Information technology - Generic cabling systems - Part 1: General requirements

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

See Eesti standard EVS-EN 50173-1:2018 sisaldab Euroopa standardi EN 50173-1:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 50173-1:2018 consists of the English text of the European standard EN 50173-1:2018.
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 15.06.2018.	Date of Availability of the European standard is 15.06.2018.
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.

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Technologies de l'information - Systèmes de câblage générique - Partie 1: Exigences générales

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European foreword

This document (EN 50173-1:2018) was prepared by CLC/TC 215, "*Electrotechnical aspects of telecommunication equipment*".

The following dates are fixed:

— latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2019-03-19
— latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2021-03-19

This document supersedes EN 50173-1:2011.

The first edition of EN 50173-1, published in 2002, has been developed to enable the application-independent cabling to support ICT applications in office premises. Their basic principles, however, are applicable to other types of applications and in other types of premises.

This edition of EN 50173-1:

a) introduces new balanced cabling component Categories 8.1 and 8.2 to support new channel Classes I and II;

b) removes balanced cabling components and channel Class CCCB;

c) removes the optical fibre Classes concept;

d) defines a new cabled optical fibre Category OM5;

e) updates Annex F “Supported applications”;

f) amends various other subclauses, tables and figures.

TC 215 has decided to establish relevant European Standards which address the specific requirements of these premises. In order to point out the commonalities of these cabling design standards, these ENs are published as individual parts of the series EN 50173, thus also acknowledging that standards users recognize the designation “EN 50173” as a synonym for generic cabling design.

At the time of publication of this European Standard, series EN 50173 comprises the following standards:

EN 50173-1	Information technology – Generic cabling systems – Part 1: General requirements
EN 50173-2	Information technology – Generic cabling systems – Part 2: Office spaces
EN 50173-3	Information technology – Generic cabling systems – Part 3: Industrial spaces
EN 50173-4	Information technology – Generic cabling systems – Part 4: Homes
EN 50173-5	Information technology – Generic cabling systems – Part 5: Data centre spaces
EN 50173-6	Information technology – Generic cabling systems – Part 6: Distributed building services

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Introduction

This European Standard contains general requirements in support of the other standards in the EN 50173 series.

It should be noted that generic cabling is a passive system and cannot be tested for EMC compliance individually. Application-specific equipment, designed for one or more cabling media, is required to meet relevant EMC standards on those media. Care should be taken that the installation of any of those media in a cabling system does not degrade the characteristics of the system. The installation methods of EN 50174 series should be used to minimise the effect of electromagnetic disturbances. For EMC requirements of BCT cabling see EN 50083-8.

Figure 1 and Table 1 show the schematic and contextual relationships between the standards produced by TC 215 for information technology cabling, namely:

1) this and other parts of the EN 50173 series;

2) installation (EN 50174 series);

3) bonding (EN 50310).

