SLOVENSKI STANDARD
SIST EN IEC 60534-4:2022

01-junij-2022

Nadomešča:
SIST EN 60534-4:2007

Regulacijski ventili za industrijske procese - 4. del: Preverjanje in rutinsko preskušanje (IEC 60534-4:2021)

Industrial-process control valves - Part 4: Inspection and routine testing (IEC 60534-4:2021)

Stellventile für die Prozessregelung - Teil 4: Abnahme und Prüfungen (IEC 60534-4:2021)

Vannes de régulation des processus industriels - Partie 4: Inspection et essais individuels de série (IEC 60534-4:2021)

Ta slovenski standard je istoveten z: EN IEC 60534-4:2022

ICS:

23.060.40	Tlačni regulatorji	Pressure regulators
25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control

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EUROPEAN STANDARD

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EN IEC 60534-4

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Supersedes EN 60534-4:2006 and all of its amendments and corrigenda (if any)

English Version

Industrial-process control valves - Part 4: Inspection and routine testing (IEC 60534-4:2021)

Vannes de régulation des processus industriels - Partie 4: Inspection et essais individuels de série (IEC 60534-4:2021)

Stellventile für die Prozessregelung - Teil 4: Abnahme und Prüfungen (IEC 60534-4:2021)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

European foreword

The text of document 65B/1208/FDIS, future edition 4 of IEC 60534-4:2021, prepared by SC 65B "Measurement and control devices" of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60534-4:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022–10–20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025–01–20

This document supersedes EN 60534-4:2006 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 60534-4:2021 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61298 (series) NOTE Harmonized as EN 61298 (series)

ISO 15848-2 NOTE Harmonized as EN ISO 15848-2

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60534 (series)	-	Industrial-process control valves	EN 60534 (series)	-

IEC 60534-4

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Industrial-process control valves – Part 4: Inspection and routine testing

Vannes de régulation des processus industriels – Partie 4: Inspection et essais individuels de série

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INDUSTRIAL-PROCESS CONTROL VALVES –

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FOREWORD

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IEC 60534-4 has been prepared by subcommittee 65B: Measurement and control devices, of IEC technical committee 65: Industrial-process measurement, control and automation. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2006. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) remove details about hydrostatic test but state that to be performed according to valve design code;
b) include mandatory test for valve packing;
c) put in evidence limits of reduced differential pressure seat leakage test procedure;
d) introduce details about low temperature seat leakage test;
e) extend dimensional range for leakage class VI to less than 25 mm and over 400 mm seat diameter;

f) include stroking time tests.

The text of this International Standard is based on the following documents:

Draft	Report on voting
65B/1208/FDIS	65B/1211/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 60534 series, published under the general title *Industrial-process control valves*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INDUSTRIAL-PROCESS CONTROL VALVES –

Part 4: Inspection and routine testing

1 Scope

This part of IEC 60534 specifies the requirements for the inspection and routine testing of control valves manufactured in conformity with the other parts of IEC 60534.

This document is applicable to valves with pressure ratings not exceeding Class 2500. The requirements for actuators apply only to pneumatic actuators.

This document does not apply to the types of control valves where radioactive service, fire safety testing, or other hazardous service conditions are encountered. If a standard for hazardous service conflicts with the requirements of this document, the standard for hazardous service should take precedence.

NOTE This document can be extended to higher pressure ratings by agreement between the purchaser and the manufacturer.

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.

IEC 60534 (all parts), *Industrial-process control valves*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in the IEC 60534 series and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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

3.1
bench range
range of pressures to the actuator within which the nominal travel is performed in both directions, with no pressure in the valve, but including friction forces

Note 1 to entry: The actuator operating range, i.e. when the valve is installed under actual process conditions, will be different from the bench range.

3.2
dead band
finite range of values within which reversal of the input variable does not produce any noticeable change in the output variable (see Figure 1)