

## **Communication cables - Part 1-1: General**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50290-1-1:2002 sisaldab Euroopa standardi EN 50290-1-1:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 15.10.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50290-1-1:2002 consists of the English text of the European standard EN 50290-1-1:2001.</p> <p>This document is endorsed on 15.10.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This European Standard EN 50290 harmonizes the standardisation of symmetrical, coaxial and optical cables used for the infrastructure of communication and control networks. Most of the cables covered by this European Standard are primarily intended to be used in IT networks. However they can also be used for other applications with the exception of those which presume a direct connection to the mains electricity supply.</p> <p>This Part 1-1 of EN 50290 gives directly or by reference all common requirements, ratings and preferred values for communication cables.</p> <p>It is completed by generic, sectional, family and detail specifications, as appropriate, to describe in a detailed manner each type of cable with its specific characteristics.</p>	<p><b>Scope:</b></p> <p>This European Standard EN 50290 harmonizes the standardisation of symmetrical, coaxial and optical cables used for the infrastructure of communication and control networks. Most of the cables covered by this European Standard are primarily intended to be used in IT networks. However they can also be used for other applications with the exception of those which presume a direct connection to the mains electricity supply.</p> <p>This Part 1-1 of EN 50290 gives directly or by reference all common requirements, ratings and preferred values for communication cables.</p> <p>It is completed by generic, sectional, family and detail specifications, as appropriate, to describe in a detailed manner each type of cable with its specific characteristics.</p>
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**Võtmesõnad:** genera, glass fibre cables, macroscopic analysis, materials testing, mechanical testing, optical, quality, safety, specification, specification (approval), specifications, standardization, surveys, symmetrical, telecommunication, testing, visual inspection (testing)

English version

**Communication cables  
Part 1-1: General**Câbles de communication  
Partie 1-1: GénéralitésKommunikationskabel  
Teil 1-1: Allgemeines

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**CENELEC**

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

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## Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 46X, Communication cables.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50290-1-1 on 2001-05-01.

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) 2002-04-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2004-04-01

This European Standard has been prepared under the European Mandate M/212 given to CENELEC by the European Commission and the European Free Trade Association.

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## 1 Scope

Part 1-1 and Part 1-2 of EN 50290 give directly or by reference all common requirements for communication cables.

They are completed by generic, sectional, family and detail specifications, as appropriate, to describe in a detailed manner each type of cables with its specific characteristics.

EN 50290 consists of the following parts:

- Part 1-1            General
- Part 1-2            Definitions
- Part 2-1            Common design rules and construction - General
- Part 2-2X series   Common design rules and construction - Materials
- Part 3              Quality assessment
- Part 4-1            General considerations for the use of cables - Environmental conditions and safety aspects
- Part 4-2            General considerations for the use of cables - Guide for use

The test methods are described in EN 50289, Communication cables - Specifications for test methods, which consists of the following parts:

- Part 1-X series    Electrical test methods
- Part 2-X series    Transmission and optical test methods
- Part 3-X series    Mechanical test methods
- Part 4-X series    Environmental test methods.

This Part 1-1 harmonizes the standardisation of symmetrical, coaxial and optical cables used for the infrastructure of communication, multimedia and control networks. Most of the cables covered by this Part 1-1 are primarily intended to be used in IT networks. However they can also be used for other applications with the exception of those which presume a direct connection to the mains electricity supply.

## 2 Normative references

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 (including amendments).

EN 50289-1-X	series	Communication cables - Specifications for test methods - Part 1-X: Electrical test methods
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EN 50289-2-X <sup>1)</sup>		Communication cables - Specifications for test methods - Part 2-X: Transmission and optical test methods
EN 50289-3-X	series	Communication cables - Specifications for test methods - Part 3-X: Mechanical test methods
EN 50289-4-X	series	Communication cables - Specifications for test methods - Part 4-X: Environmental test methods
EN 50290-1-2 <sup>1)</sup>		Communication cables - Part 1-2: Definitions
EN 50290-2-X	series	Communication cables - Specifications for test method - Part 2-X : Common design rules and construction
EN 50290-3 <sup>1)</sup>		Communication cables - Part 3: Quality assessment
EN 50290-4-1	2001	Communication cables - Part 4-1: General considerations for the use of cables - Environmental conditions and safety aspects
EN 60811	series	Insulating and sheathing materials of electric and optical fibre cables – Common test methods

### 3 Definitions

For the purposes of this European Standard, the definitions of EN 50290-1-2 apply.

### 4 Common design rules and construction

Unless otherwise specified in the detail specification, design rules and construction shall be according to EN 50290-2 as requested in the sectional specification.

### 5 Quality assessment

EN 50290-3 details quality systems to be used to assess the quality of communication cables.

### 6 Environmental conditions, installation and safety aspects

EN 50290-4 details environmental conditions and installation and safety aspects for communication cables. This part addresses the relationship with the applicable EC directives concerning the environmental and safety aspect.

### 7 Tests

#### 7.1 General

Conditions for testing are given in the relevant part of EN 50289.

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<sup>1)</sup> At draft stage.