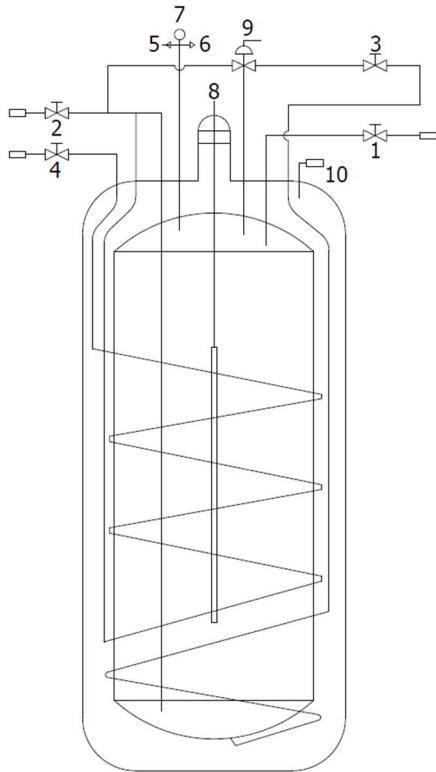


**Technical Specification of
Portable Liquid Nitrogen Container**

Sl. No.	Description	Details
General		
1	Gross Capacity	200 liters (min.)
2	Net Capacity	190 liters (min.)
3	Fluid to be stored	Liquid Nitrogen
4	Net Evaporation Rate	2.2% (max.) per day of full volume at STP conditions for N ₂
Inner Vessel		
5	Material	Stainless Steel X5 Cr-Ni18-10 or equivalent
6	Design Code	DOT 4 L or EN1251-2:2000 or Equivalent
7	Maximum Allowable Working Pressure	34 bar(g) max.
8	Design Temperature	-190 to 40 °C or wider
9	Insulation	Vacuum + Si
Outer Vessel		
10	Material	SS 304
11	Design & Manufacturing Code	DOT 4 L or EN1251-2:2000 or Equivalent
12	Design Pressure	1 bar(g) min.
13	Operating Pressure	Vacuum
14	Design Temperature	-20 to 55 °C or wider
15	Operating Temperature	Ambient
Weight & Size		
16	Empty Weight	175 kg (max.)
17	Outer Diameter	600 mm (max.)
18	Overall Height	1700 mm (max.)
Flow Components		
19	Vent Valve	Suitable (Chart / Rego or Equivalent)
20	Liquid Fill and Withdrawal Valve	Suitable (Chart / Rego or Equivalent)
21	Pressurizing Valve	Suitable (Chart / Rego or Equivalent)
22	Gas Withdrawal Valve	Suitable (Chart / Rego or Equivalent)
23	Safety Relief Valve	Set Pressure: 34 bar(g) or higher, as per standard
24	Burst Disc	Set Pressure: 39.7 bar(g) or higher, as per standard
25	Pressure Gauge	Range: 0 – 40 bar(g) min. Make: WIKA or Equivalent
26	Level Gauge	Float Type (CHART or Equivalent)
27	Combined Pressure Regulator and Economizer	Chart or Equivalent Range: 7 to 24.6 bar (g) approx.
28	Evacuation Port cum Safety Valve	Suitable (Chart or Equivalent)

Sketch showing Typical Flow Components of Portable Liquid Nitrogen Container



1	Vent Valve	3/8" NPT	Short Stem Valve
2	Liquid Fill and Withdrawal Valve	3/8" NPT	Short Stem Valve
3	Pressurizing Valve	3/8" NPT	Short Stem Valve
4	Gas Withdrawal Valve	3/8" NPT	Short Stem Valve
5	Safety Relief Valve	1/4" NPT	Set Pressure: 34 bar(g) or higher, as per standard
6	Burst Disc	1/4" NPT	Set Pressure: 39.7 bar(g) or higher, as per standard
7	Pressure Gauge	----	0 – 40 bar(g) min. Make: WIKA or Equivalent
8	Level Gauge	----	Float Type (CHART or Equivalent)
9	Combined Pressure Regulator and Economizer	1/4"	Chart or Equivalent Range: 7 to 24.6 bar (g) approx.
10	Evacuation Port cum Safety Valve	DN25	Suitable (Chart or Equivalent)

Transportation pallet: -

- Every Portable Liquid Nitrogen Container shall be supplied with a transportation pallet.
- It shall be configured based on size of Portable Liquid Nitrogen Container and made of steel.
- Each pallet shall be designed to carry one cylinder only.
- Suitable wheels shall be provided on base of pallet for easy movement of cylinder.



(Typical Transportation Pallet: for reference only)

General Terms:

- Party shall provide one year warranty from the date of delivery.
- Along with item, party shall provide operational and maintenance manual in English.
- Along with the item, party shall provide copy of valid test certificates from manufacturer of Portable Liquid Nitrogen Containers.
- Along with the item, party shall also provide valid PESO certificates on Portable Liquid Nitrogen Containers.