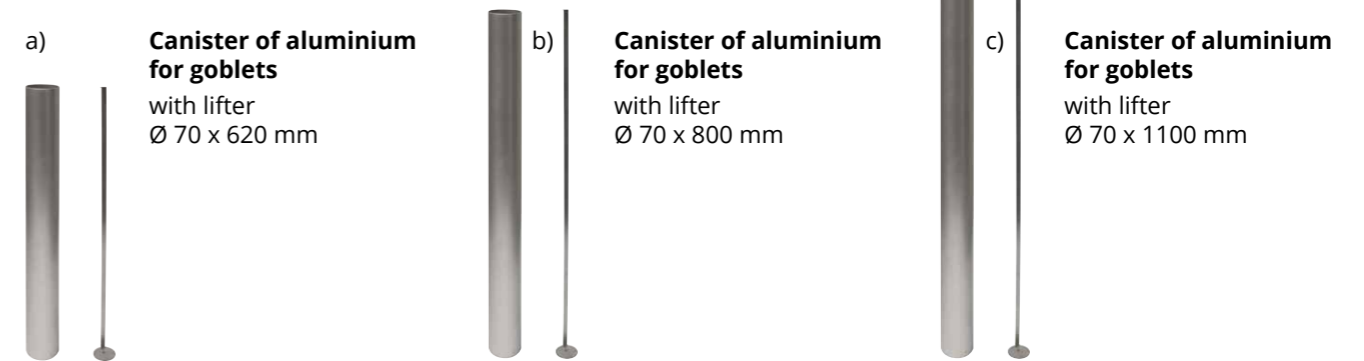


### Racks of aluminium for SBS racks

- c) with pivoting drawer bar  
620 x 89 x 145 mm  
800 x 89 x 145 mm  
1100 x 89 x 145 mm

SBS Racks (127.76 x 85.48) in Racks Without Locking or with Spring Clips in Each Level or with Levels and Clamps	Dimensions (H x W x D) [mm]	Article-No.	Layout	BIOSAFE® 500 Capacity	BIOSAFE® 600 Capacity	BIOSAFE® 1000 Capacity	BIOSAFE® 1400 Capacity
c) rack for SBS racks (20-30 mm high), 18 levels, with pivoting drawer bar	680 x 89 x 145	*	41, 42	---	42	64	---
rack for SBS racks (30-40 mm high), 14 levels, with pivoting drawer bar	680 x 89 x 145	*	41, 42	---	42	64	---
rack for SBS racks (40-62 mm high), 9 levels, with pivoting drawer bar	680 x 89 x 145	*	41, 42	---	42	64	---
rack for SBS racks (20-30 mm high), 21 levels, with pivoting drawer bar	800 x 89 x 145	*	40	28	---	---	---
rack for SBS racks (30-40 mm high), 17 levels, with pivoting drawer bar	800 x 89 x 145	*	40	28	---	---	---
rack for SBS racks (40-62 mm high), 11 levels, with pivoting drawer bar	800 x 89 x 145	*	40	28	---	---	---
rack for SBS racks (20-30 mm high), 30 levels, with pivoting drawer bar	1100 x 89 x 145	*	42	---	---	---	64
rack for SBS racks (30-40 mm high), 23 levels, with pivoting drawer bar	1100 x 89 x 145	*	42	---	---	---	64
rack for SBS racks (40-62 mm high), 16 levels, with pivoting drawer bar	1100 x 89 x 145	*	42	---	---	---	64

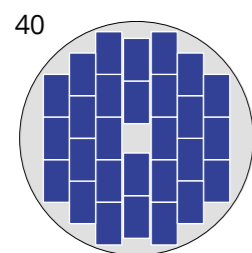
\* on request



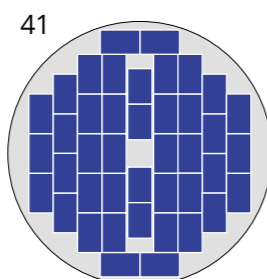
Straws in Canisters	Dimensions (Ø x H) [mm]	Article-No.	Layout	BIOSAFE® 500 Capacity	BIOSAFE® 600 Capacity	BIOSAFE® 1000 Capacity	BIOSAFE® 1400 Capacity
a) canister for goblets with lifter 620 mm high, max. 4 goblets	Ø 70 x 620	78213016	44, 45	---	120	212	---
b) canister for goblets with lifter 800 mm high, max. 5 goblets	Ø 70 x 800	78215719	43	100	---	---	---
c) canister for goblets with lifter 1100 mm high, max. 7 goblets	Ø 70 x 1100	78215720	45	---	---	---	212
plus: goblets diameter 65 mm, 120 mm high	Ø 65 x 120	78212792		500	480	848	1,484
<b>maximum storage capacity for straws 0.25 ml</b>				<b>280,000</b>	<b>268,800</b>	<b>474,880</b>	<b>831,040</b>
<b>maximum storage capacity for straws 0.5 ml</b>				<b>105,000</b>	<b>100,800</b>	<b>178,080</b>	<b>311,640</b>

Explanatory note: 1 goblet (Ø 65 x 120 mm) contains max. 560 pcs 0.25 ml straws or max. 210 pcs 0.5 ml straws

