

# MSB HELIUM SERIES

## *Stainless steel cryocylinder to store, transport and handle Liquid Helium*

Of an exceptional reliability, these vessels respond perfectly to the demand of nuclear research centers, different research laboratories, University centers, medical and biological applications ...

Benefiting from Cryo Diffusion's experience in very low temperature technics, the MSB Helium series combine:

- Robustness: complete stainless steel construction
- Performance: low loss rate due to amelioration in the multishields technic and high level vacuum
- Non-magnetic carbon rate for MRI services (Magnetic Resonance Imagery)
- Wide range: capacities graded from 30 to 5000 liters (other capacity available on request)

CE marking

Transportable Pressure Equipment Directive - TPED 10/35/UE

Pressure Equipment Directive - PED 97/23/CE



# Technical specification

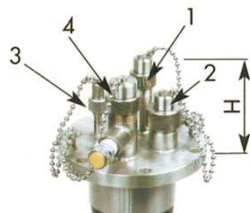
SPECIFICATIONS MSB ...	30	60	100	250	450	500	1000	2000	3000	5000
Total Capacity (l)	32,8	64,4	102,6	265	449	500	1106	2120	3300	5500
Weight – empty (kg)	52	63	77	180	248	258	610	1100	1480	3050
Weight – full (kg)	56	71	89,7	212	305	320	735	1338	1855	3675
Total height (mm)	962	1164	1359	1395	1594	1667	1940	2177	-	-
External diameter (mm)	555	555	555	890	1050	1050	1400	1750	1800	2300
Mobile head connection	NW50	NW50	NW50	Flange	Flange	Flange	Flange	Flange	Flange	Flange
Mobile Head type	A	A	A	B / C / D	B / C / D	B / C / D	B / C / D	B / C / D	B / C / D	B / C / D
Static evaporation (l/day)	< 2,3	< 1,3	< 1	1	0,9	0,9	0,9	< 0,3	< 0,25	< 0,14
Max working pressure (bar)	0,5	0,5	0,5	0,5	0,5	0,5	0,9	1	1	1

Other capacity available on request

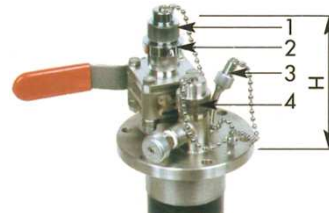


NW 50 connection

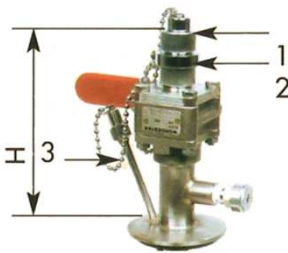
Flange connection



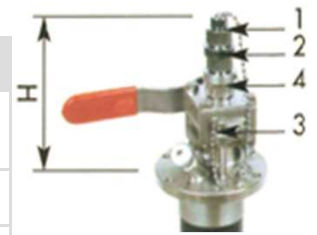
Type B



Type C



Type A



Type D

MOBILE HEADS	Type	1	2	3	4	H
MSB 30 MSB 60 MSB 100	A	10	12 *	2,5	-	143
MSB 250 MSB 450 MSB 500	B	10	12 *	2,5	16	81
MSB 1000 MSB 2000 MSB 3000 MSB 5000	C	10	12 *	2,5	16	108
	D	10	12 *	2,5	16	147

\* 12,7 mm model is also available on request

## Transfer lines for LHE:

It exists a wide variety of models whose conception is specific to each use. These lines are consequently built upon demand following customer needs.

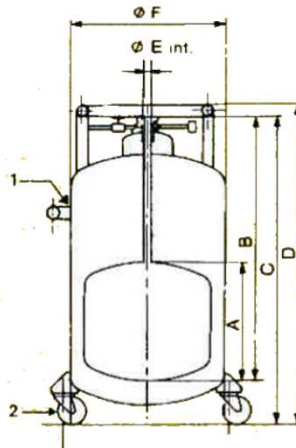
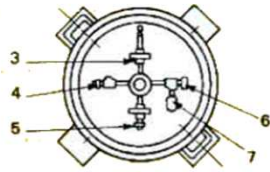
For any inquiry regarding vacuum insulates lines (rigid or flexible), please ask us for a detailed quotation. We will help you to realize your project.



# Dimensional characteristics

All the dimension given on this page are in mm

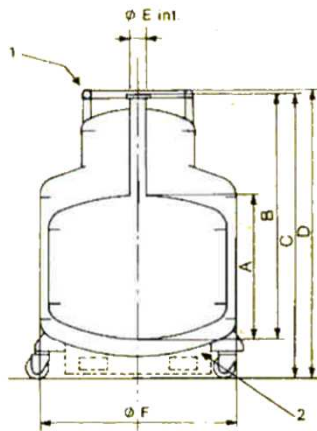
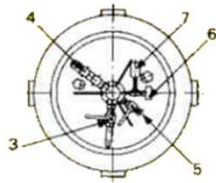
## MSB 30 - 60 - 100:



- 1- 2x Retractable handles
- 2- 4x castors
- 3- Vent valve
- 4- Relief valve set to 0,5 bar
- 5- Relief valve set to 35 g/cm<sup>2</sup>
- 6- Vacuum pressure gauge
- 7- Taconis oscillation damper

MODEL	A	B	C	*D	*øE	øF
MSB 30	270	743	917	962	25,4	555
MSB 60	472	945	1119	1164	25,4	555
MSB 100	722	1196	1314	1359	25,4	555

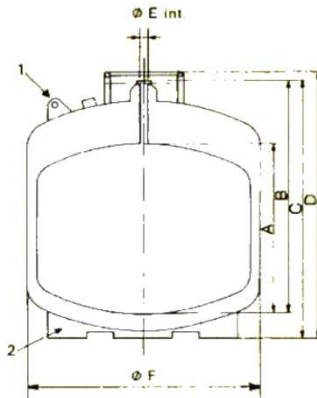
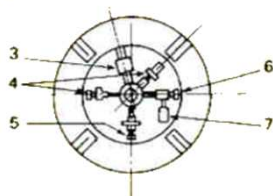
## MSB 250 - 450 - 500:



- 1- Lifting lugs
- 2- Forklift base (optional)
- 3- Vent valve
- 4- 2x Relief valve set to 0,5 bar
- 5- Relief valve set to 35 g/cm<sup>2</sup>
- 6- Vacuum pressure gauge
- 7- Taconis oscillation damper

MODEL	A	B	C	*D	*øE	øF
MSB 250	645	1206	1366	1395	49/72	890
MSB 450	776	1338	1565	1594	49/72	1050
MSB 500	853	1414	1638	1667	49/72	1050

## MSB 1000 - 2000 - 3000 - 5000:



- 1- Lifting lugs
- 2- Forklift base (optional)
- 3- Vent valve
- 4- 2x Relief valve set to 0,5 bar
- 5- Relief valve set to 35 g/cm<sup>2</sup>
- 6- Vacuum pressure gauge
- 7- Taconis oscillation damper

MODEL	A	B	C	*D	*øE	øF
MSB 1000	1082	1663	1864	1940	80	1400
MSB 2000	1336	1963	2156	2156	100	1600
MSB 3000	1800	2405	2620	-	100	1800
MSB 5000	1900	2740	2940	-	100	2300



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