

Analoog- ja digitaalkommunikatsioonis ja -juhtimises kasutatavad mitmeelemendilised metallkaablid. Osa 9-1: Varjestatud, sagedusega kuni 1000 MHz iseloomustatavate kaablite liigitus. Rõhtsad ja ehitiste magistraalkaablid

Multi-element metallic cables used in analogue and digital communication and control - Part 9-1: Sectional specification for screened cables characterised up to 1000 MHz - Horizontal and building backbone cables

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50288-9-1:2013 sisaldab Euroopa standardi EN 50288-9-1:2012 ingliskeelset teksti.

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

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Contents

Foreword	3
1 Scope	5
2 Normative references	5
3 Terms, definitions, symbols and abbreviations	6
3.1 Terms and definitions	6
3.2 Symbols and abbreviations	6
4 Cable construction	6
4.1 Conductor	6
4.2 Insulation	6
4.3 Cabling elements	6
4.4 Identification of cabling elements	6
4.5 Screening of cabling elements	6
4.6 Cable make-up	6
4.7 Filling compound	6
4.8 Interstitial fillers	7
4.9 Screening of the cable core	7
4.10 Moisture barriers	7
4.11 Wrapping layers	7
4.12 Sheath	7
5 Test methods and requirements for completed cables	7
5.1 General	7
5.2 Electrical tests	7
5.3 Mechanical tests	12
5.4 Environmental tests	13
5.5 Fire performance tests	13
Annex A (informative) Maximum voltage, current and temperature rating for cables used for POE applications	14
Annex B (informative) Blank Detail Specification	15
B.1 General	15
B.2 Document Details	15
B.3 Generic specification EN 50288-1	16

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*.

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