

Vacuum Insulated Reservoir

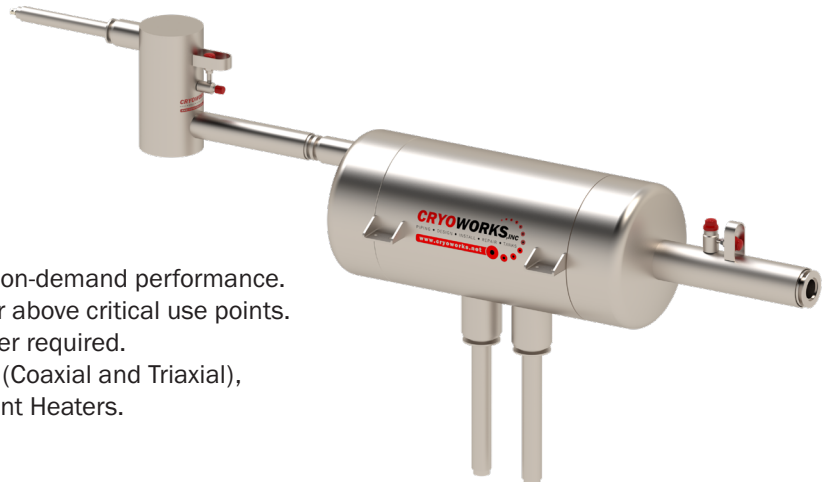
A CryoWorks Vacuum Insulated Reservoir is designed to accumulate and maintain high-quality liquid for on-demand withdrawal at line pressure. The reservoir consists of a vacuum insulated container and keepfull vent device. Reservoirs, also known as accumulators, create an area for liquid/gas phase separation to occur. When coupled with the keepfull vent device, the gas rises to the top to be vented, and high-quality liquid is dispensed from the bottom. The reservoir generates a reserve of liquid that helps eliminate the issues associated with two-phase flow coming from upstream supply lines. Two-phase flow can be caused by undersized or oversized supply lines, incorrect sloping, and sometimes other existing system inefficiencies.

Features:

- Incorporated Keepfull Vent Device: Mechanically controls the venting of gas but retains the liquid.
- Thermal Performance: Vacuum insulated container prevents frost, ice buildup, and minimizes losses.
- Horizontal and vertical configurations.
- Various bayonet configurations and sizes available.

Benefits:

- Reconditions Liquid: Delivers high-quality liquid.
- Line Pressure Phase Separation: High-quality liquid for on-demand performance.
- Versatile Design: Integrate into main lines, branches, or above critical use points.
- Simple Operation: Little to no maintenance, no controller required.
- Related Components: CryoWorks Rigid VIP, Flexible VIP (Coaxial and Triaxial), Vacuum Insulated Valves, Keepfull Vent Device, and Vent Heaters.

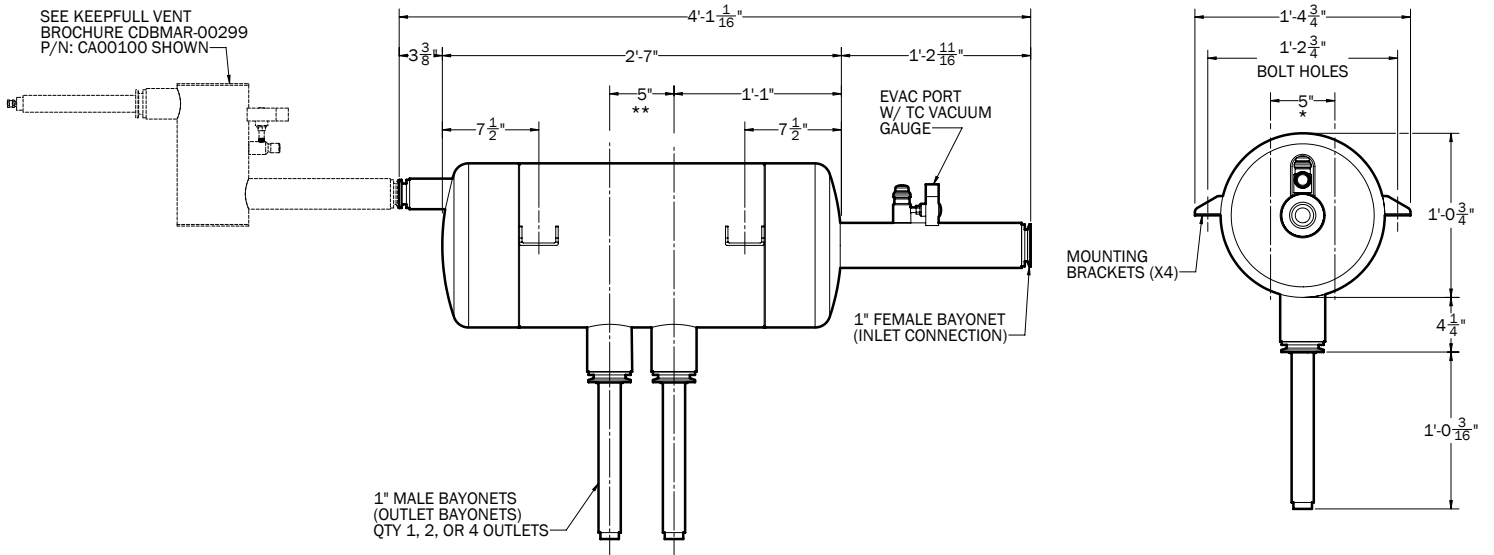


Technical Specifications:

- Liquid Capacity** — 10 Gallons (38 Liters)
- Outlets / P/N** — 1 Outlet: CA01717
2 Outlets: CA01718
4 Outlets: CA01719
- Service / MAWP** — Liquid Nitrogen (LN2): 150 PSIG Max
- Vent Heater** — Standard: 100 – 120 VAC (50 – 60 Hz)
Optional: 220 – 240 VAC (50 – 60 Hz)
- Weight** — Dry: 145 lbs. (66 kg) – 245 lbs. (111 kg)
Full: 185 lbs. (84 kg) – 330 lbs. (150 kg)
- Vacuum Insulation** — Standard: Static Vacuum Design
Optional: Dynamic Vacuum Design
- Materials** — 304/304L Stainless Steel
- Codes and Certifications** — Assembly: Built to ASME B31.3 Process Piping
- Options** — Customization, Vertical Orientation, Oxygen and Facility Monitor Integration.
For Adjustable Pressure or Gravity Fed Phase Separator Designs -
See CryoWorks APPS & GFPS Literature.

**Let CryoWorks
design and set up
a Vacuum Insulated Reservoir
for your cryogenic application.**

Diagram:



*BAYONET SPACING FOR 4 OUTLET VERSION
 ** ADD 5" FOR 2 & 4 OUTLET VERSIONS

System Schematic:

A CryoWorks Vacuum Insulated Reservoir can be used on any application that requires high-quality liquid delivery at a pressure that is equal to the bulk tank or branch line pressure. Ideal applications include Cold Plates, Storage Freezers, Environmental Test Chambers, and Thermal Vacuum Chambers.

