

# BIOSAFE® VENUS

The safe Storage for your Samples.

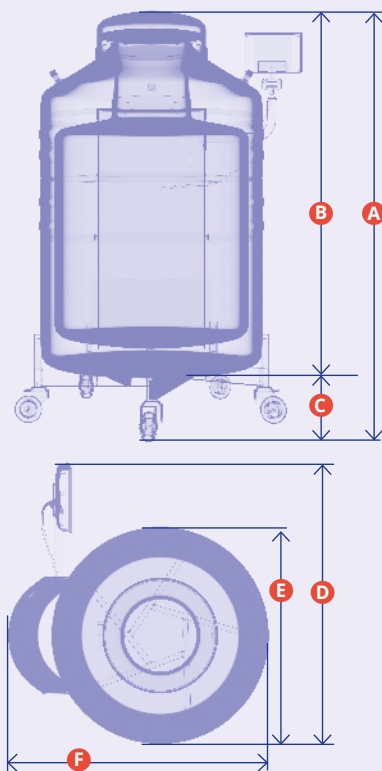
## All Advantages at a Glance



The safe aluminum storage vessel.  
Ideal for biological-medical samples.

- ▶ For up to 6,000 samples 2 ml vials in gas or liquid phase
- ▶ For straws in up to 96 goblets à 65 mm
- ▶ For up to 108 bags 250 / 500 ml

More than  
**55** Excellence  
YEARS in Engineering  
1964 - 2019



## Technical Data



| BIOSAFE® VENUS  |               | 150   | 180   |
|---|---------------|-------|-------|
| Neck diameter   | [mm]          | 216   | 216   |
| Weight, empty (as delivered, with rack system and BIOSAFE® smart electronics) | [kg]          | 96    | 105   |
| Weight, full (in real operation with LIN, max.)                               | [kg]          | 192   | 245   |
| Total height  | <b>A</b> [mm] | 1,100 | 1,215 |
| Height of vessel  | <b>B</b> [mm] | 950   | 1,065 |
| Height of roller base   | <b>C</b> [mm] | 140   | 140   |
| Diameter, outside   | <b>E</b> [mm] | 678   | 678   |
| Depth max.  | <b>F</b> [mm] | 840   | 840   |
| Width max.  | <b>D</b> [mm] | 820   | 820   |
| Daily evaporation   | [%/day]*      | 0.79  | 0.54  |
| Static holding time   | [days]*       | 148   | 181   |
| Static holding time   | [days]*       | 13    | 13    |

\*) The daily evaporation rate and the static holding time were determined at 20 degrees Celsius, 1013 hectopascal, with the vessel standing still, lid closed and without accessories. These are nominal values that may change depending on the use and age of the container.

Folding lid  
Item No. 78217562

Insulation plug  
Item No. 78217561



Smart-rack system for a comfortable and safe access to your samples



Individual numbering for clear placement

# BIOSAFE® VENUS

## Storage Capacities



| BIOSAFE® VENUS                        |            | 150            |                | 180    |       |
|---------------------------------------|------------|----------------|----------------|--------|-------|
| Liquid phase / Gas phase              |            | Liquid         | Gas            | Liquid | Gas   |
| Nominal volume                        | [l]        | 120            |                | 175    |       |
| Racks (aluminum)                      | [piece]    | 6              | 6              | 6      | 6     |
| Number of levels usable               | [quantity] | 8              | 7/8            | 10     | 9/10  |
| 2 ml cryogenic vials in 10x10 boxes   | [up to]    | 4,800          | 4,200          | 6,000  | 5,400 |
| Size of cryogenic boxes 10x10 (hwxwd) | [mm]       | 132 x 132 x 53 | 132 x 132 x 53 |        |       |
| Daisy goblets                         | [up to]    | 48             | 72             | 72     | 96    |
| Bags 250/500 ml (77031488)            | [up to]    | -              | 54             | 54     | 108   |

Further vessel sizes and accessories upon request.

## Dedicated inventory system & accessories for the VENUS



### Smart rack for vials

VENUS 150 Item No. 78217554  
VENUS 180 Item No. 78217555



### Rack for goblets

VENUS 150 Item No. 78217556  
VENUS 180 Item No. 78217557



### Smart rack for bags

VENUS 150 Item No. 78217558  
VENUS 180 Item No. 78217559



### Cryo-Gloves

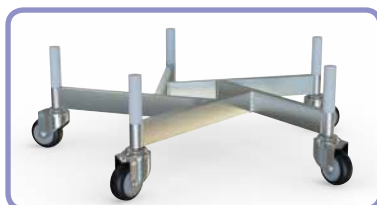
Length: ca. 400 mm  
Item No.

