

# DRAFT AMENDMENT

## ISO 15500-9:2012/DAM 1

ISO/TC 22/SC 41

Secretariat: UNI

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

### Part 9: Pressure regulator

### AMENDMENT 1

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

*Partie 9: Régulateur de pression*

*AMENDEMENT 1*

ICS: 43.060.40

**PREVIEW**  
iTeh STANDARD  
(standards.itih.ai)  
Full standard:  
https://standards.itih.ai/catalog/standards/sist/defa2-46-f4d1-4ecc-a49d-fa5ca147067e/iso-15500-9-2012-amd-1  
2016

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Reference number  
ISO 15500-9:2012/DAM 1:2015(E)

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Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
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## 5 Construction and assembly

**5.1** 5.1 The pressure regulator shall comply with the applicable provisions of ISO 15500-1 and ISO 15500-2, and with the tests specified in clause 6 of this part of ISO 15500. [Tolerances should follow the specifications of ISO 15500-2](#)

## 6 Tests

### 6.1 Applicability

The tests required to be carried out are indicated in Table 1.

**Table 1 — Tests applicable**

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 <del>(external)</del>	X <a href="#">(external)</a>	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	
<a href="#">Ozone ageing</a>	<a href="#">X</a>	<a href="#">X</a>	
<a href="#">Heat Ageing</a>	<a href="#">X</a>	<a href="#">X</a>	
<a href="#">Automotive Fluids</a>	<a href="#">X</a>	<a href="#">X</a>	
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)

Water jacket freezing	X		X (see 6.8)
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6.4 ~~Rec~~Cycle the regulator for 95 % of the total number of cycles at room temperature and at the working pressure. Each cycle shall consist of flow until stable outlet pressure has been obtained, after which the gas flow shall be shut off by a downstream valve within 1 s, until the downstream lock-up pressure has stabilized. Stabilized outlet pressures are defined as set pressure  $\pm 15$  % for at least 5 s. The regulator shall comply with 6.3 at room temperature at intervals of 20 %, 40 %, 60 %, 80 % and 100 % of room temperature cycles

#### 6.7.2

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~~The internal impulse test in 6.7.1 tests the reaction of the regulator under a pressure pulse that enters into the first stage chamber, for example if the pressure regulator has no gas in it, the inlet valve is open and the cylinder valve opens instantaneously or the system is connected to a filling dispenser.~~ The external impulse test in this subclause tests the resistance of the inlet valve to pulses on the high pressure side, for example, a pressure regulator with normal working pressure inside but with no pressure in the fuel line and there is a sudden opening of the cylinder valve filled with service pressure.