



NSAI
Standards

Irish Standard
I.S. EN 50117-9-1:2019

Coaxial cables - Part 9-1: Sectional specification for coaxial cables for analogue and digital signal transmission - Indoor drop cables for systems operating at 5 MHz - 1 000 MHz

I.S. EN 50117-9-1:2019

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 50117-9-1:2019

Published:

2019-03-29

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

2019-04-16

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 50117-9-1:2019 is the adopted Irish version of the European Document EN 50117-9-1:2019, Coaxial cables - Part 9-1: Sectional specification for coaxial cables for analogue and digital signal transmission - Indoor drop cables for systems operating at 5 MHz - 1 000 MHz

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

For relationships with other publications refer to the NSAI web store.

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 50117-9-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 33.120.10

Supersedes EN 50117-2-1:2005

English Version

Coaxial cables - Part 9-1: Sectional specification for coaxial cables for analogue and digital signal transmission - Indoor drop cables for systems operating at 5 MHz - 1 000 MHz

Câbles coaxiaux - Partie 9-1: Spécification intermédiaire pour câbles coaxiaux pour la transmission de signaux analogiques et numériques - Câbles de raccordement à usage intérieur pour les systèmes fonctionnant entre 5 MHz et 1 000 MHz

Koaxialkabel - Teil 9-1: Rahmenspezifikation für Koaxialkabel für analoge und digitale Signalübertragung - Innenkabel für Systeme im Bereich von 5 MHz - 1 000 MHz

This European Standard was approved by CENELEC on 2018-10-10. 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, Serbia, 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: Rue de la Science 23, B-1040 Brussels

EN 50117-9-1:2019 (E)

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	4
3	Terms and definitions	5
4	Requirements for cable construction and design	5
4.1	General.....	5
4.2	Inner conductor.....	6
4.3	Dielectric.....	6
4.4	Outer conductor or screen	6
4.5	Filling compounds	6
4.6	Moisture barriers.....	6
4.7	Wrapping layers	6
4.8	Sheath	7
4.9	Metallic protection	7
4.10	Cable integral suspension strand (Messenger wire)	7
4.11	Oversheath	7
4.12	Fauna proofing.....	7
4.13	Chemical and/or environmental proofing	7
4.14	Cable identification.....	7
4.14.1	General.....	7
4.14.2	Sheath marking.....	7
4.15	Labelling	8
5	Tests and requirements for completed cables	8
5.1	General.....	8
5.2	Electrical parameters and requirements	8
5.2.1	Low-frequency and DC electrical parameters and requirements	8
5.2.2	High-frequency electrical and transmission parameters and requirements	9
5.3	Mechanical parameters and requirements.....	10
5.4	Environmental parameters and requirements	12
5.5	Fire performance test methods	12
Annex A (informative) Cable types		13
Bibliography		14

European foreword

This document (EN 50117-9-1:2019) 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) 2019-09-29
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2022-03-29

This document supersedes EN 50117-2-1:2005.

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.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

All materials used for cables according to this standard should fulfil the requirements of the current REACH Regulation and ROHS Directives.

EN 50117-9-1:2019 (E)

1 Scope

This part of EN 50117 which is a sectional specification applies to coaxial indoor drop cables for analogue and digital one and two way signal transmission, e.g. for cable networks for television signals, sound signals and interactive services in accordance with EN 60728-1, EN 60728-1-1, EN 60728-101, EN 60728-10, EN 50173-1 and EN 50173-4. This includes also the transmission of BCT signals provided by a CATV, MATV or SMATV cable network.

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

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 50117-1:2019, *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 50289-3-9:2001, *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 50290-2-1:2005, *Communication cables - Part 2-1: Common design rules and construction*

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*

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

EN 50290-2-38, *Communication cables - Part 2-38: Common design rules and construction - Polypropylene insulation for coaxial cables*

EN 50290-4-1:2014, *Communication cables - Part 4-1: General considerations for the use of cables - Environmental conditions and safety aspects*

EN 50290-4-2:2014, *Communication cables - Part 4-2: General considerations for the use of cables - Guide to use*

EN 60728-1, *Cable networks for television signals, sound signals and interactive services - Part 1: System performance of forward paths (IEC 60728-1)*

EN 60728-1-1, *Cable networks for television signals, sound signals and interactive services - Part 1-1: RF cabling for two way home networks (IEC 60728-1-1)*

EN 60728-10, *Cable networks for television signals, sound signals and interactive services - Part 10: System performance for return paths (IEC 60728-10)*

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](#)
-