

# Series PMV Precision Metering Valve User Instructions

## Scope:

These user instructions are applicable for Generant Series PMV, Precision Metering Valves sizes 1/8" and 1/4" (Connection Types NPT and Bi-Lok Dual Ferrule Tube)

## **Intended Use:**

The intended use of these valves is to meter the 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:**

PMV Series Precision Metering Valves are 100% factory tested for leakage. Series PMV Precision Metering Valves are marked with Manufacturer, Part Number, Direction of Flow and Date Code. Operating parameters are listed below:

Maximum Operating Pressure: 1000 Psi (68.9 Bar) for Brass and Stainless Steel Temperature Range: -50° to 180° Fahrenheit. Seal dependant, see technical information.

Generant Series PMV Precision Metering Valves are supplied assembled and 100% Factory tested for leakage. 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. Install Metering Valve with Arrow facing in the direction of Controlled Flow.
- 2. When installing valves with Male NPT threads Teflon tape should be used to seal the connection between the metering valve and the piping system.
- 3. Beginning with the first thread, wrap tape in the direction of the male tapered thread spiral, and join with a slight overlap.
- 4. Make sure tape does not overhang the first thread, as the tape could shred and get into the system.
- 5. Cut off excess tape. Draw the free end of the tape around the thread tautly so that it conforms to the threads. Press in firmly at the overlap point. The connection is now ready for makeup. (If any additional pipe sealant is being used (i.e.: pipe dope or Swak), **Do not** apply it to the first thread of the valve)
- 6. Thread the valve into the connection port hand tight. Using an open-end wrench, tighten the valve an additional ¾ to 1 full turn.
- 7. When ordered with Dual Ferrule connections, follow installation instructions for Dual Ferrule Tube Fittings, per Generant Series "D" Catalog.

# 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.