
Regulacijski ventili za industrijske procese - 8-1. del: Šum - Laboratorijske meritve šuma, ki ga proizvaja aerodinamični pretok skozi regulacijske ventile (IEC 60534-8-1:2005)

(istoveten EN 60534-8-1:2005)

Industrial-process control valves - Part 8-1: Noise considerations - Laboratory measurement of noise generated by aerodynamic flow through control valves (IEC 60534-8-1:2005)

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EN 60534-8-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2005

ICS 23.060.40; 17.140.20; 25.040.40

Supersedes EN 60534-8-1:2000

English version

**Industrial-process control valves
Part 8-1: Noise considerations -
Laboratory measurement of noise
generated by aerodynamic flow
through control valves
(IEC 60534-8-1:2005)**

Vannes de régulation des processus
industriels
Partie 8-1: Considérations sur le bruit -
Mesure en laboratoire du bruit créé
par un débit aérodynamique
à travers une vanne de régulation
(CEI 60534-8-1:2005)

Stellventile für die Prozessregelung
Teil 8-1: Geräuschbetrachtungen -
Laboratoriumsmessungen von
Geräuschen bei gasdurchströmten
Stellventilen
(IEC 60534-8-1:2005)

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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 65B/558/FDIS, future edition 2 of IEC 60534-8-1, prepared by SC 65B, Devices, of IEC TC 65, Industrial-process measurement and control, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60534-8-1 on 2005-09-01.

This European Standard supersedes EN 60534-8-1:2000.

This standard has been revised to obtain consistency in describing the methods for measuring internal and external sound pressure measurements and to update the description of the instrumentation from analog to digital.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2006-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2008-09-01

Annex ZA has been added by CENELEC.

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Endorsement notice

[SIST EN 60534-8-1:2007](https://standards.iteh.ai/catalog/standards/sist/60534-8-1-2007)

The text of the International Standard IEC 60534-8-1:2005 was approved by CENELEC as a European Standard without any modification.

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Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

The following referenced documents are indispensable for the application 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 Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60534	Series	Industrial-process control valves	EN 60534	Series
IEC 60534-1	- ¹⁾	Part 1: Control valve terminology and general considerations	EN 60534-1	2005 ²⁾
IEC 60534-2-3	- ¹⁾	Part 2-3: Flow capacity - Test procedures	EN 60534-2-3	1998 ²⁾
IEC 60534-8-3	- ¹⁾	Part 8-3: Noise considerations - Control valve aerodynamic noise prediction method	EN 60534-8-3	2000 ²⁾
IEC 61260	- ¹⁾	Electroacoustics - Octave-band and fractional-octave-band filters	EN 61260	1995 ²⁾
IEC 61672-1	2002	Electroacoustics - Sound level meters Part 1: Specifications	EN 61672-1	2003
ISO 3744	1994	Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane	EN ISO 3744	1995
ISO 3745	2003	Acoustics - Determination of sound power levels of noise sources using sound pressure - Precision methods for anechoic and hemi-anechoic rooms	EN ISO 3745	2003

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

60534-8-1

Deuxième édition
Second edition
2005-09

Vannes de régulation des processus industriels –

Partie 8-1:

Considérations sur le bruit –

**Mesure en laboratoire du bruit créé par un débit
aérodynamique à travers une vanne de régulation**

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Industrial-process control valves –

SIST EN 60534-8-1:2007

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Part 8-1:

Noise considerations –

**Laboratory measurement of noise generated
by aerodynamic flow through control valves**

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Commission Electrotechnique Internationale
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INDUSTRIAL-PROCESS CONTROL VALVES –**Part 8-1: Noise considerations –
Laboratory measurement of noise generated
by aerodynamic flow through control valves**

FOREWORD

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International Standard IEC 60534-8-1 has been prepared by subcommittee 65B: Devices, of IEC technical committee 65: Industrial-performance measurement and control.

This second edition cancels and replaces the first edition published in 1986. This edition constitutes a technical revision.

This standard has been revised to obtain consistency in describing the methods for measuring internal and external sound pressure measurements and to update the description of the instrumentation from analog to digital.

The text of this standard is based on the following documents:

FDIS	Report on voting
65B/558/FDIS	65B/567/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 60534 comprises the following parts, under the general title *Industrial-process control valves*:

- Part 1: Control valve terminology and general considerations
- Part 2-1: Flow capacity – Sizing equations for fluid flow under installed conditions
- Part 2-3: Flow capacity – Test procedures
- Part 2-4: Flow capacity – Inherent flow characteristics and rangeability
- Part 2-5: Flow capacity – Sizing equations for fluid flow through multistage control valves with interstage recovery
- Part 3-1: Dimensions – Face-to-face dimensions for flanged, two-way, globe-type, straight pattern and centre-to-face dimensions for flanged, two-way, globe-type, angle pattern control valves
- Part 3-2: Dimensions – Face-to-face dimensions for rotary control valves except butterfly valves
- Part 3-3: Dimensions – End-to-end dimensions for butt-weld, two-way, globe-type, straight pattern control valves
- Part 4: Inspection and routine testing
- Part 5: Marking
- Part 6-1: Mounting details for attachment of positioners to control valves – Positioner mounting on linear actuators
- Part 6-2: Mounting details for attachment of positioners to control valves – Positioner mounting on rotary actuators
- Part 7: Valve data sheet
- Part 8-1: Noise considerations – Laboratory measurement of noise generated by aerodynamic flow through control valves
- Part 8-2: Noise considerations – Laboratory measurement of noise generated by hydrodynamic flow through control valves
- Part 8-3: Noise considerations – Control valve aerodynamic noise prediction method
- Part 8-4: Noise considerations – Prediction of noise generated by hydrodynamic flow
- Part 9: Test procedure for response measurements from step inputs (under consideration)

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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