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HGV 3.1-2013

# Fuel system components for compressed hydrogen gas powered vehicles

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# Preface

This is the first edition of HGVS 3.1, *Fuel system components for compressed hydrogen gas powered vehicles*.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the NGV 3/HGV 3 Joint Technical Advisory Group on Standards for Fuel System Components for Compressed Natural Gas and Hydrogen Powered Vehicles, under the jurisdiction of the Automotive Technical Committee.

**Interpretations:** “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant committee interpretation has not already been published, CSA’s procedures for interpretation shall be followed to determine the intended safety principle.”

## Notes:

- 1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.
- 2) Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.
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# ***HGV 3.1-2013***

## ***Fuel system components for compressed hydrogen gas powered vehicles***

### **Part 1 General requirements and definitions**

#### **1 Scope**

##### **1.1**

This standard establishes requirements for newly produced compressed hydrogen gas fuel system components, intended for use on hydrogen gas powered vehicles as listed below:

- check valves;
- manual valves;
- manual container valves;
- automatic valves;
- gas injectors;
- pressure indicators;
- pressure regulator;
- pressure relief valves;
- pressure relief devices;
- excess flow valves;
- gas tight housing and ventilation lines and passages;
- rigid fuel lines;
- flexible fuel lines;
- filter housing;
- fittings; and
- discharge line closures.

**Note:** *It is recognized that other components not specifically covered herein can be examined to meet the criteria of HGVS.1 and tested according to the appropriate functional needs.*

##### **1.2**

This standard applies to devices which have a service pressure of either 25MPa, 35MPa, 50MPa, or 70MPa hereinafter referred to in this Standard as the following:

- "H25" - 25 MPa;
- "H35" - 35 MPa;
- "H50" - 50 MPa;
- "H70" - 70 MPa.