Irish Standard
I.S. EN 50288-9-1:2012

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

I.S. EN 50288-9-1:2012

Incorporating amendments/corrigenda issued since publication:

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English version

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

Câbles métalliques à éléments multiples utilisés pour les transmissions et les commandes analogiques et numériques - Partie 9-1: Spécification intermédiaire pour câbles écrantés pour applications jusqu'à 1 000 MHz - Câbles horizontaux et verticaux de bâtiment

Mehradrige metallische Daten- und Kontrollkabel für analoge und digitale Übertragung - Teil 9-1: Rahmenspezifikation für geschirmte Kabel bis 1 000 MHz - Kabel für den Horizontal- und Steigbereich

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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.

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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

This document (EN 50288-9-1:2012) has been prepared by CLC/SC 46XC, "Multicore, multipair and quad data 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)	2013-11-12
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2015-11-12

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

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 50288 series is divided into the following parts:

– 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 50288-7, *Multi-element metallic cables used in analogue and digital communication and control — Part 7: Sectional specification for instrumentation and control cables*;

- EN 50288-8, *Multi-element metallic cables used in analogue and digital communication and control — Part 8: Specification for type 1 cables characterised up to 2 MHz*;

- EN 50288-9-1, *Multi-element metallic cables used in analogue and digital communications and control — Part 9-1: Sectional specification for screened cables characterized from 1 MHz up to 1 000 MHz — Horizontal and building backbone cables* (the present document);

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

- 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 from 1 MHz up to 500 MHz — Horizontal and building backbone cables*.

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.

1 Scope

EN 50288-9-1 is a sectional specification for screened cables, characterised from 1 MHz up to 1 000 MHz, to be used in horizontal and building backbone wiring for Information technology generic-cabling systems.

This sectional specification contains the electrical, mechanical, transmission and environmental performance characteristics and requirements of the cables when tested in accordance with the referenced test methods.

This sectional specification should be read in conjunction with EN 50288-1 which contains the essential provisions for its application.

The cables covered in this sectional specification are intended to operate with voltages and currents normally encountered in communication systems. These cables are not intended to be used in conjunction with low impedance sources, for example, the electric power supplies of public utility mains.

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 50288-1	*Multi-element metallic cables used in analogue and digital communication and control — Part 1: Generic specification*
EN 50289-1-4	*Communication cables — Specifications for test methods — Part 1-4: Electrical test methods — Insulation resistance*
EN 50289-3-2	*Communication cables — Specifications for test methods — Part 3-2: Mechanical test methods — Tensile strength and elongation for conductor*
EN 50289-3-4	*Communication cables — Specifications for test methods — Part 3-4: Mechanical test methods — Tensile strength, elongation and shrinkage of insulation and sheath*
EN 50289-3-5	*Communication cables — Specifications for test methods — Part 3-5: Mechanical test methods — Crush resistance of the cable*
EN 50289-3-6	*Communication cables — Specifications for test methods — Part 3-6: Mechanical test methods — Impact resistance of the cable*
EN 50289-3-8	*Communication cables — Specifications for test methods — Part 3-8: Mechanical test methods — Abrasion resistance of cable sheath markings*
EN 50289-3-9:2001	*Communication cables — Specifications for test methods — Part 3-9: Mechanical test methods — Bending tests*
EN 50289-3-16	*Communication cables — Specifications for test methods — Part 3-16: Mechanical test methods — Cable tensile performance*
EN 50289-4-6	*Communication cables — Specifications for test methods — Part 4-6: Environmental test methods — Temperature cycling*
EN 50290-2 (all parts)	*Communication cables — Part 2: Common design rules and construction*
EN 60708	*Low-frequency cables with polyolefin insulation and moisture barrier polyolefin sheath (IEC 60708)*
IEC 60189-2	*Low-frequency cables and wires with PVC insulation and PVC sheath — Part 2: Cables in pairs, triples, quads and quintuples for inside installations*