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Standards

Irish Standard  
I.S. EN 60534-7:2010

# Industrial-process control valves -- Part 7: Control valve data sheet (IEC 60534 -7:2010 (EQV))

## I.S. EN 60534-7:2010

*Incorporating amendments/corrigenda issued since publication:*

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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**EUROPEAN STANDARD**

**EN 60534-7**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

December 2010

ICS 23.060.40; 25.040.40

English version

**Industrial-process control valves -  
Part 7: Control valve data sheet  
(IEC 60534-7:2010)**

Vannes de régulation des processus  
industriels -  
Partie 7: Grille de définition de vanne de  
régulation  
(CEI 60534-7:2010)

Stellventile für die Prozessregelung -  
Teil 7: Datenblatt für Stellventile  
(IEC 60534-7:2010)

This European Standard was approved by CENELEC on 2010-12-01. 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, Croatia, 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

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## **Foreword**

The text of document 65B/756/FDIS, future edition 2 of IEC 60534-7, 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 60534-7 on 2010-12-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- |  |       |            |
|--|-------|------------|
| – latest date by which the EN has to be implemented<br>at national level by publication of an identical<br>national standard or by endorsement | (dop) | 2011-09-01 |
| – latest date by which the national standards conflicting<br>with the EN have to be withdrawn  | (dow) | 2013-12-01 |

Annex ZA has been added by CENELEC.

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## **Endorsement notice**

The text of the International Standard IEC 60534-7:2010 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 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 60529	2001	Degrees of protection provided by enclosures - (IP Code)		-
IEC 60534	Series	Industrial-process control valves	EN 60534	Series
IEC 60534-1	2005	Industrial-process control valves - Part 1: Control valve terminology and general considerations	EN 60534-1	2005
IEC 60534-2-1	1998	Industrial-process control valves - Part 2-1: Flow capacity - Sizing equations for fluid flow under installed conditions	EN 60534-2-1	1998
IEC 60534-2-4	2009	Industrial-process control valves - Part 2-4: Flow capacity - Inherent flow characteristics and rangeability	EN 60534-2-4	2009
IEC 60534-2-5	2003	Industrial-process control valves - Part 2-5: Flow capacity - Sizing equations for fluid flow through multistage control valves with interstage recovery	EN 60534-2-5	2003
IEC 60534-3-1	2000	Industrial-process control valves - 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	EN 60534-3-1 + corr. July	2000 2000
IEC 60534-3-2	2001	Industrial-process control valves - Part 3-2: Dimensions - Face-to-face dimensions for rotary control valves except butterfly valves	EN 60534-3-2	2001
IEC 60534-3-3	1998	Industrial-process control valves - Part 3-3: Dimensions - End-to-end dimensions for butt-weld, two-way, globe-type, straight pattern control valves	EN 60534-3-3	1998
IEC 60534-4	2006	Industrial process control valves - Part 4: Inspection and routine testing	EN 60534-4	2006
IEC 60534-5	2004	Industrial-process control valves - Part 5: Marking	EN 60534-5	2004

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60534-8-1	2005	Industrial-process control valves - Part 8-1: Noise considerations - Laboratory measurement of noise generated by aerodynamic flow through control valves	EN 60534-8-1	2005
IEC 60534-8-3	2000	Industrial-process control valves - Part 8-3: Noise considerations - Control valve aerodynamic noise prediction method	EN 60534-8-3	2000
IEC 60534-8-4	2005	Industrial-process control valves - Part 8-4: Noise considerations - Prediction of noise generated by hydrodynamic flow	EN 60534-8-4	2005

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **INDUSTRIAL-PROCESS CONTROL VALVES –**

#### **Part 7: Control valve data sheet**

### FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60534-7 has been prepared by subcommittee 65B: Devices and process analysis, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 1989. This edition constitutes a technical revision.

The main changes with respect to the previous edition are listed below:

- the standard has been updated to reflect digital electronic accessories and fieldbus protocols;
- to aid clarification, the explanation of terms and definitions contains the same subheading as the information required in the control valve data sheet;
- the column numbering system has been replaced with descriptive title headings.

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

FDIS	Report on voting
65B/756/FDIS	65B/771/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.

A list of all parts of 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 publication will remain unchanged until the stability 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
- amended.

## INTRODUCTION

The writing of control valve specifications is an extremely important segment of the complete design, purchase and manufacturing of any process control system.

If the wrong control valve is specified, due to either incomplete or erroneous specification, the replacement of that valve becomes costly to both the user and the control valve manufacturer and often results in undue project delay. Therefore, many of the important control valve users and contractors have developed their own standard data sheets to eliminate as much misunderstanding as possible regarding the valve specifications.

To avoid confusion between valve manufacturers, users and contractors, standardisation of the datasheet is required.

The purpose of a standard control valve data sheet is to promote uniformity, both in content and form. General use of this form by contractors, users and manufacturers offers many advantages. For example:

- assisting in preparation of a complete specification by listing and providing space for all principal descriptive options;
- promoting uniform terminology;
- facilitates quoting, purchasing, receiving, accounting and ordering procedures by uniform display of information;
- providing a useful permanent record and information for checking;
- improving efficiency from initial concept to the final installation.

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