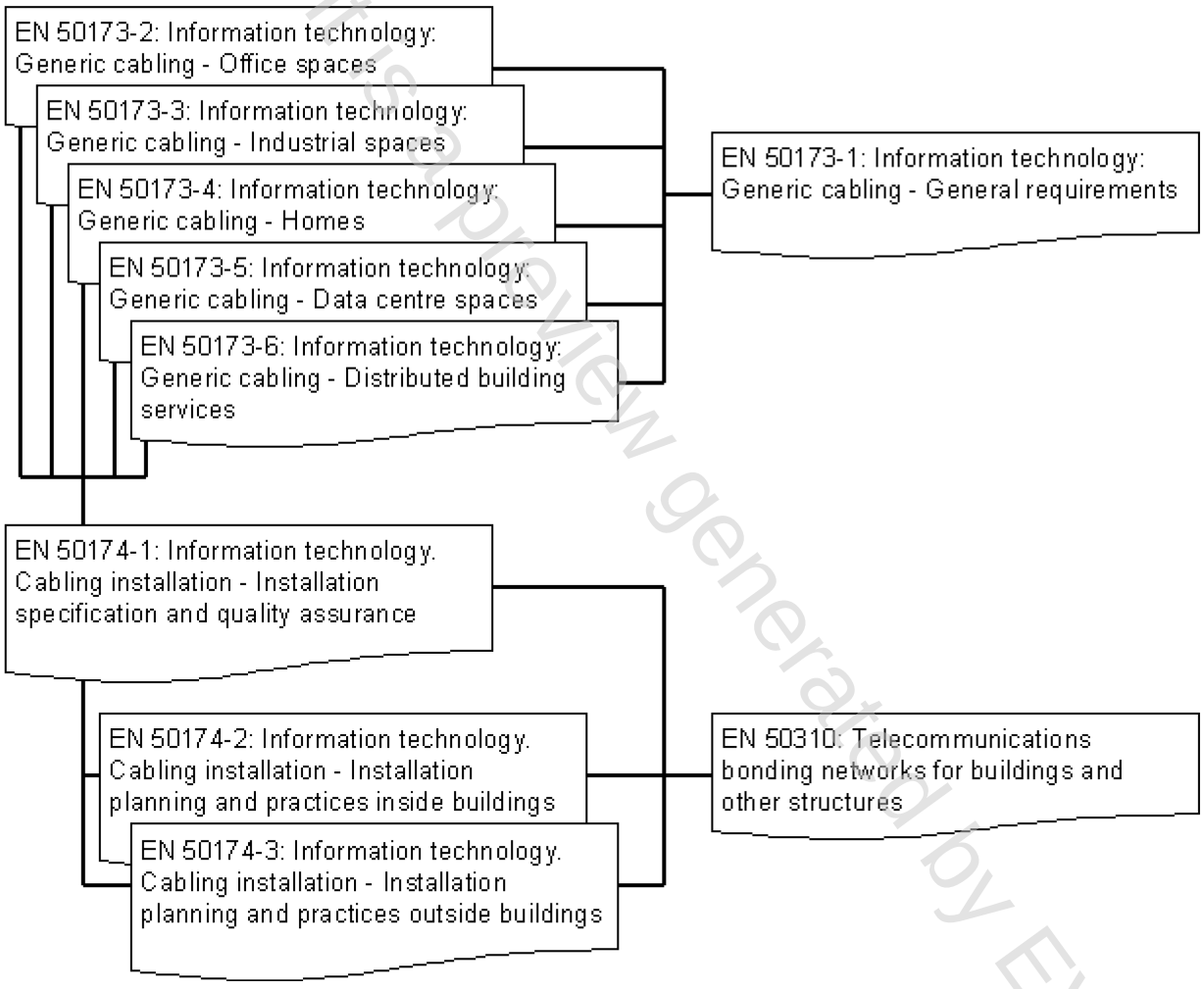

Figure 1 — Schematic relationship between the EN 50173 series and other relevant standards

Table 1 — Contextual relationship between EN 50173 series and other standards relevant for information technology cabling systems

<table>
<tr><th>Building design phase</th><th>Generic cabling design phase</th><th>Specification phase</th><th>Installation phase</th><th>Operation phase</th></tr>
<tr><td rowspan="3">EN 50310</td><td rowspan="3">EN 50173-2
EN 50173-3
EN 50173-4
EN 50173-5
EN 50173-6
(these ENs reference general requirements of EN 50173-1)</td><td>EN 50174-1</td><td rowspan="3">EN 50174-2
EN 50174-3
EN 50310</td><td rowspan="3">EN 50174-1</td></tr>
<tr><td>Planning phase</td></tr>
<tr><td>EN 50174-2
EN 50174-3
EN 50310</td></tr>
</table>

In addition, a number of Technical Reports have been developed to support or extend the application of these standards, including:

— CLC/TR 50173-99-1, *Cabling guidelines in support of 10 GBASE-T*;

— CLC/TR 50173-99-2, *Information technology — Implementation of BCT applications using cabling in accordance with EN 50173-4*;

— CLC/TR 50173-99-3, *Information technology — Generic cabling systems — Part 99-3: Home cabling infrastructures up to 50 m in length to support simultaneous and non simultaneous provision of applications*.

In addition, a number of cabling design standards have been developed using components of EN 50173-1 (e.g. EN 50098 series and EN 50700).

1 Scope and conformance

1.1 Scope

This European Standard specifies:

a) the structure and configuration of the backbone cabling subsystems of generic cabling systems within the types of premises and/or spaces defined by the other standards in the EN 50173 series;

b) channel transmission and environmental performance requirements in support of the standards in the EN 50173 series (which have taken into account requirements specified in application standards listed in Annex F);

c) link performance requirements in support of the standards in the EN 50173 series;

d) backbone cabling reference implementations in support of the standards in the EN 50173 series;

e) component performance requirements in support of the standards in the EN 50173 series;

f) test procedures to verify conformance to the cabling transmission performance requirements of the standards in the EN 50173 series.