Size S: 78400843  
Size M: 78400180  
Size L: 78400887  
Size XL: 78400856



### Cryo-protective sign

Item No. 77031452



### Roller base

Ø 687 mm (interior), height 140 mm  
with five swivel castors, three of them lockable  
Item No. 78217560



### Gas phase storage

Your samples are stored in the gas phase, without contact to liquid nitrogen. The usable levels secure the storage in gas phase.



### Liquid phase storage

Your samples are stored up to 100% in the liquid phase at temperatures down to -196°C.

# BIOSAFE® VENUS

equipped with BIOSAFE® smart

**Cryotherm®**  
life science

## Functional Favorite – BIOSAFE® smart for VENUS



Our BIOSAFE® VENUS vessels are available in capacities from 150 to nearly 180 litres.

BIOSAFE® smart is an on-site vessel monitoring system with the following abilities:

- Level control and monitoring, automatic filling and temperature display
- Monitoring and evaluation of alarms and events
- Data analysis and transfer according to GMP FDA CFR 21 Part 11
- Double access control via RFID transponder and PIN code
- Temperature monitoring with up to 3 temperature sensors
- Visual and audible alarm on the display
- Forwarding of alarms and temperature
- Other optional equipment: battery backup, warm gas by-pass, software with alarms and messenger

**NEW**



## All from one source



### BIOSAFE® VENUS

With the BIOSAFE® smart for the Venus series, an automatic refill system can be connected conveniently, easily and safely.

For the nitrogen supply, the APOLLO® series is available.



## Item Numbers



For your BIOSAFE® VENUS we supply various equipment options and extensive accessories.

### BIOSAFE® VENUS Vessel Options

| Item No.                          | Quantity   |
|-----------------------------------|--|
| <input type="checkbox"/> 78224110 | BIOSAFE® VENUS 150 SC smart, incl. roller base, connecting hose 1.5 m for APOLLO® (biorepository unit without rack system)   |
| <input type="checkbox"/> 78217554 | BIOSAFE® VENUS 150 smart rack for vials 2ml (without cryoboxes), VENUS suitable for up to 6 racks, 8 levels (single item number)                                   |
| <input type="checkbox"/> 78217556 | BIOSAFE® VENUS 150 smart rack for goblets with drawers (without goblets), suitable for VENUS 4 goblets per level, for up to 6 racks per VENUS (single item number) |
| <input type="checkbox"/> 78217558 | BIOSAFE® VENUS 150 smart rack for cassettes, VENUS suitable for 9 cassettes per rack, 2 levels, for up to 6 racks per VENUS (single item number)                   |
| <input type="checkbox"/> 78224111 | BIOSAFE® VENUS 180 SC smart, incl. roller base, connecting hose 1.5 m for APOLLO® (biorepository unit without rack system)   |
| <input type="checkbox"/> 78217555 | BIOSAFE® VENUS 180 smart rack for vials 2ml (without cryoboxes), VENUS suitable for up to 6 racks, 10 levels (single item number)                                  |
| <input type="checkbox"/> 78217557 | BIOSAFE® VENUS 180 smart rack for goblets with drawers (without goblets), suitable for VENUS 4 goblets per level, for up to 6 racks per VENUS (single item number) |
| <input type="checkbox"/> 78217559 | BIOSAFE® VENUS 180 smart rack for cassettes, VENUS suitable for 9 cassettes per rack, 2 shelves, for up to 6 racks per VENUS (single item number)                  |

Further container sizes and accessories upon request.

### BIOSAFE® VENUS Extensive accessories / spare parts

| Item No.                          | Quantity  |
|-----------------------------------|---|
| <input type="checkbox"/> 78217560 | Roller base for BIOSAFE® VENUS 150/180 (re-order reference)                                 |
| <input type="checkbox"/> 78212859 | Cryobox (10x10, for 100 vials) with Cryotherm label, (single item number)                   |
| <input type="checkbox"/> 78214364 | Cryobox (9x9, for 81 vials) with Cryotherm label, (single article number)                   |
| <input type="checkbox"/> 78212792 | Transparent goblet, without lid, Ø 65 mm (single article number)                            |
| <input type="checkbox"/> 78216990 | Set of 5 transparent daisy goblets with 11 coloured inserts, lid, Ø 65 mm (set item number) |
| <input type="checkbox"/> 77031488 | Cassette for bags (single article number)   |
| <input type="checkbox"/> 78217561 | Insulation plug, interior (spare parts)   |
| <input type="checkbox"/> 78217562 | Hinged cover (spare parts)  |



[sales@cryotherm.de](mailto:sales@cryotherm.de)



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