CryoVent

Mechanical

The Cryovent is designed to remove excess vapor from cryogenic piping systems when the liquid stops flowing, ensuring that your cryogenic system is always filled with liquid. It is modular and pre-engineered for easy installation and flexible arrangement in any piping system.

All Cryovents come with CSM renowned customer service, from conceptual design to implementation, and are backed by a one year warranty

Cryovent

The cryovent is installed to enhance the liquid delivery performance of a piping system. Under normal operational circumstances, the liquid in the system is constantly vaporizing into gaseous nitrogen due to a constant heat leak. If the accumulated gas in the pipeline is not removed, it will block the liquid flow to the use points. The Cryovent plays an important role in removing the gas from the pipeline by automatically venting it to the atmosphere.

The Cryovent uses a mechanical (buoyancy) control principle. It allows only gas/vapor to vent while retaining the liquid medium in the pipeline. This ensures that quality liquid is readily available at all times in the pipeline, improving the liquid delivery efficiency. The Cryovent is maintenance-free and requires no field adjustments. Its operation requires no electrical power, sensors, pneumatics, or electronics.

Related Products:

Vent Heater

Typical Applications

- This device functions as both a gas venting and pre-cooling device in a vacuum-jacketed piping system
- It is suitable for use with inert gases such as liquid nitrogen and argon. Optional CFOS cleaning is available for oxygen service

Features and Benefits

- The cryovent is available with either bayonet or pipe threaded termination
- It uses a bayonet connection to facilitate future expansion of the piping system
- The cryovent ensures consistent and efficient liquid supply from bulk storage to the end application
- It maintains the liquid level in the piping system at all times

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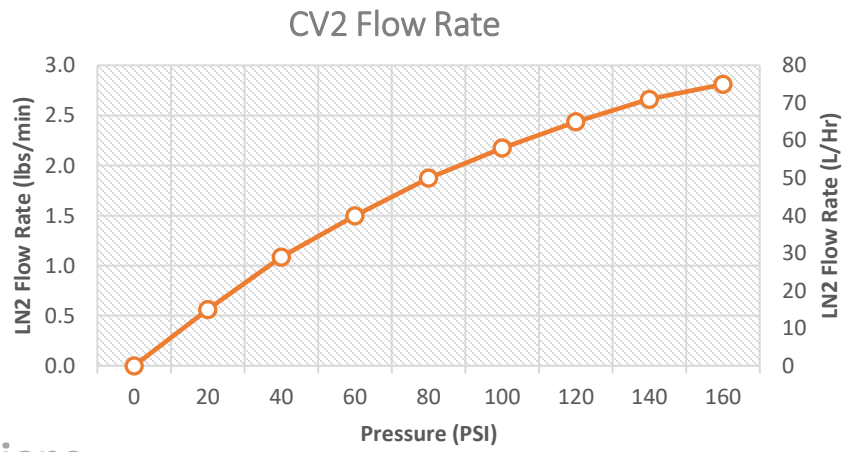
SPECIALTY MANUFACTURING
QUALITY WITH A DIFFERENCE

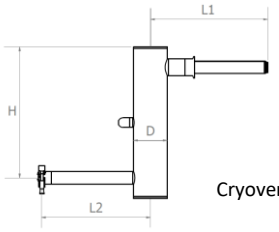
Cryovent Specifications

Cryovent Model	CV2	CV10
Capacity	0.6 gal (2L)	2.6gal (10L)
Control Principle	Mechanical/Buoyancy	
Venting Capacity	1.5 Nm^3/hr (Theoretical Max)	
Orifice Size	Fixed Orifice	
Insulation	Static vacuum with Multi-Layer Insulation; or Dynamic vacuum	
Cleanliness Level	Cleaned oil and grease-free Oxygen clean on request	
Maximum Operating Pressure MAWP	200 psig (13.8 bar)	
Material Construction	Stainless Steel Series 300	
Standard Testing	Dimensional Check He leak checked 1 x 1 0 - 9 cc/s	
Optional	Pneumatic pressure test, Vacuum retention testing, LN2 cold shock, pre-material certs., X-ray, ASME B31.3 certification, CFOS cleaning for O2 services	

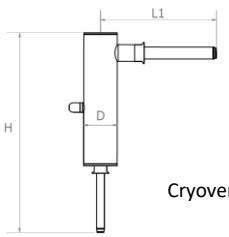


Dimensions

Model	H	L1	L2	D
CV2-H-C5F	18.1” (460.1mm)	11.9” (302mm)	12.8” (326mm)	4.0” (102mm)
CV2-H-C10F	16.9” (429.5mm)	11.9” (302mm)	12.6” (320mm)	4.0” (102mm)
CV2-B-C5M	24.2” (614mm)	11.9” (302mm)	-	4.0” (102mm)
CV2-B-C10M	25.7” (654mm)	11.9” (302mm)	-	4.0” (102mm)
CV10-H-C10F	22.3” (565mm)	16.5” (420mm)	20.2” (513mm)	12.0” (300mm)



Cryovent, Horizontal



Cryovent, Vertical

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