Series LCV, Liquid Cylinder Valve
User Instructions

Scope:
These user instructions are applicable for all Series LCV Liquid Cylinder Valves.

Intended Use:
The intended use of these products is solely to protect against over pressure condition on Cryogenic Liquid Cylinders, which are designed to the requirements of DOT 4L. These products can be used with the following media, Inert Gas, Oxygen and potential Oxidizer gases > 21%, Hydrogen, Carbon Dioxide and Liquefied natural Gas

Technical Data:
LCV Series valves are supplied preset, 100% factory tested and permanently staked to prevent any adjustment of the pressure setting. Every CE marked LCV is engraved with the full part number, set pressure, material lot code and date of manufacture. Operating parameters are listed below:

Temperature Range: -320° to 348° Fahrenheit (-195°C to 176°C)
Nominal Set Pressure Range: 22 – 500 psi (1.52 – 34.48 bar)

Orifice: .250 Diameter
Set Pressure Tolerance:

Nominal Set Pressure	Tolerance
0.50-28.90 psig	± 5%
29.00-48.30 psig	± 1.45 psi
48.40 + psig	± 3%

Operating Temperature Per Seal Material
Seal Material
FS – Fluorosilicone for 22-49 Psig (-85° to 350° F (-65° to 176°C))
K – PCTFE for Above 50 Psig (-320° to 165° F (-196° to 74° C))

Maintenance:
These valves are factory preset and are NOT to be tampered with in the field. These products do not require maintenance. If valve becomes visibly damaged or corroded, or if the inlet orifice becomes contaminated with particulate, the valves should be discarded and replaced.

⚠ WARNING Generant Liquid Cylinder Valves are supplied Cleaned for Oxygen Service and are shipped from the factory individually 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 entire system.

Installation Instructions:

1. All Series LCV relief valves are 100% factory tested for leakage before crack, flow and reseat performance.
2. Ensure that the cylinder relief valve connection port is free of particulate contamination. This should be accomplished by purging with a clean dry media. Visually inspect the port for cleanliness.
3. Teflon tape should be used to seal the connection. Beginning with the first thread, wrap tape in the direction of the male tapered thread spiral, and join with a slight overlap. Ensure that the tape does not overhang the first thread. If any additional pipe sealant is being used, **do not** apply it to the first thread of the valve.
4. Thread the valve into the connection port hand tight. Using a 7/8" open-end wrench, tighten the valve an additional ¾ to 1 full turn.
5. The connection should be tested for leaks using an oxygen-approved leak detector.

Safe Component Selection
The LCV Series is intended to be used on DOT 4L Liquid Cylinders. However, 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.

Generant Company, Inc.
1865 Route 23 South P.O. Box 768 Butler, New Jersey 07405 Phone 973.838.6500 Fax 973.838.4888
www.generant.com

EN-FR-014
Rev E
DCR3297