Safety and electromagnetic compatibility (EMC) requirements are outside the scope of this European Standard and are covered by other standards and regulations. However, information given in this European Standard can be of assistance in meeting these standards and regulations.

1.2 Conformance

This European Standard does not contain specific conformance requirements. The other standards in the EN 50173 series incorporate the requirements of this standard as part of their individual conformance requirements.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 (all parts), *Cable networks for television signals, sound signals and interactive services*

NOTE EN 50083 series is gradually replaced by EN 60728 series.

EN 50117-1, *Coaxial cables - Part 1: Generic specification*

EN 50117-4-1, *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*

EN 50174-1, *Information technology - Cabling installation - Part 1: Installation specification and quality assurance*

EN 50174-2, *Information technology - Cabling installation - Part 2: Installation planning and practices inside buildings*

EN 50174-3, *Information technology - Cabling installation - Part 3: Installation planning and practices outside buildings*

EN 50288-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 1: Generic specification*

EN 50288-2-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 2-1: Sectional specification for screened cables characterised up to 100 MHz - Horizontal and building backbone cables*

EN 50288-2-2, *Multi-element metallic cables used in analogue and digital communication and control - Part 2-2: Sectional specification for screened cables characterised up to 100 MHz - Work area and patch cord cables*

EN 50288-3-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 3-1: Sectional specification for unscreened cables characterised up to 100 MHz - Horizontal and building backbone cables*

EN 50288-3-2, *Multi-element metallic cables used in analogue and digital communication and control - Part 3-2: Sectional specification for unscreened cables characterised up to 100 MHz - Work area and patch cord cables*

EN 50288-4-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 4-1: Sectional specification for screened cables characterised up to 600 MHz - Horizontal and building backbone cables*

EN 50288-4-2, *Multi-element metallic cables used in analogue and digital communication and control - Part 4-2: Sectional specification for screened cables characterised up to 600 MHz - Work area and patch cord cables*

EN 50288-5-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 5-1: Sectional specification for screened cables characterized up to 250 MHz - Horizontal and building backbone cables*

EN 50288-5-2, *Multi-element metallic cables used in analogue and digital communication and control - Part 5-2: Sectional specification for screened cables characterized up to 250 MHz - Work area and patch cord cables*

EN 50288-6-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 6-1: Sectional specification for unscreened cables characterised up to 250 MHz - Horizontal and building backbone cables*

EN 50288-6-2, *Multi-element metallic cables used in analogue and digital communication and control - Part 6-2: Sectional specification for unscreened cables characterised up to 250 MHz - Work area and patch cord cables*

EN 50288-9-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 9-1: Sectional specification for screened cables characterised up to 1 000 MHz - Horizontal and building backbone cables*

EN 50288-9-2, *Multi-element metallic cables used in analogue and digital communication and control - Part 9-2: Sectional specification for screened cables characterized from 1 MHz up to 1 000 MHz for work area, patch cord and data centre applications*

EN 50288-10-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 10-1: Sectional specification for screened cables characterized up to 500 MHz - Horizontal floor and building backbone cables*

EN 50288-10-2, *Multi-element metallic cables used in analogue and digital communication and control - Part 10-2: Sectional specification for screened cables characterized from 1 MHz up to 500 MHz for work area, patch cord and data centre applications*

EN 50288-11-1, *Multi-element metallic cables used in analogue and digital communication and control - Part 11-1: Sectional specification for un-screened cables characterised up to 500 MHz - Horizontal and building backbone cables*

EN 50288-11-2, *Multi-element metallic cables used in analogue and digital communication and control - Part 11-2: Sectional specification for un-screened cables, characterized from 1 MHz up to 500 MHz for work area, patch cord and data centre applications*

EN 50288-12-1, *Multi-element metallic cables used in analogue and digital communications and control - Part 12-1: Sectional specification for screened cables characterised from 1 MHz up to 2 000 MHz - Horizontal and building backbone cables*

EN 50288-12-2, [1)], *Multi-element metallic cables used in analogue and digital communication and control – Part 12-2: Sectional specification for screened cables characterised from 1 MHz up to 2 000 MHz - Work area cables*

EN 50288-13-1 [1)], *Multi-element metallic cables used in analogue and digital communication and control – Part 13-1: Sectional specification for outer screened cables characterised up to 2000 MHz - Horizontal and building backbone cables*

EN 50288-13-2 [1)], *Multi-element metallic cables used in analogue and digital communication and control – Part 13-2: Sectional specification for outer screened cables characterised from 1 MHz up to 2000 MHz - Work Area cables*

EN 50289-1-11, *Communication cables – Specifications for test methods – Part 1-11: Electrical test methods – Characteristic impedance, input impedance, return loss*

EN 50289-1-14, *Communication cables - Specifications for test methods - Part 1-14: Electrical test methods - Coupling attenuation or screening attenuation of connecting hardware*

EN 60352-2, *Solderless connections - Part 2: Crimped connections - General requirements, test methods and practical guidance*

[1)] In preparation by CLC/SC 46XC.

