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NSAI Standards

Irish Standard
I.S. EN 50441-1:2012

Cables for indoor residential telecommunication installations -- Part 1: Unscreened cables - Grade 1

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50441-1

March 2012

ICS 33.120.10

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English version

Cables for indoor residential telecommunication installations - Part 1: Unscreened cables - Grade 1

Câbles pour les installations résidentielles de télécommunications en intérieur - Partie 1: Câbles non écrantés - Classe 1

Innenkabel für Telekommunikationseinrichtungen im Wohnbereich - Teil 1: Ungeschirmte Innenkabel - Klasse 1

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CENELEC

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

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Contents

Foreword **3**
1 Scope **4**
2 Normative references **4**
3 Quality control **5**
4 Cable construction **5**
4.1 Conductors 5
4.2 Insulation 5
4.3 Cable element 6
4.4 Screening of the cable element 6
4.5 Cabling 6
4.6 Spare pairs 6
4.7 Colour code 6
4.8 Sheath 6
4.9 Ripcord 6
4.10 Overall diameter 6
4.11 Identification 7
4.12 Delivery length 7
5 Mechanical requirements **8**
5.1 Conductor 8
5.2 Insulation 8
5.3 Sheath 8
5.4 Finished cable 8
6 Environmental and climatic requirements **10**
6.1 Insulation 10
6.2 Sheath 10
6.3 Fire behaviour 11
7 Electrical requirements **11**
7.1 General 11
7.2 Conductor resistance 11
7.3 Dielectric strength and capacitance 11
7.4 Insulation resistance 11
7.5 High frequency characteristics 11
7.6 Electromagnetic behaviour 14
7.7 Unbalance attenuation 14
7.8 Environmental and safety aspects 14
Bibliography **15**

Figures

Figure 1 – Test fixture 9
Figure 2 – Installation test system 10

Tables

Table 1 – Recommended outer diameter of the sheath 7
Table 2 – Cable impedance 11
Table 3 – Return loss measurement 12
Table 4 – Maximum cable attenuation 12
Table 5 – Minimum NEXT and PSNEXT 13
Table 6 – Minimum ELFEXT and PSELFEXT 13

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Foreword

This document (EN 50441-1:2012) has been prepared by SC 46XC, "Multicore, multipair and quad data communication cables", of CLC/TC 46X, "Communication cables".

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)	2013-01-23
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This document supersedes EN 50441-1:2006.

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

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

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1 Scope

This European Standard specifies the constructional details and performances requirements for cables for indoor residential cabling systems characterized up to 100 MHz. Cables in this European Standard are based on the common design rules specified in EN 50290-2-1 and are specifically intended for supporting ICT and BCT applications (telephone, computer and TV services) as specified in EN 50173-4.

The cables covered in this European Standard are intended to operate with voltages and currents normally encountered in communications systems. These cables are not intended to be used in conjunction with low impedance sources, for example, the electrical power supply of public utility mains.

Cables covered in this European Standard may however be subjected to voltages of not more than 300 V a.c. or 450 V d.c. and comply with the requirements of the Low Voltage Directive.

The maximum current rating per conductor is 3 A/mm² unless otherwise specified in the relevant detail specification.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50173-1	*Information technology – Generic cabling systems - Part 1: General requirements*
EN 50289-1-2	*Communication cables – Specifications for test methods - Part 1-2: Electrical test methods – DC resistance*
EN 50289-1-3	*Communication cables – Specifications for test methods – Part 1-3: Electrical test methods – Dielectric strength*
EN 50289-1-4	*Communication cables – Specifications for test methods – Part 1-4: Electrical test methods – Insulation resistance*
EN 50289-1-6	*Communication cables – Specifications for test methods – Part 1-6: Electrical test methods – Electromagnetic performance*
EN 50289-1-7	*Communication cables – Specifications for test methods – Part 1-7: Electrical test methods – Velocity of propagation*
EN 50289-1-8	*Communication cables – Specifications for test methods – Part 1-8: Electrical test methods – Attenuation*
EN 50289-1-9	*Communication cables – Specifications for test methods – Part 1-9: Electrical test methods – Unbalance attenuation (longitudinal conversion loss, longitudinal conversion transfer loss)*
EN 50289-1-10	*Communication cables – Specifications for test methods – Part 1-10: Electrical test methods – Crosstalk*
EN 50289-1-11	*Communication cables – Specifications for test methods – Part 1-11: Electrical test methods – Characteristic impedance, input impedance, return loss*
EN 50289-3-7	*Communication cables – Specifications for test methods – Part 3-7: Mechanical test methods – Abrasion resistance of the cable sheath*
EN 50289-3-9:2001	*Communication cables – Specifications for test methods – Part 3-9: Mechanical test methods – Bending tests*

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