

**Industrial-process control valves - Part 2-4: Flow capacity - Inherent flow characteristics and rangeability**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60534-2-4:2009 sisaldb Euroopa standardi EN 60534-2-4:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 60534-2-4:2009 consists of the English text of the European standard EN 60534-2-4:2009.
Standard on kinnitatud Eesti Standardikeskuse 31.07.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 31.07.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kätesaadavaks tegemise kuupäev on 19.06.2009.	Date of Availability of the European standard text 19.06.2009.
Standard on kätesaadav Eesti standardiorganisatsionist.	The standard is available from Estonian standardisation organisation.

**ICS** 23.060.40, 25.040.40

### Standardite reproduutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
Aru 10 Tallinn 10317 Eesti; [www.evs.ee](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

### Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:  
Aru str 10 Tallinn 10317 Estonia; [www.evs.ee](http://www.evs.ee); Phone: +372 605 5050; E-mail: [info@evs.ee](mailto:info@evs.ee)

English version

**Industrial-process control valves -  
Part 2-4: Flow capacity -  
Inherent flow characteristics and rangeability  
(IEC 60534-2-4:2009)**

Vannes de régulation  
des processus industriels -  
Partie 2-4: Capacité d'écoulement -  
Caractéristiques intrinsèques de débit  
et coefficient intrinsèque de réglage  
(CEI 60534-2-4:2009)

Stellventile für die Prozessregelung -  
Teil 2-4: Durchflusskapazität -  
Inhärente Durchflusskennlinien  
und Stellverhältnis  
(IEC 60534-2-4:2009)

This European Standard was approved by CENELEC on 2009-06-01. CENELEC 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 Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 65B/704/FDIS, future edition 2 of IEC 60534-2-4, prepared by SC 65B, Devices & process analysis, of IEC TC 65, Industrial-process measurement, control and automation, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60534-2-4 on 2009-06-01.

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) 2010-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-06-01

Annex ZA has been added by CENELEC.

---

## Endorsement notice

The text of the International Standard IEC 60534-2-4:2009 was approved by CENELEC as a European Standard without any modification.

**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 When 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 60534-1	2005	Industrial-process control valves - Part 1: Control valve terminology and general considerations	EN 60534-1	2005
IEC 60534-2-3	- <sup>1)</sup>	Industrial-process control valves - Part 2-3: Flow capacity - Test procedures	EN 60534-2-3	1998 <sup>2)</sup>

---

<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

## INDUSTRIAL-PROCESS CONTROL VALVES –

### Part 2-4: Flow capacity – Inherent flow characteristics and rangeability

#### 1 Scope

This part of IEC 60534 applies to all types of industrial-process control valves. It defines how to state typical control valve inherent flow characteristics and inherent rangeabilities. It also defines how to establish criteria for adherence to manufacturer-stated flow characteristics.

#### 2 Normative references

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 or the referenced document (including any amendments) applies.

IEC 60534-1:2005, *Industrial-process control valves – Part 1: Control valve terminology and general considerations*

IEC 60534-2-3, *Industrial-process control valves – Part 2-3: Flow capacity – Test procedures*