EN 60352-3, *Solderless connections - Part 3: Solderless accessible insulation displacement connections - General requirements, test methods and practical guidance*

EN 60352-4, *Solderless connections - Part 4: Solderless non-accessible insulation displacement connections - General requirements, test methods and practical guidance*

EN 60352-5, *Solderless connections - Part 5: Press-in connections - General requirements, test methods and practical guidance*

EN 60352-6, *Solderless connections - Part 6: Insulation piercing connections - General requirements, test methods and practical guidance*

EN 60352-7, *Solderless connections - Part 7: Spring clamp connections - General requirements, test methods and practical guidance*

EN 60352-8, *Solderless connections - Part 8: Compression mount connections - General requirements, test methods and practical guidance*

EN 60512-3-1, *Connectors for electronic equipment - Tests and measurements - Part 3-1: Insulation tests - Test 3a: Insulation resistance*

EN 60512-4-1, *Connectors for electronic equipment - Tests and measurements - Part 4-1: Voltage stress tests - Test 4a: Voltage proof*

EN 60512-4-2, *Connectors for electronic equipment - Tests and measurements - Part 4-2: Voltage stress tests - Test 4b: Partial discharge*

EN 60512-6-2, *Connectors for electronic equipment - Tests and measurements - Part 6-2: Dynamic stress tests - Test 6b: Bump*

EN 60512-6-3, *Connectors for electronic equipment - Tests and measurements - Part 6-3: Dynamic stress tests - Test 6c: Shock*

EN 60512-6-4, *Connectors for electronic equipment - Tests and measurements - Part 6-4: Dynamic stress tests - Test 6d: Vibration (sinusoidal)*

EN 60512-11-4, *Connectors for electronic equipment - Tests and measurements - Part 11-4: Climatic tests - Test 11d: Rapid change of temperature*

EN 60512-11-7, *Connectors for electronic equipment - Tests and measurements - Part 11- 7: Climatic tests - Test 11g: Flowing mixed gas corrosion test*

EN 60512-11-9, *Connectors for electronic equipment - Tests and measurements - Part 11-9: Climatic tests - Test 11i: Dry heat*

EN 60512-11-10, *Connectors for electronic equipment - Tests and measurements - Part 11-10: Climatic tests - Test 11j: Cold*

EN 60512-11-12, *Connectors for electronic equipment - Tests and measurements - Part 11-12: Climatic tests - Test 11m: Damp heat, cyclic*

EN 60512-16-4, *Connectors for electronic equipment - Tests and measurements - Part 16-4: Mechanical tests on contacts and terminations - Test 16d: Tensile strength (crimped connections)*

EN 60512-17-2, *Connectors for electronic equipment - Tests and measurements - Part 17-2: Cable clamping tests - Test 17b: Cable clamp resistance to cable rotation*

EN 60512-17-4, *Connectors for electronic equipment - Tests and measurements - Part 17-4: Cable clamping tests - Test 17d: Cable clamp resistance to cable torsion*

EN 60512-19-3, *Electromechanical components for electronic equipment - Basic testing procedures and measuring methods - Part 19: Chemical resistance tests - Section 3: Test 19c - Fluid resistance*

EN 60512-23-3, *Electromechanical components for electronic equipment - Basic testing procedures and measuring methods - Part 23-3: Test 23c: Shielding effectiveness of connectors and accessories*

EN 60512-25-1, *Connectors for electronic equipment - Tests and measurements - Part 25-1: Test 25a - Crosstalk ratio*

EN 60512-25-2, *Connectors for electronic equipment - Tests and measurements - Part 25-2: Test 25b: Attenuation (insertion loss)*

EN 60512-25-4, *Connectors for electronic equipment - Tests and measurements - Part 25-4: Teste25d - Propagation delay*

EN 60512-25-5, *Connectors for electronic equipment - Tests and measurements - Part 25-5: Test 25e - Return loss*

EN 60512-25-9, *Connectors for electronic equipment - Tests and measurements - Part 25-9: Signal integrity tests - Test 25i: Alien crosstalk*

