



## Series HPCV, High Pressure Check Valve User Instructions

### **Scope:**

These user instructions are applicable for Generant Series HPCV, Check Valves sizes 1/4", 3/8", and 1/2" (Connection Types NPT, SAE, BSPT and BSPP)

### **Intended Use:**

The intended use of these valves is to limit reverse flow in a given system. These products can be used with the following media, Inert gases, Oxygen and potential oxidizer gases > 21% and Hydrogen. When intended use is for Oxygen and oxidizer gases >21%, valves must be specified to be "Cleaned for Oxygen service" and will be supplied heat-sealed in poly bags. Proper seal material selection is important to insure compatibility with intended media.

### **Technical Data:**

HPCV Series High Pressure Check Valves are 100% factory tested for leakage in the backflow direction. Series HPCV Valves are marked with Manufacturer, Direction of Free Flow, Maximum Allowable Working Pressure, Seal Material and Date Code. Operating parameters are listed below:

Leakage in Check Direction: Zero @ >1.0 Psi Backpressure  
TFE seals may require higher backpressure to seal bubble leak-tite  
Temperature Range: -320° F to 450° Fahrenheit (elastomer dependent)  
Nominal Cracking Pressure: 2 – 5 Psi (0.14 - 0.34 Bar)

**⚠ WARNING** Generant Series HPCV Check Valves are supplied assembled, preset and tested. Valves that are supplied "Cleaned for Oxygen Service" from the factory are supplied heat sealed in poly bags. Once removed from the bag, integrity of this cleaning has been compromised. Proper handling should be used to ensure the integrity and cleanliness of the system.

### **Installation:**

1. Be sure to install Check Valve with Arrow facing in the free flow direction.
2. For valves specified with NPT or BSPT connections, Teflon tape should be used to seal the connection between the Check Valve and the piping system.
3. Ensure that outlet connection does not interfere with travel of the poppet.
4. When ordered with other thread connections, user shall consider proper sealing and tightening according to the appropriate industry standards.

### **Safe Component Selection**

When selecting a component, the total system design must be considered to ensure safe, trouble free performance. Component function, materials compatibility, adequate ratings, proper installation, operation, cleanliness and maintenance are the responsibility of the system designer and user.