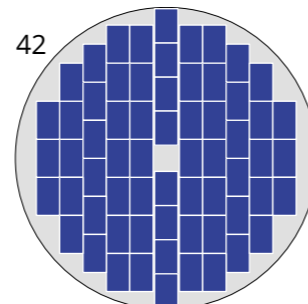
BIOSAFE® 500



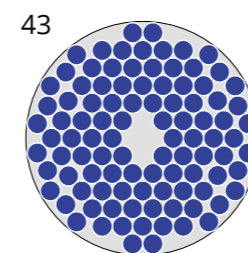
BIOSAFE® 600



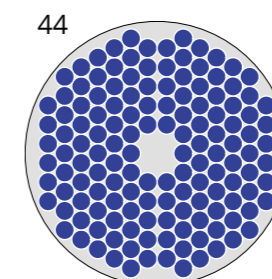
BIOSAFE® 1000/1400



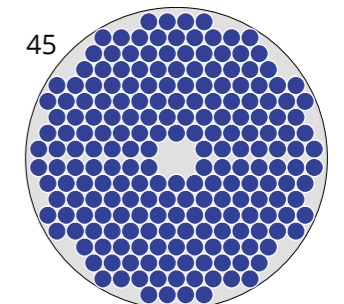
BIOSAFE® 500



BIOSAFE® 600



BIOSAFE® 1000/1400





Cassettes with various locks

Frame for cryotubes and cassettes

Rack-Numbers (Set) 35 x 25 mm incl. Screws	Article-No.	Colour
1-5	78211733	red
6-10	78211732	blue
11-15	78211731	black
16-20	78211730	red
21-25	78311729	blue
26-30	78202816	black
31-35	78202817	red
36-40	78212510	blue
41-45	78213671	black
46-50	78215212	red
51-55	78215213	blue
56-60	78215214	black
61-65	78215215	Rot

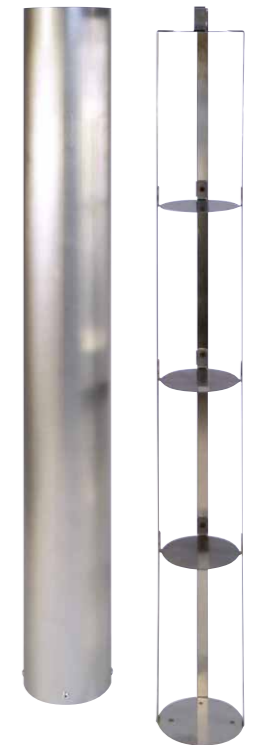
Rack-Numbers (Set) as Chips	Article-No.	Colour
1-4	77031486	black
1-8	77031515	black
1-16	77031487	black
1-24	77031517	black



Racks for packages and boxes



Rack with swing door



Canister with lifter  
(4 floors)

Further variations are possible. Please contact us to discuss your requirements.



## NITROGEN VESSELS

APOLLO® LIN Supply and Storage Vessel (50 - 350 l) · JUNO® LIN Supply and Storage Vessel (30 l)  
SIRIUS® LIN Supply and Storage Vessel (1,000 - 2,000 l) · SATURN® LIN Transport Vessel (50 - 300 l)  
MERKUR® LIN Transport Tank (500 - 3,000 l) · STELLA® Working Dewar (0.5 - 10,000 l) · LAB® Dewar Series (4 - 50 l)



## BIOSAFE® SYSTEMS / LIFE SCIENCE

BIOSAFE® MD B Sample Storage System (Medical Product) (120 - 1,400 l) · BIOSAFE® SC B Sample Storage System (120 - 1,400 l)  
BIOSAFE-CONTROL® B · CRYO-MESSENGER® Remote Monitoring System · BIOSAFE® X/S-Series · Vapor Shipper  
STELLA® Working Dewar (0.5 - 10,000 l) · Controlled Rate Freezers (3.3 - 16 l)



## BIOSAFE® RACK-SYSTEMS

Racks · Drawers and Cryoboxes for Vials · Canisters for Straws in Goblets · SBS Boxes (Microtiter)  
Cassettes for Freezing Bags



## HELIUM VESSELS

HELIOS® LHe Storage Vessel (100 - 15,000 l)  
STRATOS® LHe Transport Vessel (100 - 1,000 l) · LHe Siphon



## OTHER VESSELS

HYDROS® LH<sub>2</sub> Transport Vessel (1,000 - 15,000 l) · STRATOS® Transport Vessel (100-1,000 l)  
APOLLO® Supply and Storage Vessel (50 - 350 l) · MERKUR® Transport Tank (500-3,000 l)



## CRYO LINE SYSTEMS

Rigid Line Systems (DN 14-300) · Flexible Line Systems (DN 20-150) · Phase Separator Stations (50 - 200 l)  
Gas Separator (5 l) · LHe Multiline



## CONTROL AND MONITORING TECHNOLOGY FOR CRYOGENIC GASES

BIOSAFE-CONTROL® B · CRYO-MESSENGER® Remote Monitoring System · CRYO LC® Level Measurement and Control Device  
LHe Level Measurement and Control Device · Capacitive Level Measurement · Oxygen Deficiency Warning System



## TRANSPORT COOLING FOR VEHICLES

CRYOGEN® TRANS-SYSTEM



## CUSTOMISING / TURNKEY SOLUTIONS / CRYO COOLER / COOLING BATHS

Do you have the right partner for your highly specific research tasks? Whether you work in microelectronics, analytics, environmental protection or one of the many other areas of research, we have the specialist staff who know your field and speak your language.



## CRYO ACCESSORIES & AFTER-SALES SERVICE

Accessories · Installation/Assembly · Start Up · Function Qualification IQ / OQ · Repair/Maintenance  
Spare Parts Service · Vessel Hire · Instruction/Training · Operating Manual · Service Hotline



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