Koaksiaalkaablid. Osa 4-1: BCT-kaabelduses kasutatavate kaablite liigitus vastavalt standardile EN 50173. Siseruumide rippkaablid sagedusel 5 MHz kuni 3000 MHz talitlevatele süsteemidele

Coaxial cables -- Part 4-1: Sectional specification for cables for BCT cabling in accordance with EN 50173 - Indoor drop cables for systems operating at 5 MHz - 3 000 MHz

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50117-4-1:2008 sisaldab Euroopa standardi EN 50117-4-1:2008 ingliskeelset teksti.	This Estonian standard EVS-EN 50117-4-1:2008 consists of the English text of the European standard EN 50117-4-1:2008.
Standard on kinnitatud Eesti Standardikeskuse 26.09.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 26.09.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 08.08.2008.	Date of Availability of the European standard text 08.08.2008.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 33.120.10

Võtmesõnad:

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50117-4-1

August 2008

ICS 33.120.10

English version

Coaxial cables - Part 4-1: Sectional specification for cables for BCT cabling in accordance with EN 50173 - Indoor drop cables for systems operating at 5 MHz - 3 000 MHz

Câbles coaxiaux -
Partie 4-1: Spécification intermédiaire
pour câbles destinés au câblage BCT
(Broadcast and Communication Technology)
conformément à la EN 50173 -
Câbles de raccordement à usage intérieur
pour systèmes fonctionnant d
ans la plage 5 MHz - 3 000 MHz

Koaxialkabel -
Teil 4-1: Rahmenspezifikation
für Kabel für RuK-Verkabelung
nach EN 50173 -
Hausinstallationskabel
im Bereich von 5 MHz bis 3 000 MHz

This European Standard was approved by CENELEC on 2008-04-01. 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, 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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 50117-4-1:2008 E

Foreword

This European Standard was prepared by SC 46XA, Coaxial cables, of Technical Committee CENELEC TC 46X, Communication cables.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50117-4-1 on 2008-04-01.

This standard is to be read in conjunction with EN 50117-1:2002.

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)	2009-04-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2011-04-01

Contents

1 Scope 4
2 Normative references 4
3 Definitions 5
4 Requirements for cable construction 5
4.1 General 5
4.2 Inner conductor 5
4.3 Dielectric 5
4.4 Outer conductor or screen 5
4.5 Filling compounds 5
4.6 Moisture barriers 5
4.7 Wrapping layers 6
4.8 Sheath 6
4.9 Metallic protection 6
4.10 Cable integral suspension strand (messenger wire) 6
4.11 Oversheath 6
4.12 Fauna proofing 6
4.13 Chemical and/or environmental proofing 6
4.14 Cable identification 6
5 Tests for completed cables 7
5.1 Electrical tests 7
5.2 Mechanical tests 10
5.3 Environmental tests 11
5.4 Fire performance test methods (FFS) 12

Tables

Table 1 – Low-frequency and d.c. electrical measurements 7
Table 2 – High-frequency electrical and transmission measurements 8
Table 3 – Mechanical tests 10
Table 4 – Environmental tests 11

1 Scope

This sectional specification relates to EN 50117-1: Generic specification for coaxial cables, and is to be read in conjunction with this generic standard. This specification applies to coaxial cables for BCT-cabling in accordance with EN 50173 operating at a maximum d.c. voltage of 72 V and a maximum d.c. current of 0,5 A at a temperature range between –20 °C and +60 °C [1)] and at frequencies between 5 MHz and 3 000 MHz and complying with the requirements of EN 50083.

The purpose of this European Standard is to specify the applicable test methods and requirements for the electrical, mechanical, and environmental and fire performance of the cables.

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 50083 series	Cable networks for television signals, sound signals and interactive services
EN 50117-1:2002	Coaxial cables - Part 1: Generic specification
EN 50173-1	Information technology - Generic cabling systems - Part 1: General requirements
EN 50173-4	Information technology - Generic cabling systems - Part 4: Homes
EN 50289-1-6:2002	Communication cables - Specifications for test methods - Part 1-6: Electrical test methods - Electromagnetic performance
EN 50289-3-9:2001	Communication cables - Specifications for test methods - Part 3-9: Mechanical test methods - Bending tests
EN 50290-1-2	Communication cables - Part 1-2: Definitions
EN 50290-2-22	Communication cables - Part 2-22: Common design rules and construction - PVC sheathing compounds
EN 50290-2-23	Communication cables - Part 2-23: Common design rules and construction - PE insulation
EN 50290-2-25	Communication cables - Part 2-25: Common design rules and construction - Polypropylene insulation compounds
EN 50290-2-27	Communication cables - Part 2-27: Common design rules and construction - Halogen free flame retardant thermoplastic sheathing compounds
EN 50290-4-1	Communication cables - Part 4-1: General considerations for the use of cables - Environmental conditions and safety aspects
EN 50356	Method for spark testing of cables
EN 62153-1-1	Metallic communication cables test methods - Part 1-1: Electrical - Measurement of the pulse/step return loss in the frequency domain using the Inverse Discrete Fourier Transformation (IDFT) (IEC 62153-1-1)
EN 62230	Electric cables - Spark-test method (IEC 62230)
IEC 61196-1-115	Coaxial communication cables - Part 1-115: Electrical test methods - Test for regularity of impedance (pulse/step function return loss)

1) Only valid without current load.