

---

---

**Road vehicles — Compressed natural  
gas (CNG) fuel system components —**

**Part 6:  
Automatic valve**

**AMENDMENT 1**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

*Véhicules routiers — Composants des systèmes de combustible gaz  
naturel comprimé (CNG) —*

*Partie 6: Valve automatique*

*ISO 15500-6:2012/Amd 1:2016*

<https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016>



**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 15500-6:2012/Amd 1:2016  
<https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
www.iso.org

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

Amendment 1 to ISO 15500-6:2012 was prepared by Technical Committee ISO/TC 22, *Road Vehicles*, Subcommittee SC 41, *Specific aspects for gaseous fuels*.

<https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[ISO 15500-6:2012/Amd 1:2016](https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016>

# Road vehicles — Compressed natural gas (CNG) fuel system components —

## Part 6: Automatic valve

### AMENDMENT 1

*Page 2, Clause 4*

Add the following after the Note:

In addition to the markings specified above, if the valve is compatible with start/stop systems, one of the following additional marks shall be used for automatic cylinder valves:

- “H1” if the valve is to be used with an engine that shuts off automatically when the vehicle comes to a halt;
- “H2” if the valve is to be used with an engine that, in addition to (a), it also shuts off automatically when the vehicle drives with an electric motor only;
- “H3” if the valve is to be used with an engine that, in addition to (a) or (b), it also shuts off automatically when the accelerator pedal is released

*Page 2, Clause 5*

Replace Clause 5 with the following: <https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-248c1/iso-15500-6-2012-amd-1-2016>

#### **5 Construction and assembly**

The automatic valve shall comply with the applicable provisions of [ISO 15500-1](#) and [ISO 15500-2](#), and with the tests specified in Clause 6. All automatic valves, including solenoid valves, cylinder valves and valves with manual by-pass, shall comply with the tests specified in [Clause 6](#). Tolerances should follow the specifications of ISO 15500-2.

An automatic valve shall be closed when de-energized.

An automatic valve with manual by-pass shall meet the minimum requirements of this part of [ISO 15500](#).

Replace Table 1 with the following:

**Table 1 — Applicable tests**

Test	Applicable	Test procedure as required by ISO 15500-2	Specific test requirements of this part of ISO 15500
Hydrostatic strength	X	X	X (see 6.2)
Leakage	X	X	X (see 6.3)
Excess torque resistance	X	X	
Bending moment	X	X	
Continued operation	X	X	X (see 6.4)
Corrosion resistance	X	X	
Oxygen ageing	X	X	
Ozone ageing	X	X	
Heat Ageing	X	X	
Automotive Fluids	X	X	
Electrical overvoltages	X	X	
Non-metallic material immersion	X	X	
Vibration resistance	X	X	
Brass material compatibility	X	X	
Insulation resistance	X		X (see 6.5)
Minimum opening voltage	X		X (see 6.6)
Pressure impulse	X		X (see 6.7)

<https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016>

Page 4, 6.4

Replace 6.4 with the following:

**6.4.1** Test the automatic valve in accordance with the procedure for testing continued operation given in ISO 15500-2, for 50 000 cycles, but lower the downstream pressure of the test fixture to less than 2 % of working pressure, and perform the leakage test in accordance with 6.3. The valve shall continue to operate according to the manufacturer’s specifications.

**6.4.2** Following cycling and leakage testing, perform the hydrostatic strength test in accordance with 6.2.

**6.4.3** If the automatic valve is to be used in vehicles with start-stop systems, and closed during commanded stop phases, the valve shall be submitted to the following numbers of operations during test:

- a) 200 000 cycles (mark “H1”) if the engine shuts off automatically when the vehicle comes to a halt;
- b) 500 000 cycles (mark “H2”) if, in addition to a), the engine also shuts off automatically when the vehicle drives with the electric motor only;
- c) 1 000 000 cycles (mark “H3”) if, in addition to a) or b), the engine also shuts off automatically when the accelerator pedal is released.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[ISO 15500-6:2012/Amd 1:2016](https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[ISO 15500-6:2012/Amd 1:2016](https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016)  
<https://standards.iteh.ai/catalog/standards/sist/94b82152-a746-4c25-b7b0-4e3f6bc248c1/iso-15500-6-2012-amd-1-2016>