



# Cryogenic Vapor Vent Models

## K2041 & K2042 Instructions

### OVERVIEW

Vapor Vents (models K2041 & K2042) are designed to automatically remove vapor from vacuum jacketed (VJ) piping systems when in operation and charged with liquid. The vapor is caused by the heat leak of the pipe as well as depressurization and cool-down losses. This is a simple device as it does not require electricity to operate. An internal float operated valve allows gas to be vented from the overall pipe system to ensure a liquid-full system at all times.

### INSTALLATION

Vapor Vents are most effective when installed at the highest point of the piping system and near the end of the piping run. The piping system itself needs to be installed on a gradual uphill incline from the source so as internal vapor is created it will bubble up to the device and be vented through the provided check valve located on top. Vapor Vents must be installed in a vertical orientation with the provided check valve on the top. The Model K2041 is equipped with a 1/2" MNPT nipple and is installed into the VJ system by screwing it into a female thread on the piping system. Teflon tape may be used as a thread sealant. The Model K2042 Vapor Vent utilizes a CB704 Male Bayonet connection. In this case, the piping system must be equipped with a compatible female bayonet. Installation is accomplished by engaging the bayonets and then tightening the coupling nut. Typical installation calls for 1/2" tubing to be installed from the outlet of the check valve to vent the gas outside of the building or to a safe space.

### NOTES

The body of the device is vacuum jacketed but the tubing to route gas away is not, thus when cold gas is flowing there will be frost and ice build-up on that tube. In order to avoid dripping water, this tube may be insulated with foam pipe wrap or other similar insulation. Alternately, a Vent Heater (Model H1300 or H1500) may be installed on the outlet to limit frost build-up. During operation, the Vapor Vent will constantly exhaust vapor and hiss; this is normal.

