

## საქართველოს სტანდარტი

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გაზის წნევის რეგულატორები 10 მპა-მდე (100 ბარი) შემავალი წნევისთვის

# სსტ ენ 334:2019/2024

## საინფორმაციო მონაცემები

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Gas pressure regulators for inlet pressure up to 10 MPa  
(100 bar)

Régulateurs de pression de gaz pour des pressions  
amont jusqu'à 10 MPa (100 bar)

Gas-Druckregelgeräte für Eingangsdrücke bis 10 MPa  
(100 bar)

This European Standard was approved by CEN on 23 April 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 334:2019) has been prepared by Technical Committee CEN/TC 235 "Gas pressure regulators and associated safety devices for use in gas transmission and distribution", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by February 2020, and conflicting national standards shall be withdrawn at the latest by February 2020.

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 334:2005+A1:2009.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

In comparison with the previous edition, the following technical modifications have been made:

- normative references have been updated;
- terms and definitions have been added;
- flange ratings as per the available European Standards both with PN and class designations have been included: PN 20 and PN 50 flanges, as per ISO 7005-2, concern spheroidal graphite cast iron only, because at the time of writing, there was no EN standard available for class designation;
- minimum requirements for elastomeric materials following the approach already have been adopted for metallic materials;
- “fail open” and “fail close” characteristics have been improved as per the CEN rules i.e. implementing for each characteristics, where originally missed, the relevant requirement/test method/ acceptance criteria;
- provisions for surveillance in use have been included, as already done for SSDs in EN 14382;
- closing force for stand-by monitor when classified as safety accessory to PED as already done for SSD when classified as safety accessory to PED;
- antistatic characteristics;
- statistical strength test on the basis of PED provisions;
- definition of  $C_g$  flow coefficient and an improvement of  $K_g$  flow coefficient by adding the definition/test method/notice of its limits;
- improvement of the functional performance classification;
- Annex G – Materials has been updated;

- requirements/test procedure and acceptance criteria for non-metallic materials have been updated;
- vent limiter as possible fixture to be assembled in the pressure regulators;
- integration of environmental requirements;
- alignment of Normative references (Clause 2), Annex G, Annex ZA and its relevant clauses to CEN rules;
- the standard has been editorially revised.

This document can be used as a guideline for gas pressure regulators outside the ranges specified in this standard. This edition has introduced the application of statistical strength testing for series produced pressure and safety accessories on the basis of EU Directive 2014/68/EU, Annex I, Article 3.2.2 and Guideline H-14. Gas pressure regulators dealt with in this document are considered as standard pressure equipment in accordance with Clause 2 a) of Art. 1 of Pressure Equipment Directive 2014/68/EU (PED).

Gas pressure regulators according to this European Standard do not have their own source of ignition. However, the manufacturer is responsible to identify any potential ignition sources of his product which could be effective during the intended use<sup>1)</sup>.

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

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1) Therefore gas pressure regulators are usually not within the scope of ATEX European legislation on equipment and protective systems intended for use in potentially explosive atmospheres. Any additional component (e.g. proximity switch, travel transducer etc.) should be independently considered in the framework of assemblies as per ATEX 2014/34/EU Guidelines – 2nd Edition - December2017 clauses § 44 “Combined equipment (assemblies)”, § 46 “Components” and § 94 “Written attestation of conformity for components”.