

UL 125

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Valves for Anhydrous Ammonia and LP-Gas (Other Than Safety Relief)

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Underwriters Laboratories Inc. (UL)
333 Pfingsten Road
Northbrook, IL 60062-2096

UL Standard for Safety for Valves for Anhydrous Ammonia and LP-Gas (Other Than Safety Relief), UL 125

Seventh Edition, Dated April 18, 2007

Summary of Topics

This new edition of ANSI/UL 125 includes editorial revisions consisting of updated references and renumbering of the standard. No changes in requirements have been made.

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New product submittals made prior to a specified future effective date will be judged under all of the requirements in this Standard including those requirements with a specified future effective date, unless the applicant specifically requests that the product be judged under the current requirements. However, if the applicant elects this option, it should be noted that compliance with all the requirements in this Standard will be required as a condition of continued Listing, Recognition, and Follow-Up Services after the effective date, and understanding of this should be signified in writing.

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Seventh Edition

April 18, 2007

The most recent designation of ANSI/UL 125 as a Reaffirmed American National Standard (ANS) occurred on April 18, 2007.

This ANSI/UL Standard for Safety, which consists of the Seventh Edition is under continuous maintenance, whereby each revision is ANSI approved upon publication.

An effective date included as a note immediately following certain requirements is one established by Underwriters Laboratories Inc.

Revisions of this Standard will be made by issuing revised or additional pages bearing their date of issue. A UL Standard is current only if it incorporates the most recently adopted revisions, all of which are itemized on the transmittal notice that accompanies the latest set of revised requirements. Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <http://csds.ul.com>.

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INTRODUCTION

1 Scope

1.1 These requirements cover the following types of anhydrous ammonia and liquefied petroleum gas (LP-Gas) valves for use at temperatures within the range of minus 40°F (minus 40°C) to 130°F (55°C):

- a) Shut-off Valves,
- b) Excess Flow Valves,
- c) Back Pressure Check Valves,
- d) Filler Valves,
- e) Vapor Return Valves, and
- f) Actuated Liquid Withdrawal Excess-Flow Valves.

1.2 Valves covered by these requirements are for use in systems and facilities covered in the following Standards:

- a) Safety Requirements for the Storage and Handling of Anhydrous Ammonia, ANSI/CGA G-2.1 (ANSI K61.1);
- b) Liquefied Petroleum Gas Code , NFPA 58; and
- c) Utility LP-Gas Plant Code, NFPA 59.

1.3 These requirements do not cover shut-off valves of the type commonly referred to as "cylinder valves" used on containers constructed under Department of Transportation (DOT) Specifications.

1.4 These requirements do not apply to LP-Gas valves for use on containers or in systems for the following:

- a) Refrigerated storage systems and
- b) Marine and pipeline terminals, chemical plants, natural gas processing plants, refineries or tank farms, where "tank farms" do not include storage at industrial locations.

1.5 These requirements do not apply to valves for anhydrous ammonia for use on containers or in systems for the following:

- a) Refrigerated storage systems,
- b) Ammonia manufacturing plants,
- c) Refrigeration plants where ammonia is used solely as a refrigerant, and
- d) Ammonia transportation pipelines.

1.6 Except for such observations as are required to ascertain performance characteristics, the assigning of pressure and/or flow capacity ratings is not within the scope of these requirements.

1.7 A product that contains features, characteristics, components, materials, or systems new or different from those covered by the requirements in this standard, and that involves a risk of fire or of electric shock or injury to persons shall be evaluated using appropriate additional component and end-product requirements to maintain the level of safety as originally anticipated by the intent of this standard. A product whose features, characteristics, components, materials, or systems conflict with specific requirements or provisions of this standard does not comply with this standard. Revision of requirements shall be proposed and adopted in conformance with the methods employed for development, revision, and implementation of this standard.

2 Service Pressure Rating

2.1 The service pressure rating of a valve intended for use in anhydrous ammonia and/or LP-Gas service shall not be less than 250 pounds per square inch (psi) (1.7 MPa) and shall not exceed 1/5 of its rupture pressure.

3 General

3.1 Components

3.1.1 Except as indicated in 3.1.2, a component of a product covered by this standard shall comply with the requirements for that component.

3.1.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or
- b) Is superseded by a requirement in this standard.

3.1.3 A component shall be used in accordance with its rating established for the intended conditions of use.

3.1.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

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