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

Part 6:  
**Automatic valve**

**AMENDMENT 1**

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

*Partie 6: Valve automatique*

*AMENDEMENT 1*



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# 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:

#### **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)

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.