

# CGA<sup>®</sup>

Compressed Gas Association

The Standard For Safety Since 1913

## **CGA V-16—2023 GUIDELINE FOR THE APPLICATION OF CGA PUBLICATIONS TO CYLINDER VALVES**

**SECOND EDITION**

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NOTE—Technical changes from the previous edition are underlined.

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## 1 Introduction

Several CGA publications have been developed to promote public safety in the use of compressed gas cylinder valves.

## 2 Scope

This guideline helps cylinder valve users, buyers, sellers, manufacturers, and others in the application of the standards to ensure the safe and proper use of cylinders valves.

The following publications are applicable when selecting a cylinder valve; however, specific engineering specifications such as materials of construction, leak tightness, and valve type, are based on end use applications and are the responsibility of the user.

## 3 Definitions

For the purpose of this publication, the following definitions apply.

### 3.1 Publication terminology

#### 3.1.1 Shall

Indicates that the procedure is mandatory. It is used wherever the criterion for conformance to specific recommendations allows no deviation.

#### 3.1.2 Should

Indicates that a procedure is recommended.

#### 3.1.3 May

Indicates that the procedure is optional.

#### 3.1.4 Will

Is used only to indicate the future, not a degree of requirement.

#### 3.1.5 Can

Indicates a possibility or ability.

## 4 Applicable publications

### 4.1 CGA V-9, *Compressed Gas Association Standard for Compressed Gas Cylinder Valves* [1]<sup>1</sup>

This standard informs cylinder valve users, buyers, sellers, manufacturers, and others in the safe and proper use of cylinder valves.

This standard covers cylinder valve design, manufacture, and use including performance requirements such as operating temperature limits, pressure ranges, and flow capabilities. It also includes requirements such as materials, inlet and outlet connections, cleaning, qualification and production testing, maintenance, and reconditioning. This standard also includes guidelines and requirements for the design, material selection, testing, and marking of cylinder valve protective caps. This standard is intended for valves for compressed gases packaged in U.S. Department of Transportation (DOT) and Transport Canada (TC) cylinders. CGA V-9 is incorporated by reference into Title 49 of the U.S. Code of Federal Regulations (49 CFR) by DOT and CSA B340, *Selection and use of cylinders, spheres, tubes, and other containers for the transportation of dangerous goods, Class 2* by TC [1, 2, 3]. The edition incorporated may be different than the current edition available from CGA. Referenced editions are available on [www.cganet.com](http://www.cganet.com). Valves are required to comply with the edition of CGA V-9 referenced in 49 CFR 171.7 and Clause 2 of CSA B340 [1, 2, 3].

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<sup>1</sup> References are shown by bracketed numbers and are listed in order of appearance in the reference section.