

**Elektrijuhistike torusüsteemid. Osa 24: Erinõuded. Maa-  
alused torusüsteemid**

**Conduit systems for cable management - Part 24:  
Particular requirements - Conduit systems buried  
underground**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 61386-24:2010 sisaldab Euroopa standardi EN 61386-24:2010 ingliskeelset teksti.	This Estonian standard EVS-EN 61386-24:2010 consists of the English text of the European standard EN 61386-24:2010.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 08.10.2010.	Date of Availability of the European standard is 08.10.2010.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

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Võtmesõnad: conduit buried underground, electric wiring system, electrical characteristics, mechanical characteristics, test,

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English version

**Conduit systems for cable management -  
Part 24: Particular requirements -  
Conduit systems buried underground  
(IEC 61386-24:2004)**

Systèmes de conduits pour la gestion  
du câblage -  
Partie 24: Règles particulières -  
Systèmes de conduits enterrés dans le sol  
(CEI 61386-24:2004)

Installationsrohrsysteme zum Führen  
von Leitungen für elektrische Energie  
und für Information -  
Teil 2-4: Besondere Anforderungen  
für erdverlegte  
Elektroinstallationsrohrsystem  
(IEC 61386-24:2004)

This European Standard was approved by CENELEC on 2010-10-01. 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.

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**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of the International Standard IEC 61386-24:2004, prepared by SC 23A, Cable management systems, of IEC TC 23, Electrical accessories, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 61386-24 on 2010-10-01 without any modification.

This European Standard supersedes EN 50086-2-4:1994 + corr. Feb.2001 + A1:2001.

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 at national level by publication of an identical national standard or by endorsement (dop) 2011-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-10-01

This Part 24, which specifies particular requirements for conduit systems buried underground, is to be used in conjunction with EN 61386-1, *Conduit systems for cable management – Part 1: General Requirements*, and its amendments. It was established on the basis of the first edition (2004) of that standard and its Amendment 1 (2000).

This Part 24 supplements or modifies the corresponding clauses of EN 61386-1. Where a particular clause or subclause of Part 1 is not mentioned in this Part 24, that clause or subclause applies as far as is reasonable. Where this Part 24 states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

Subclauses, tables and figures which are in addition to those in Part 1 are numbered starting with 101.

A conduit system which complies with this standard, is deemed safe for use when installed in accordance with national wiring regulations, whilst applying the manufactures installation instructions and conduit classification.

NOTE The following print types are used:

- requirements: in roman type
- *test specifications: in italic type*
- notes: in small roman type

EN 61386 consists of the following parts, under the general title *Conduits systems for cable management*:

Part 1: General requirements

Part 21: Particular requirements – Rigid conduit systems

Part 22: Particular requirements – Pliable conduit systems

Part 23: Particular requirements – Flexible conduit systems

Part 24: Particular requirements – Conduit systems buried underground

Part 25: Particular requirements – Conduit fixing devices

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

Annexes ZA and ZB have been added by CENELEC.

### **Endorsement notice**

The text of the International Standard IEC 61386-24:2004 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.

Annex ZA of Part 1 is applicable except as follows:

EN 60423, Not applicable

EN 60670, Not applicable

*Addition:*

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 161-1	1996	Thermoplastics pipes for the conveyance of fluids - Nominal outside diameters and nominal pressures - Part 1: Metric series	-	-
ISO 2768-1	1989	General tolerances - Part 1: Tolerances for linear and angular dimensions without individual tolerance indications	EN 22768-1	1993

**Annex ZB**  
(normative)

**Special national conditions**

**Special national condition: National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions.**

NOTE If it affects harmonization, it forms part of the European Standard or Harmonization Document.

**For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.**

Clause      Special national condition

**General**      **Denmark** According to the installation practice in Denmark conduit systems buried underground have to be in the colour "red no 5" according to DS 735 (1982) or "red" according to IEC 304 (1982).

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# SYSTÈMES DE CONDUITS POUR LA GESTION DU CÂBLAGE –

## Partie 24: Règles particulières – Systèmes de conduits enterrés dans le sol

### 1 Domaine d'application

#### *Remplacement:*

La présente norme spécifie les règles et les essais applicables aux systèmes de conduits enterrés, incluant conduits et accessoires de conduits, pour la protection et le rangement des conducteurs isolés et/ou des câbles, dans les installations électriques ou les systèmes de télécommunication. La présente norme s'applique aux systèmes de conduits métalliques, non métalliques et composites avec des extrémités filetées et non filetées terminant le système.

### 2 Références normatives

L'article de la Partie 1 est applicable avec les exceptions suivantes:

CEI 60423, N'est pas applicable

CEI 60670, N'est pas applicable

#### *Addition:*

ISO 161-1:1996, *Tubes en matières thermoplastiques pour le transport des fluides – Diamètres extérieurs nominaux et pressions nominales – Partie 1: Série métrique*

ISO 2768-1:1989, *Tolérances générales – Partie 1: Tolérances pour dimensions linéaires et angulaires non affectées de tolérances individuelles*

### 3 Définitions

L'article de la Partie 1 est applicable.

### 4 Prescriptions générales

L'article de la Partie 1 est applicable.

### 5 Généralités sur les essais

L'article de la Partie 1 est applicable.

### 6 Classification

L'article de la Partie 1 est applicable avec les exceptions suivantes:

#### *Modification:*

NOTE L'annexe A n'est pas applicable.

## CONDUIT SYSTEMS FOR CABLE MANAGEMENT –

### Part 24: Particular requirement – Conduit systems buried underground

#### 1 Scope

*Replacement:*

This standard specifies requirements and tests for conduit systems buried underground including conduits and conduit fittings for the protection and management of insulated conductors and/or cables in electrical installations or in communication systems. This standard applies to metallic, non-metallic and composite systems including threaded and non-threaded entries which terminate the system.

#### 2 Normative references

This clause of Part 1 is applicable except as follows:

IEC 60423, Not applicable

IEC 60670, Not applicable

*Addition:*

ISO 161-1:1996, *Thermoplastics pipes for the conveyance of fluids – Nominal outside diameters and nominal pressures – Part 1: Metric series*

ISO 2768-1:1989, *General tolerances – Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

#### 3 Definitions

This clause of Part 1 is applicable.

#### 4 General requirements

This clause of Part 1 is applicable.

#### 5 General conditions for tests

This clause of Part 1 is applicable.

#### 6 Classification

This clause of Part 1 is applicable except as follows:

*Modification:*

NOTE Annex A is not applicable.