







MVE Doble Series

Featuring Advanced QWick™ Charge Technology

The Doble Series cryogenic liquid dewars are the first units to be designed for both vapor shipment and liquid storage. The Doble QWick Series utilizes an absorbent wicking material that charges with liquid nitrogen in two hours, providing the capacity for same-day vapor shipping. A unique absorbent layer in the base of the storage tanks of both series enables them to be charged with nitrogen and employed as dry shippers with hold times of up to 30 days. Once at the final destination, the tanks can be filled with liquid and used for long term storage, therefore avoiding the need for return shipments.

Features Include:

- Liquid and vapor storage options
- Low liquid nitrogen consumption
- Convenient lightweight package
- CHARGES IN TWO HOURS





ADVANCED

QWick Charge Technology

Charges in under 2 hours

Tank Features A Durable composite lid design B High strength neck tube reduces liquid nitrogen loss C Canisters D Strong, lightweight aluminum construction E Advanced chemical vacuum retention system

Hydrophobic liquid nitrogen absorbent system

	Doble 11	Doble 20	Doble 22	Doble 28	Doble 34	Doble 47	Doble 47-10
Maximum Storage Capacity							
Number of Canisters	6	6	6	6	6	6	10
No. of 1/2 cc Straws 10/cane	660	660	2400	2,400	2,100	4,500	3,500
Vial Capacity	210	210	810	810	630	1,320	1,050
Performance							
LN2 Capacity w/o Inventory w/o Inventory L est.	10.0	18.5	20.0	28.0	32.0	46.0	46.0
Vapor Capacity L	3.1	2.8	6.7	8.4	6.7	8.4	9.6
Static Evaporation Rate L/day	0.17	0.10	0.35	0.35	0.20	0.40	0.40
Working Duration days for liquid	37	116	40	50	100	74	72
Working Duration days for vapor	17	21	18	24	20	21	21
Unit Dimensions							
Neck Opening in (mm)	2.18 (55)	2.18 (55)	3.81 (97)	3.81 (97)	3.50 (89)	5.00 (127)	5.00 (127)
Overall Height in (mm)	21.6 (549)	25.7 (652)	22.0 (559)	22 (559)	26.6 (676)	26.5 (673)	26.5 (673)
Outside Diameter in (mm)	10.2 (260)	14.5 (368)	14.5 (368)	18.2 (462)	18.2 (462)	20.0 (508)	20.0 (508)
Canister Height in (mm)	11 (279)	11 (279)	11 (278)	11 (279)	11 (279)	11 (279)	11 (279)
Canister Diameter in (mm)	1.65 (41)	1.65 (42)	3.09 (79)	3.09 (78)	2.81 (72)	4.00 (101)	2.81 (72)
Weight Empty lb. (kg)	14.5 (6.6)	22.7 (10.3)	30.0 (13.6)	33.0 (15.0)	34.0 (15.4)	40.0 (18.1)	40.0 (18.1)
Weight Charged vapor lb. (kg)	18.5 (8.4)	29.7 (13.5)	40.0 (18.2)	47.0 (21.3)	48.5 (22.0)	53.5 (24.3)	53.5 (24.3)
Weight Full liquid lb. (kg)	32 (14.5)	56 (25.4)	68 (30.8)	89 (40.4)	92 (41.7)	117 (53.1)	117 (53.1)

TWO Year Parts Warranty • THREE Year Vacuum Warranty

Conforms to MDD 93/42/EEC, the Medical Device Directive for the EU. $\label{eq:model} % \begin{center} \begin$