



NSAI
Standards

Irish Standard
I.S. EN 50117-4-2:2015

Coaxial cables - Part 4-2: Sectional specification for CATV cables up to 6 GHz used in cabled distribution networks

I.S. EN 50117-4-2:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN 50117-4-2:2015

Published:

2015-09-18

This document was published under the authority of the NSAI and comes into effect on:

2015-10-06

ICS number:

33.120.10

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN 50117-4-2:2015 is the adopted Irish version of the European Document EN 50117-4-2:2015, Coaxial cables - Part 4-2: Sectional specification for CATV cables up to 6 GHz used in cabled distribution networks

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This page is intentionally left blank

EUROPEAN STANDARD

EN 50117-4-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2015

ICS 33.120.10

English Version

Coaxial cables - Part 4-2: Sectional specification for CATV cables up to 6 GHz used in cabled distribution networks

Câbles coaxiaux - Partie 4-2: Spécification intermédiaire relative aux câbles des réseaux câblés de télévision jusqu'à 6 GHz, utilisés dans les réseaux de distribution par câbles

Koaxialkabel - Teil 4-2: Rahmenspezifikation für CATV-Kabel bis zu 6 GHz für Kabelverteilanlagen

This European Standard was approved by CENELEC on 2015-06-22. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions.....	4
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	5
4.8 Sheath	5
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
4.15 Labelling	6
5 Tests for completed cables	7
5.1 Electrical tests.....	7
5.2 Mechanical tests	9
5.3 Environmental tests.....	11
5.4 Fire performance test methods	11
6 Cable types	12
Bibliography	13
 Tables	
Table 1 — Low-frequency and D.C. electrical measurements	7
Table 2 — High-frequency electrical and transmission measurements	7
Table 3 — Mechanical tests	9
Table 4 — Environmental tests	11
Table 5 — Cable types - Dimensions and ratings	12

European foreword

This document (EN 50117-4-2:2015) has been prepared by CLC/SC 46XA "Coaxial 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) 2016-06-22
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2018-06-22

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).

EN 50117-4-2:2015

1 Scope

This sectional specification relates to EN 50117-1 and should be read in conjunction with this generic specification. This specification applies to indoor drop cables for use in cabled distribution systems operating at temperature between -40 °C and $+70\text{ °C}$ ¹⁾ and at frequencies between 5 MHz and 6 000 MHz and complying with the requirements of EN 50083. These cables are suitable to implement the network type Case D as depicted in Figure 1 and subclause 6.6 of EN 60728-1-1:2014.

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 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 50117-1:2002, *Coaxial cables – Part 1: Generic specification*

EN 50289-1-6, *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 50290-1-2:2004, *Communication cables – Part 1-2: Definitions*

EN 50290-2-22, *Communication cables – Part 2-22: Common design rules and construction – PVC sheathing compounds*

EN 50290-2-27, *Communication cables – Part 2-27: Common design rules and construction – Halogen free flame retardant thermoplastic sheathing compounds*

prEN 50290-2-37, *Communication cables – Part 2-37: Common design rules and construction – Polyethylene insulation for coaxial cables*

prEN 50290-2-38, *Communication cables – Part 2-38: Common design rules and construction – Polyethylene insulation for coaxial cables*

EN 62153-1-1, *Metallic telecommunication cable 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)*

IEC 61196-1-115, *Coaxial communication cables – Part 1-115: Electrical test methods – Test for pulse return loss (regularity of impedance)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50290-1-2:2004 and EN 50117-1:2002 apply.

1) This value is valid for applications without ampacity only.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-