

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 Together with BS EN ISO 17268-2, it supersedes BS EN ISO 17268:2020, which will be withdrawn on publication of BS EN ISO 17268-2.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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EUROPÄISCHE NORM

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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 120 g/s (ISO 17268-1:2025)

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

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

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of an identical text or by endorsement, at the latest by February 2026, and conflicting national standards shall be withdrawn at the latest by February 2026.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.

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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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Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General construction requirements	4
5 Nozzles	7
6 Receptacles	9
7 Design verification test procedures	10
7.1 General requirements	10
7.2 Test conditions	10
7.3 Nozzle tests	10
7.4 Receptacle tests	10
7.5 User — Machine interface test	11
7.6 Dropping test	11
7.7 Leakage at room temperature test	12
7.8 Valve operating handle test	12
7.9 Receptacle vibration resistance test	12
7.10 Abnormal loads test	12
7.11 Low and high temperatures test	13
7.11.1 Purpose	13
7.11.2 General	13
7.11.3 Leakage tests	13
7.12 Operation tests	14
7.13 Durability and maintainability test	14
7.13.1 Purpose	14
7.13.2 Nozzle durability test	14
7.13.3 Receptacle check valve durability test	15
7.13.4 Receptacle durability test	15
7.13.5 Connector durability test	16
7.14 Sealing material aging test	16
7.14.1 Purpose	16
7.14.2 Oxygen aging test procedure	16
7.14.3 Ozone aging test procedure	16
7.15 Non-metallic material hydrogen resistance test	16
7.16 Electrical resistance test	17
7.17 Hydrostatic strength test	17
7.18 Corrosion resistance test	17
7.18.1 Purpose	17
7.18.2 General	17
7.18.3 Nozzle test	17
7.18.4 Receptacle test	18
7.19 Deformation test	18
7.20 Contamination test	18
7.21 Thermal cycle test	18
7.22 Misconnected nozzle test	18
7.23 Upward/downward compatibility test	20
7.23.1 General	20
7.23.2 Upward/downward compatibility test	20
7.23.3 Other fuels receptacles incompatibility test	20
7.24 Washout test	20
7.25 User abuse test	21
7.26 Cold gas test	21
7.27 Rocking test	22

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

8	Instructions	23
9	Marking	24
9.1	Mandatory information	24
9.2	Non-mandatory information	24
Annex A (normative)	Receptacle/nozzle interface envelope	25
Annex B (normative)	Hydrogen receptacles	26
Annex C (normative)	Loose fit test fixtures	33
Annex D (normative)	Tight fit test fixtures	39
Annex E (normative)	Wear pattern test fixtures	45
Annex F (informative)	Example Hex Design	51
Annex G (normative)	Pressure drop test	52
Annex H (normative)	Required test fixtures	55
Bibliography		56

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

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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.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This corrected version of ISO 17268-1:2025 incorporates the following corrections:

- [Figures B.2, B.5, C.1](#) and [D.6](#) have been corrected;
- caption of [Figure E.1](#) corrected;
- text in [7.18.3](#) and [7.18.4](#) corrected to "The salt spray solution shall consist of 50 g/kg of sodium chloride and 950 g/kg of distilled water."

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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