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Industrial valves - Gearboxes for valves (ISO 22109:2026)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN ISO 22109:2026 sisaldab Euroopa standardi EN ISO 22109:2026 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 25.02.2026.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN ISO 22109:2026 consists of the English text of the European standard EN ISO 22109:2026.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 25.02.2026.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 23.060.01

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EUROPEAN STANDARD

EN ISO 22109

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN ISO 22109:2020

English Version

Industrial valves - Gearboxes for valves (ISO 22109:2026)

Robinetterie industrielle - Réducteurs pour appareil de robinetterie (ISO 22109:2026)

Industriearmaturen - Armaturengetriebe (ISO 22109:2026)

This European Standard was approved by CEN on 31 January 2026.

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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

European foreword

This document (EN ISO 22109:2026) has been prepared by Technical Committee ISO/TC 153 "Valves" in collaboration with Technical Committee CEN/TC 69 "Industrial valves" 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of an identical text or by endorsement, at the latest by August 2026, and conflicting national standards shall be withdrawn at the latest by August 2026.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 22109:2020.

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 22109:2026 has been approved by CEN as EN ISO 22109:2026 without any modification.



**International
Standard**

ISO 22109

**Industrial valves — Gearboxes for
valves**

*Robinetterie industrielle — Réducteurs pour appareil de
robinetterie*

**Second edition
2026-02**

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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 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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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 153, *Valves*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 69, *Industrial valves*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 22109:2020), which has been technically revised.

The main changes are as follows:

- the rated torques 32 001 to 250 000 were added to [Table 2](#);
- the mechanical advantage for gearboxes other than worm gearboxes was added to [5.4.2](#) and [5.4.3](#);
- the mechanical advantage along the stroke has been changed to above 80 % of the initial values in [Clause A.5](#);
- editorial changes were made.

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.

Industrial valves — Gearboxes for valves

1 Scope

This document specifies basic requirements for gearboxes to operate industrial valves for manual and automated on/off and modulating duties, including manual override gearboxes. It includes guidelines for classification, design and methods for conformity assessment.

This document does not cover gear systems which are an integral part in the design of valves and subsea gearboxes.

Other requirements or conditions of use different from those indicated in this document are agreed between the purchaser and the manufacturer or supplier (first party) prior to order.

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 5210, *Industrial valves — Multi-turn valve actuator attachments*

ISO 5211, *Industrial valves — Part-turn actuator attachments*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

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

gearbox

self-contained gear unit for torque/thrust/speed/orientation change that can be manually operated and/or automated with an actuator

3.2

ambient temperature

temperature of the environment surrounding the *gearbox* (3.1)

3.3

end of travel

predefined position related to a fully open or a fully closed condition

3.4

end stop

mechanical device designed to stop the *gearbox* (3.1) drive train movement