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**Ergonomic requirements for office work with visual display terminals (VDTs) - Part 4: Keyboard requirements (ISO 9241-4:1998)**

Ergonomic requirements for office work with visual display terminals (VDTs) - Part 4: Keyboard requirements (ISO 9241-4:1998)

Ergonomische Anforderungen für Bürotätigkeiten mit Bildschirmgeräten - Teil 4: Anforderungen an die Tastatur (ISO 9241-4:1998)

Exigences ergonomiques pour travail de bureau avec terminaux a écrans de visualisation (TEV) - Partie 4: Exigences relatives aux claviers (ISO 9241-4:1998)

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**Ta slovenski standard je istoveten z: EN ISO 9241-4:1998**

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**ICS:**

|        |  |  |
|--------|--|--|
| 13.180 | Ergonomija                               | Ergonomics                                 |
| 35.180 | Terminalska in druga periferna oprema IT | IT Terminal and other peripheral equipment |

**SIST EN ISO 9241-4:2001****en**

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EUROPEAN STANDARD  
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EN ISO 9241-4

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English version

Ergonomic requirements for office work with visual display  
terminals (VDTs) - Part 4: Keyboard requirements (ISO 9241-  
4:1998)

Exigences ergonomiques pour travail de bureau avec  
terminaux à écrans de visualisation (TEV) - Partie 4:  
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Ergonomische Anforderungen für Bürotätigkeiten mit  
Bildschirmgeräten - Teil 4: Anforderungen an die Tastatur  
(ISO 9241-4:1998)

This European Standard was approved by CEN on 1 July 1998.

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 Central Secretariat or to any CEN 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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Page 2  
EN ISO 9241-4:1998

## Foreword

The text of the International Standard ISO 9241-4:1998 has been prepared by Technical Committee ISO/TC 159 "Ergonomics" in collaboration with CEN/CS.

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 February 1999, and conflicting national standards shall be withdrawn at the latest by February 1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 9241-4:1998 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

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**Annex ZA (normative)**  
**Normative references to international publications**  
**with their relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u>  | <u>EN</u>  | <u>Year</u> |
|--------------------|-------------|---|------------|-------------|
| ISO 9241-3         | 1992        | Ergonomic requirements for office work with visual display terminals (VDTs) - Part 3: Visual display requirements | EN 29241-3 | 1993        |

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# INTERNATIONAL STANDARD

**ISO**  
**9241-4**

First edition  
1998-08-01

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## **Ergonomic requirements for office work with visual display terminals (VDTs) —**

### **Part 4: Keyboard requirements**

*Exigences ergonomiques pour travail de bureau avec terminaux à écrans  
de visualisation (TEV) —  
Partie 4: Exigences relatives aux claviers*

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Reference number  
ISO 9241-4:1998(E)

## ISO 9241-4:1998(E)

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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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

## iTeh STANDARD PREVIEW

International Standard ISO 9241-4 was prepared by the Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 4, *Ergonomics of human system interaction*.

ISO 9241 consists of the following parts, under the general title *Ergonomic requirements for office work with visual display terminals (VDTs)*:

- Part 1: General introduction
- Part 2: Guidance on task requirements
- Part 3: Visual display requirements
- Part 4: Keyboard requirements
- Part 5: Workstation layout and postural requirements
- Part 6: Guidance on the work environment
- Part 7: Requirements for display with reflections
- Part 8: Requirements for displayed colours
- Part 9: Requirements for non-keyboard input devices
- Part 10: Dialogue principles
- Part 11: Guidance on usability
- Part 12: Presentation of information
- Part 13: User guidance
- Part 14: Menu dialogues
- Part 15: Command dialogues

- *Part 16: Direct-manipulation dialogues*
- *Part 17: Form filling dialogues*

Annexes A and B of this part of ISO 9241 are for information only.

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## Introduction

The keyboard is currently the principal input device used by operators to enter information into interactive office computer systems. Keyboard design can have a significant impact on efficiency, effectiveness and satisfaction. The requirements and recommendations are based on ergonomic principles.

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