EN 60512-26-100, *Connectors for electronic equipment - Tests and measurements - Part 26-100: Measurement setup, test and reference arrangements and measurements for connectors according to IEC 60603-7 - Tests 26a to 26g*

EN 60529, *Degrees of protection provided by enclosures (IP Code)*

EN 60603-7:2009, *Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors*

EN 60603-7-1, *Connectors for electronic equipment - Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors*

EN 60603-7-2, *Connectors for electronic equipment - Part 7-2: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 100 MHz*

EN 60603-7-3, *Connectors for electronic equipment - Part 7-3: Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 100 MHz*

EN 60603-7-4, *Connectors for electronic equipment - Part 7-4: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz*

EN 60603-7-41, *Connectors for electronic equipment - Part 7-41: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 500 MHz*

EN 60603-7-5, *Connectors for electronic equipment - Part 7-5: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz*

EN 60603-7-51, *Connectors for electronic equipment - Part 7-51: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 500 MHz*

EN 60603-7-7, *Connectors for electronic equipment - Part 7-7: Detail specification for 8-way, shielded, free and fixed connectors for data transmission with frequencies up to 600 MHz*

EN 60603-7-71, *Connectors for electronic equipment - Part 7-71: Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 1 000 MHz*

EN 60603-7-81, *Connectors for electronic equipment - Part 7-81: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 2 000 MHz*

EN 60603-7-82, *Connectors for electronic equipment - Part 7-82: Detail specification for 8-way, 12 contacts, shielded, free and fixed connectors, for data transmission with frequencies up to 2 000 MHz*

EN 60793-1-40, *Optical fibres - Part 1-40: Measurement methods and test procedures - Attenuation*

EN 60793-1-44, *Optical fibres - Part 1-44: Measurement methods and test procedures - Cut-off wavelength*

EN 60793-2, *Optical fibres – Part 2: Product specifications – General (IEC 60793-2)*

EN 60793-2-10, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres (IEC 60793-2-10)*

EN 60793-2-50:2016, *Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres*

EN 60794-1-1, *Optical fibre cables – Part 1-1: Generic specification – General (IEC 60794-1-1)*

EN 60794-1-21, *Optical fibre cables - Part 1-21: Generic specification - Basic optical cable test procedures - Mechanical tests methods*

EN 60794-2, (all parts), *Optical fibre cables – Part 2: Indoor optical fibre cables – Sectional specification (IEC 60794-2 (all parts))*

EN 60794-2-51, *Optical fibre cables - Part 2-51: Indoor cables - Detail specification for simplex and duplex cables for use in cords for controlled environment*

EN 60811-1-1:1995, *Insulating and sheathing of electric cables – Common test methods – Part 1: General application – Section 1: Measurement of thickness and overall dimensions – Tests for determining the mechanical properties (IEC 60811-1-1:1993)*

EN 60825-2, *Safety of laser products - Part 2: Safety of optical fibre communication systems (OFCS)*

EN 60966-2-4, *Radio frequency and coaxial cable assemblies – Part 2-4: Detail specification for cable assemblies for radio and TV receivers – Frequency range 0 MHz to 3000 MHz, IEC 61169-2 connectors (IEC 60966-2-4)*

EN 60966-2-5, *Radio frequency and coaxial cable assemblies – Part 2-5: Detail specification for cable assemblies for radio and TV receivers – Frequency range 0 MHz to 1 000 MHz, IEC 61169-2 connectors (IEC 60966-2-5)*

EN 60966-2-6, *Radio frequency and coaxial cable assemblies – Part 2-6: Detail specification for cable assemblies for radio and TV receivers – Frequency range 0 MHz to 3 000 MHz, IEC 61169-24 connectors (IEC 60966-2-6)*

EN 61076-2-101, *Connectors for electronic equipment - Product requirements - Part 2-101: Circular connectors - Detail specification for M12 connectors with screw-locking*

EN 61076-2-109, *Connectors for electronic equipment - Product requirements - Part 2-109: Circular connectors - Detail specification for connectors with M 12 × 1 screw-locking, for data transmission frequencies up to 500 MHz*

EN 61076-3-104, *Connectors for electronic equipment – Product requirements – Part 3-104: – Detail specification for 8-way, shielded free and fixed connectors, for data transmissions with frequencies up to 1 000 MHz (IEC 61076-3-104)*

