

**Kommunikatsioonikaablid. Osa 2-1:
Projekteerimise üldjuhised ja konstruktsioon**

Communication cables Part 2-1: Common design rules
and construction

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50290-2-1:2005 sisaldab Euroopa standardi EN 50290-2-1:2005 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 27.04.2005 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 24.02.2005.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 50290-2-1:2005 consists of the English text of the European standard EN 50290-2-1:2005.

This standard is ratified with the order of Estonian Centre for Standardisation dated 27.04.2005 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 24.02.2005.

The standard is available from Estonian standardisation organisation.

ICS 33.120.10

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Communication cables

Part 2-1: Common design rules and construction

Câbles de communication
Partie 2-1: Règles de conception
communes et construction

Kommunikationskabel
Teil 2-1: Allgemeine Entwurf-
und Konstruktionsregeln

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CENELEC

European Committee for Electrotechnical Standardization
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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 50290-2-1 on 2004-10-01.

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) 2005-10-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2007-10-01

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.

Contents

Introduction	5
1 Scope	6
2 Normative references	6
3 Definitions	6
4 Common design rules	6
4.1 Materials	6
4.1.1 Conductor materials	6
4.1.2 Optical fibres	8
4.1.3 Taping / fillers	8
4.1.4 Insulating and sheathing materials	8
4.1.5 Messenger wires	8
4.1.6 Armour	9
4.2 Cable make-up	10
4.2.1 General design	10
4.2.2 Sheathing	10
4.2.3 Marking	10
5 Register of symbols used	11
6 Material constants	13
6.1 Table of material constants relating to dielectric and sheath and their values for different materials	13
6.2 Tables of material constants relating to conductors	14
6.3 Construction constants	15
6.3.1 Table of construction constants relating to inner conductor	15
6.3.2 Table of construction constants relating to braided outer conductors and screens	15
6.4 Braid wire dimensions	15
6.5 Attenuation factors	16
6.6 Maximum permissible input power/ current carrying capacity	16
6.6.1 Coaxial cables	16
6.6.2 Balanced cables	18
7 Standard values of characteristic impedance and outer diameter of dielectric for coaxial cables	18
7.1 Impedance of coaxial cables	18
7.2 Nominal diameters over dielectric of coaxial cables	18
8 Coaxial cable construction details	20
8.1 General	20
8.2 Inner conductor	20
8.3 Stranded inner conductor	20
8.4 Braided outer conductor	21
8.5 Medium between outer conductor and screen	21
8.6 Braided screen	21
8.7 Sheath	22
8.8 Attenuation	22
8.9 Nominal characteristic impedance z_0 and capacitance c_2 per unit length	23
9 Standard values of characteristic impedance and outer diameter of dielectric for symmetrical cables	23
9.1 Impedance of symmetrical cables	23
10 Symmetrical cable construction details	24
10.1 Attenuation	25

11	Common characteristics	25
11.1	Weight calculation	25
12	Calculation of electrical properties	26
12.1	DC resistance of conductors and screen, per unit length	26
12.2	Permissible voltages	26
12.2.1	Test voltage, dielectric, u_t	26
12.2.2	Discharge test voltage, dielectric, u_d	27
12.2.3	Test voltage, sheath	27

Introduction

EN 50290-2-1 series gives directly or by reference all common requirements for communication cables.

It is 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, which is the basic reference standard for communication cables, consists of the following parts:

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

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

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

1 Scope

This European Standard harmonises 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 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.

EN 50290-2-1 gives the common rules for the design and construction of symmetrical, coaxial and optical cables used for the infrastructure of communication and control networks.

It is to be used in conjunction with EN 50290-1-1 and 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.

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 of the referenced document (including any amendments) applies.

EN 50290-1-2	Communication cables - Part 1-2: Definitions
EN 50290-2-23	Part 2-23: Materials - PE insulation
EN 50290-2-24	Part 2-24: Materials - PE sheathing
EN 50290-2-25	Part 2-25: Materials - Polypropylene insulation compounds
EN 50290-2-26	Part 2-26: Materials - Halogen free flame retardant insulation compounds
EN 50290-2-27	Part 2-27: Materials - Halogen free flame retardant thermoplastic sheathing compounds
IEC 60304	Standard colours for insulation for low-frequency cables and wires
IEC 60028	International standard of resistance for copper
IEC 60793-1	Optical fibres - Part 1: Generic specification.

3 Definitions

For the purpose of this standard, the definitions given in EN 50290-1-2 apply.

4 Common design rules

4.1 Materials

4.1.1 Conductor materials

4.1.1.1 Wires and inner conductors

The construction and material of wires or inner conductor shall be specified in the relevant specification.