



SLOVENSKI STANDARD
SIST EN ISO 22109:2020

01-marec-2020

Industrijski ventili - Gonila za ventile (ISO 22109:2020)

Industrial valves - Gearbox for valves (ISO 22109:2020)

Industriearmaturen - Armaturengetriebe (ISO 22109:2020)

Robinetterie industrielle - Réducteur pour appareil de robinetterie (ISO 22109:2020)

Ta slovenski standard je istoveten z: EN ISO 22109:2020

[SIST EN ISO 22109:2020](https://standards.iteh.ai/catalog/standards/sist/c7f012f1-9ec8-4673-9b69-c1ef2779c091/sist-en-iso-22109-2020)

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ICS:

23.060.01 Ventili na splošno Valves in general

SIST EN ISO 22109:2020

en

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EUROPEAN STANDARD

EN ISO 22109

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2020

ICS 23.060.01

English Version

Industrial valves - Gearbox for valves (ISO 22109:2020)

Robinetterie industrielle - Réducteur pour appareil de robinetterie (ISO 22109:2020)

Industriearmaturen - Armaturengetriebe (ISO 22109:2020)

This European Standard was approved by CEN on 3 January 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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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 22109:2020) 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of an identical text or by endorsement, at the latest by July 2020, and conflicting national standards shall be withdrawn at the latest by July 2020.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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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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INTERNATIONAL
STANDARD

ISO
22109

First edition
2020-01

Industrial valves — Gearbox for valves

Robinetterie industrielle — Réducteur pour appareil de robinetterie

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Reference number
ISO 22109:2020(E)

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Published in Switzerland

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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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).

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 — Gearbox for valves

1 Scope

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

It does not cover gear systems which are 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 terminological databases for use in standardization at the following addresses:

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

3.1

gearbox

self-contained gear unit for torque/thrust/speed/orientation change that can be manually operated by handwheel/lever 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

3.5

endurance

lifetime without failure at specified conditions and tested by the type test