

2.3.3.4. Container openings shall be equipped with one of the following:

- a. A positive shutoff valve in combination with either an excess-flow check valve or a backflow check valve, plugged.
- b. An internal valve, plugged.
- c. A backflow check valve, plugged.
- d. An actuated liquid withdrawal excess-flow valve, normally closed and plugged, with provision to allow for external actuation.
- e. A plug, blind flange, or plugged companion flange.

2.3.4. Pressure relief devices

- 2.3.4.1. Pressure relief valves shall be equipped with direct spring-loaded pressure relief valves conforming with applicable requirements of UL 132, Standard on Safety Relief Valves for Anhydrous Ammonia and LP-Gas, or other equivalent pressure relief valve standards. See section 6.
- **2.3.4.2.** Pressure relief valves settings for various Tanks shall be as per NFPA 54 and NFPA 58.
- **2.3.4.3.** Shutoff valves shall not be installed between pressure relief devices and the container unless it is a listed pressure relief valve manifold having two pressure relief device and only one pressure relief device in the manifold is designed to shut off at any one time.

2.3.5. Regulators

- 2.3.5.1. Single Stage regulators shall have a maximum outlet pressure settings of 1 psig (7 kPag) and shall be equipped with integral overpressure shutoff device and additionally can be equipped integral pressure relief valve if applicable, that shuts off the flow of LP-Gas vapor when the outlet pressure of the regulator reaches the overpressure limits as per test standards required by Section 6.
- **2.3.5.2.** Two- Stage and second stage regulators shall have a maximum outlet pressure settings of 1 psig (7 kPag) and shall be equipped with integral overpressure shutoff device and additionally can be equipped integral underpressure shutoff device and/overpressure relief valve if applicable, that shuts off the flow of LP-Gas vapor when the outlet pressure of the regulator reaches the overpressure limits as per test standards required by Section 6.

2.3.6. Overfilling prevention devices

2.3.6.1. All Cylinders shall be equipped with listed overfilling prevention devices and a fixed maximum liquid level gauge as per Section 6.

2.3.7. Liquid Level gauging devices

2.3.7.1. All central Tanks filled by volume shall be equipped with listed liquid level gauging devices tested as per Section 6.

