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BS EN ISO 17268:2016



BSI Standards Publication

Gaseous hydrogen land vehicle refuelling connection devices (ISO 17268:2012)

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This British Standard is the UK implementation of EN ISO 17268:2016. It is identical to ISO 17268:2012. It supersedes BS ISO 17268:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PVE/18, Cryogenic vessels.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected
30 November 2016	This corrigendum renumbers BS ISO 17268:2012 as BS EN ISO 17268:2016

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EUROPÄISCHE NORM

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English Version

Gaseous hydrogen land vehicle refuelling connection devices (ISO 17268:2012)

Dispositifs de raccordement pour le ravitaillement des véhicules terrestres à hydrogène gazeux (ISO 17268:2012)

Gasförmiger Wasserstoff - Anschlussvorrichtungen für die Betankung von Landfahrzeugen (ISO 17268:2012)

This European Standard was approved by CEN on 8 July 2016.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of ISO 17268:2012 has been prepared by Technical Committee ISO/TC 197 "Hydrogen technologies" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 17268:2016 by Technical Committee CEN/TC 268 "Cryogenic vessels and specific hydrogen technologies applications" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 17268:2012 has been approved by CEN as EN ISO 17268:2016 without any modification.

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 17268 was prepared by Technical Committee ISO/TC 197, *Hydrogen technologies*.

This second edition cancels and replaces the first edition (ISO 17268:2006), which has been technically revised.

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Gaseous hydrogen land vehicle refuelling connection devices

1 Scope

This International Standard defines the design, safety and operation characteristics of gaseous hydrogen land vehicle (GHLV) refuelling connectors.

GHLV refuelling connectors consist of the following components, as applicable:

- receptacle and protective cap (mounted on vehicle);
- nozzle.

This International Standard applies to refuelling connectors which have working pressures of 11 MPa, 25 MPa, 35 MPa and 70 MPa, hereinafter referred to in this International Standard as the following:

- H11 – 11 MPa at 15 °C;
- H25 – 25 MPa at 15 °C;
- H35 – 35 MPa at 15 °C;
- H35HF – 35 MPa at 15 °C (high flow for commercial vehicle applications);
- H70 – 70 MPa at 15 °C.

Nozzles and receptacles that meet the requirements of this International Standard will only allow GHLVs to be filled by fuelling stations dispensing hydrogen with nominal working pressures equal to or lower than the vehicle fuel system working pressure. They will not allow GHLV to be filled by fuelling stations dispensing blends of hydrogen with natural gas.

Refuelling connectors dispensing blends of hydrogen with natural gas are excluded from the scope of this International Standard.

NOTE This International Standard can be used for certification purposes.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 1431-1, *Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static and dynamic strain testing*

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

ISO 12103-1, *Road vehicles — Test dust for filter evaluation — Part 1: Arizona test dust*

ISO 14687-2, *Hydrogen fuel — Product specification — Part 2: Proton exchange membrane (PEM) fuel cell applications for road vehicles*

ISO 15501-1, *Road vehicles — Compressed natural gas (CNG) fuel systems — Part 1: Safety requirements*