EN 61076-3-110, *Connectors for electronic equipment - Product requirements - Part 3-110: Detail specification for shielded, free and fixed connectors for data transmission with frequencies up to 1 000 MHz (IEC 61076-3-110)*

EN 61169-1, *Radio-frequency connectors - Part 1: Generic specification - General requirements and measuring methods*

EN 61169-2, *Radio-frequency connectors - Part 2: Sectional specification - Radio frequency coaxial connectors of type 9,52*

EN 61169-24, *Radio-frequency connectors - Part 24: Sectional specification - Radio frequency coaxial connectors with screw coupling, typically for use in 75 ohm cable networks (type F)*

EN 61280-4-1, *Fibre optic communication subsystem test procedures - Part 4-1: Installed cable plant - Multimode attenuation measurement*

EN 61280-4-2, *Fibre-optic communication subsystem test procedures - Part 4-2: Installed cable plant - Single-mode attenuation and optical return loss measurement*

EN 61300-2-1, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests - Vibration (sinusoidal)*

EN 61300-2-4, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre/cable retention*

EN 61300-2-5, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-5: Tests - Torsion*

EN 61300-2-9, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-9: Tests - Shock*

EN 61300-2-18, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-18: Tests - Dry heat - High temperature endurance*

EN 61300-2-22, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature*

EN 61300-2-34, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-34: Tests - Resistance to solvents and contaminating fluids of interconnecting components and closures*

EN 61300-2-44, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-44: Tests - Flexing of the strain relief of fibre optic devices*

EN 61300-2-46, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-46: Tests – Damp heat cyclic (IEC 61300-2-46)*

prEN 61753-1:2017, *Fibre optic interconnecting devices and passive components - Performance standards - Part 1: General and guidance*

EN 61753-022-2, *Fibre optic interconnecting devices and passive components - Performance standard - Part 022-2: Fibre optic connectors terminated on multimode fibre for category C - Controlled environment*

EN 61754 (all parts), *Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces (IEC 61754 (all parts))*

EN 61935-1, *Specification for the testing of balanced and coaxial information technology cabling - Part 1: Installed balanced cabling as specified in the standards series EN 50173*

EN 61935-2, *Specification for the testing of balanced and coaxial information technology cabling - Part 2: Cords as specified in ISO/IEC 11801 and related standards*

EN 61935-2-20, *Testing of balanced communication cabling in accordance with series EN 50173 - Part 2-20: Patch cords and work area cords - Blank detail specification for class D applications*

EN 62012-1, *Multicore and symmetrical pair/quad cables for digital communications to be used in harsh environments - Part 1: Generic specification*

IEC 61156-7, *Multicore and symmetrical pair/quad cables for digital communications – Part 7: Symmetrical pair cables with transmission characteristics up to 1 200 MHz – Sectional specification for digital and analog communication cables*

IEC 61935-2-X (all parts), *Testing of balanced communication cabling in accordance with ISO/IEC 11801 – Part 2-X*

IEC 62153-4-15, *Metallic Communication Cable test methods - Part 4-15: Electromagnetic compatibility (EMC) - Test method for measuring transfer impedance and screening attenuation or coupling attenuation with triaxial cell*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document and the other standards in the EN 50173 series, the following terms and definitions and those of EN 50174-1 apply.

3.1.1
administration
methodology defining the documentation requirements of a cabling system and its containment, the labelling of functional elements and the process by which moves, additions and changes are recorded

3.1.2
alien crosstalk
signal coupling from a disturbing pair of a channel to a disturbed pair of another channel

Note 1 to entry: This also applies to the signal coupling from a disturbing pair within a link or component, used to create a channel, to a disturbed pair within a link or component, used to create another channel.

Note 2 to entry: Alien crosstalk is also known as exogenous crosstalk.

3.1.3
alien far-end crosstalk loss
signal isolation between a disturbing pair of a channel and a disturbed pair of another channel, measured at the far-end

Note 1 to entry: This also applies to the measurement of the signal isolation between a disturbing pair within a link or component, used to create a channel, and a disturbed pair within a link or component, used to create another channel.

Note 2 to entry: Alien crosstalk is also known as exogenous crosstalk.

3.1.4
alien near-end crosstalk loss
signal isolation between a disturbing pair of a channel and a disturbed pair of another channel, measured at the near-end

Note 1 to entry: This also applies to the measurement of the signal isolation between a disturbing pair within a link or component, used to create a channel, and a disturbed pair within a link or component, used to create another channel.

Note 2 to entry: Alien crosstalk is also known as exogenous crosstalk.