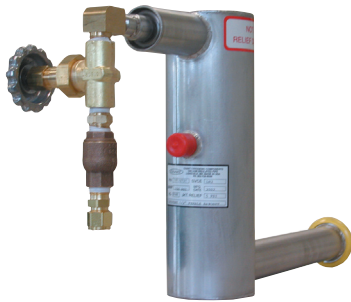


CRYOVENT VAPOR RELEASE DEVICE

VACUUM INSULATED PIPING SYSTEMS

CryoVent Advantages:

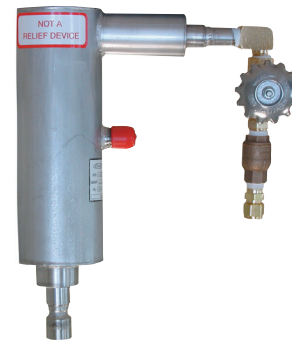
Chart's CryoVent is the most reliable way of maintaining liquid in your Vacuum Insulated Piping systems. It will not freeze open while venting gas out of the system. It does not rely on electronic probes that are pressure or temperature sensitive. It requires no electricity.



CryoVent Model B

CryoVent Operation:

Vacuum Insulated Piping systems are used to transport cryogenic liquid from an outside storage tank to an application. The liquid in the system is constantly vaporizing from the heat influx on the entire system. The vaporized gas rises to the top of the system and fills the piping while the system is not flowing liquid. If this gas is not removed from the system it finds its way into the application equipment causing slug flow and pressure spurts. The Chart CryoVent is a mechanical device that senses gas build-up in the system and regularly vents it out of the system. The CryoVent keeps the system full of liquid at all times. It lets your Vacuum Insulated Piping system provide quality liquid to the application.



CryoVent Model A

CryoVent Styles:

Chart manufactures two styles of the CryoVent. The A-model has a female 1/2 inch pipe connection that allows it to be easily added to an existing Vacuum Insulated Piping system as a replacement for the older electronic style of keep-cold device. The B-Model uses a bayonet connection that acts as a future point of expanding the piping system. Simply remove the CryoVent, add more sections of Chart vacuum insulated pipe, and reinstall the CryoVent at the end of the new piping. To achieve maximum benefit from the MVE CryoVent, each model needs to be placed at the highest elevation of the piping system as well as the end of the system to ensure liquid is maintained in the entire system.



CryoVent Model C

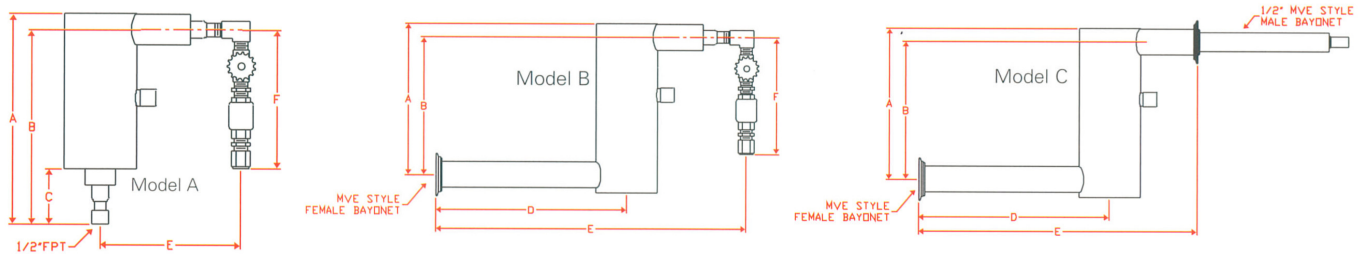


Innovation. Experience. Performance.®

CRYOVENT VAPOR RELEASE DEVICE

VACUUM INSULATED PIPING SYSTEMS

CRYOVENT SCHEMATICS



CRYOVENT DIMENSIONS

CryoVent Type:	Part Number	A	B	C	D	E	F
Model A - Threaded							
1/2" FPT	11897221	16-1/2"	15-1/2"	3-1/2"	-	10"	8"
Model B - Bayonet							
1/2" x 1-1/2"	11897247	13-1/2"	12-1/2"	-	14"	24"	8"
1" x 2-1/2"	11897280	13-1/2"	12-1/2"	-	14-3/4"	25"	8"
1-1/2" x 3"	11897642	13-1/2"	12-1/2"	-	18"	38"	8"
2" x 3-1/2"	11897343	14"	13"	-	20"	30"	8"
Model C - Bayonet							
1/2" x 1-1/2"	11897263	13-1/2"	12-1/2"	-	14"	21"	-
1" x 2-1/2"	11897301	13-1/2"	12-1/2"	-	14-3/4"	22"	-

CRYOVENT FLOW RATE

