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Gas cylinders - Specifications and testing of LPG cylinder valves - Manually operated (ISO 15995:2019)

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 23.020.35

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EUROPEAN STANDARD

NORME EUROPÉENNE

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English Version

Gas cylinders - Specifications and testing of LPG cylinder valves - Manually operated (ISO 15995:2019)

Bouteilles à gaz - Spécifications et essais pour valves de bouteilles de GPL - Fermeture manuelle (ISO 15995:2019)

Gasflaschen - Spezifikation und Prüfung von Flaschenventilen für Flüssiggas (LPG) - Handbetätigt (ISO 15995:2019)

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

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European foreword

This document (EN ISO 15995:2019) has been prepared by Technical Committee ISO/TC 58 "Gas cylinders" in collaboration with Technical Committee CEN/TC 286 “Liquefied petroleum gas equipment and accessories” the secretariat of which is held by NSAI.

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of an identical text or by endorsement, at the latest by March 2020, and conflicting national standards shall be withdrawn at the latest by March 2020.

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Endorsement notice

The text of ISO 15995:2019 has been approved by CEN as EN ISO 15995:2019 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.

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 documents 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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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 58, *Gas cylinders*, Subcommittee SC 2, *Cylinder fittings*.

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 second edition cancels and replaces the first edition (ISO 15995:2006) which has been technically revised. The main changes compared to the previous edition are as follows:

— introduction of new definitions;

— change of informative Annex on production testing to normative Annex;

— new requirement for the valve to withstand vibration during transport and introduction of vibration testing;

— restructure of Clause 5, valve type testing;

— removal of valve testing after ageing;

— increase of valve test pressure for leak tightness tests;

— introduction of excess flow valve testing; and

— introduction of non-return valve testing.

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Introduction

This document covers the function of a LPG cylinder valve as a closure (defined by the UN Model Regulations[15]).

This document has been written so that it is suitable to be referenced in the UN Model Regulations.

Cylinder valves complying with this document can be expected to perform satisfactorily under normal service conditions.

Considering the changes described in the Foreword, when an LPG cylinder valve has been approved according to the previous version of this document the body responsible for approving the same LPG cylinder valve to this new edition should consider which tests need to be performed.

In this document the unit bar is used, due to its universal use in the field of technical gases. It should, however, be noted that bar is not an SI unit, and that the corresponding SI unit for pressure is Pa (1 bar = 10^5 Pa = 10^5 N/m^2).

Pressure values given in this document are given as gauge pressure (pressure exceeding atmospheric pressure) unless noted otherwise.

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Gas cylinders — Specifications and testing of LPG cylinder valves — Manually operated

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1 Scope

This document specifies the requirements for design, specification, type testing and production testing and inspection of dedicated LPG manually operated cylinder valves for use with and directly connected to transportable refillable LPG cylinders.

It also includes requirements for associated equipment for vapour and liquid service. Bursting discs and/or fusible plugs are not covered in this document.

Annex B identifies requirements for production testing and inspection.

This document excludes other LPG cylinder devices which are not an integral part of the dedicated manually operated cylinder valve.

This document does not apply to cylinder valves for fixed automotive installations and ball valves.

NOTE For self-closing LPG cylinder valves see ISO 14245. For cylinder valves for compressed, dissolved and other liquefied gases see ISO 10297[2], ISO 17871[6] or ISO 17879[7].

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 11114-1, *Gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 1: Metallic materials*

ISO 11114-2, *Gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 2: Non-metallic materials*

ISO 2859-1:1999, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 13341, *Gas cylinders — Fitting of valves to gas cylinders*

ISO 10286, *Gas cylinders — Terminology*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10286 and the following apply. ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

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