



BSI Standards Publication

Gaseous hydrogen land vehicle refuelling connection devices

Part 1: Flow capacities up to and including 120 g/s

This is a preview of BS EN ISO 17268-1:2025. [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN ISO 17268-1:2025. It is identical to ISO 17268-1:2025. Together with BS EN ISO 17268-2, it supersedes BS EN ISO 17268:2020, which will be withdrawn on publication of BS EN ISO 17268-2.

The UK participation in its preparation was entrusted to Technical Committee GSE/6.

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

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Supersedes EN ISO 17268:2020

English Version

Gaseous hydrogen land vehicle refuelling connection devices - Part 1: Flow capacities up to and including 120 g/s (ISO 17268-1:2025)

Dispositifs de raccordement pour le ravitaillement des véhicules terrestres en hydrogène gazeux - Partie 1: Capacités de débit jusqu'à 120 g/s inclus (ISO 17268-1:2025)

Gasförmiger Wasserstoff - Anschlussvorrichtungen für die Betankung von Landfahrzeugen - Teil 1: Durchflussmengen bis einschließlich 120g/s (ISO 17268-1:2025)

This European Standard was approved by CEN on 2 May 2025.

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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
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 17268-1:2025) has been prepared by Technical Committee ISO/TC 197 "Hydrogen technologies " in collaboration with 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of an identical text or by endorsement, at the latest by February 2026, and conflicting national standards shall be withdrawn at the latest by February 2026.

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

This document supersedes EN ISO 17268:2020.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO 17268-1:2025 has been approved by CEN as EN ISO 17268-1:2025 without any modification.

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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 document 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).

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This document was prepared by Technical Committee ISO/TC 197, *Hydrogen technologies*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 268, *Cryogenic vessels and specific hydrogen technologies applications*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 17268-1, together with ISO 17268-2, cancels and replaces ISO 17268:2020.

A list of all parts in the ISO 17268 series can be found on the ISO website.

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Gaseous hydrogen land vehicle refuelling connection devices —

Part 1: Flow capacities up to and including 120 g/s

1 Scope

This document specifies 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;
- communication hardware.

This document is applicable to refuelling connectors which have nominal working pressures or hydrogen service levels up to 70 MPa and maximum flow rates up to 120 g/s.

This document is not applicable to refuelling connectors dispensing blends of hydrogen with natural gas.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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 contaminants for filter evaluation — Part 1: Arizona test dust*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

communication hardware

infrared data association (IrDA) components which are used to transmit signals from the vehicle (*receptacle*) (3.19) to the dispenser (*nozzle*) (3.14) and designed to meet SAE J2799 or equivalent