



CryoShipper

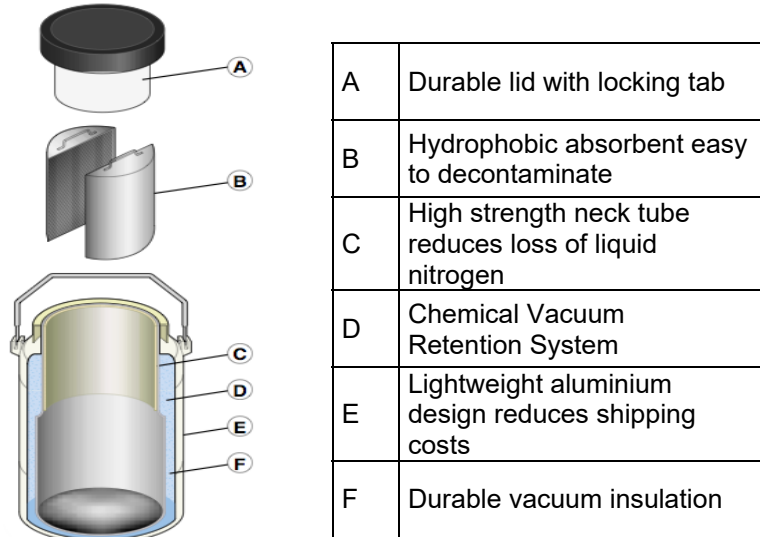
Dry shipping container with temperature logger

1/2
Rev. 08/19

We reserve the rights for this elaboration according to DIN ISO 16016. Any depicted design corresponds to the current state of technology. Alterations to this embodiment will void validity.

Application Special shipping container for the safe transportation of biological samples below a temperature of -150°C in the gas phase of liquid nitrogen. The transport capacity is between 9 and 966 vials with a normal working duration up to 85 days. A datalogger records the sample temperature during the complete transit period.

Structure



Description Inside the CryoShipper a hydrophobic absorbent stores the liquid nitrogen. This is making spillage and leakage of liquid nitrogen during transportation nearly impossible. The absorption material is easy to decontaminate, repels moisture and humidity and ensures a -150°C cold environment inside the CryoShipper. An optional available protective packaging secures the CryoShipper from shocks and due to its design it helps to ensure the system remains upside at all time. For the carriage of potentially infectious material the CryoShipper XC IATA with secondary container is recommended. All the CryoShippers meet the relevant international transport regulations such as the IATA for air transport. The containers provide storage capacities for straws, Cryovials, blood bags etc.. Depending on model delivery includes canister(s), blood bag- or vialrack.

Technical Data

Typ	SC 2/1V	SC 4/2V	SC 4/3V	SC 20/12V
Number of canisters	1 (Ø 31mm,H 127mm)	1 (Ø 67mm,H 278mm)	1 (Ø 46mm,H 278mm)	6 (Ø 38mm,H 279mm)
Neck-Ø [mm]	35	70	51	51
Storage capacity [2ml cryovials]	9	106	48	180
Volume [liters]	1,5	3,6	4,3	12,3
Evaporation rate [liters / day]	0,19	0,26	0,2	0,09
Normal working duration[days]	8	14	21	85
External Dimensions [Ø X H in mm]	184 x 343	222 x 468	222 x 492	368 x 652
Weight empty [kg]	2,7	5	5,9	13,6
Weight full [kg]	4	8,1	9,3	23,6



CryoShipper

Dry shipping container
with temperature logger

2/2
Rev. 08/19

Typ	XC 20/3V	MiniMoover	CryoMoover	CryoShipper
Number of Canisters	4 (Ø 80mm,H 278mm)	1 (Ø 31mm,H 278mm)	7 (Ø 79mm,H 278mm)	1 Rack
Neck-Ø [mm]	96.7	35	97	216
Storage capacity [2ml cryovials]	672	24	1134	500 or 10 pcs bag (4R9953)
Volume [liters]	6,8	2,9	4,2	8,5
Evaporation rate [liters / day]	0,3	0,2	0,35	0,85
Normal working duration [days]	23	14	12	10
External dimensions [Ø X H in mm]	368 x 635	184 x 495	464 x 558	369 x 546
Weight empty [kg]	10,5	3,6	13,8	10,9
Weight full [kg]	16	5	17,2	17

Typ	CroyShipper XC	CryoShipper XC IATA
Number of Canisters	-	1 Secondary Container
Neck-Ø [mm]	216	216
Dimensions of canister [Ø x H in mm]	216 x 317,5 (Usable volume)	-
Storage capacity [2ml cryovials]	966 (bulk storage)	350 or 22 pcs. bag (4R9951)
Volume [liters]	10	11,8
Evaporation rate [liters / day]	0,7	0,8
Normal working duration [day]	14	14
External dimensions [Ø X H in mm]	381 x 584	381 x 610
Weight empty [kg]	13,6	13,1
Weight full [kg]	21,4	22,9

Options Protective shipping container, temperature logger (see below), vialsrack.

Temperature-logger Temperature monitoring during transit period:



- Logging intervals can be set from 30 seconds to 99 minutes for each shipment
- Temperature alarms adjustable
- Stores up to 8.192 entry logs

Alarms:

- High and low temperature alarms
- Alarm delays programmable
- Temporary removal of cover need not initiate alarm status

Software:

- PC-Software for data transfer and analysis (Windows® '95 and higher)
- Permanent display of status and current temperature of the datalogger
- Password protection of software and settings

Technical Data:

- 3 Status LED for displaying the alarmstatus
- Probe accuracy $\pm 1.3^\circ$ at -200°C (Probe Type Pt 100, Class B)
- battery lifespan up to 3 years