

**Analoog- ja digitaalkommunikatsioonis ja -
juhtimises kasutatavad mitmeelemendilised
metallkaablid. Osa 1: Üldliigitus**

Multi-element metallic cables used in analogue and
digital communication and control - Part 1: Generic
specification

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50288-1:2004 sisaldab Euroopa standardi EN 50288-1:2003 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 25.05.2004 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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This Estonian standard EVS-EN 50288-1:2004 consists of the English text of the European standard EN 50288-1:2003.

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Võtmesõnad:

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Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
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English version

**Multi-element metallic cables used in analogue
and digital communication and control
Part 1: Generic specification**

Câbles métalliques à éléments multiples
utilisés pour les transmissions
et les commandes analogiques
et numériques
Partie 1: Spécification générique

Mehradrige metallische Daten-
und Kontrollkabel für analoge
und digitale Übertragung
Teil 1: Fachgrundspezifikation

This European Standard was approved by CENELEC on 2003-10-01. 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.

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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 Central Secretariat 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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Foreword

This European Standard was prepared by SC 46XC, Multicore, Multipair and Quad Data communication cables, of Technical Committee CENELEC TC 46X, Communication cables.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50288-1 on 2003-10-01.

This European Standard supersedes EN 50288-1:2001

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2004-10-01
 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2006-10-01
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1 Scope

When used together with EN 50290 and EN 50289, this European Standard covers cables for instrumentation, inter-connection of equipment and information technology cabling applications.

Cables for information technology cabling systems, covered by this standard are suitable for use in digital and analogue data systems meeting the requirements, for example, of EN 50090-2-1, EN 50090-3-1, EN 50098-1, EN 50098-2 and EN 50173.

Instrumentation cables covered by this standard are suitable for connecting instruments and control systems for analogue or digital signal transmission.

Unless otherwise specified, all cables covered by this standard may be subjected to voltages greater than 50 V a.c or 75 V d.c. but not more than 300 V a.c. or 450 V d.c. and shall meet the essential requirements of the low voltage directive. Due to current limitation related to the conductor cross sectional area, they are not intended for direct connection to mains electricity supply. The maximum current rating per conductor is less than or equal to 175 mA unless otherwise specified in the relevant sectional specification.

Cabling elements as defined in 4.3 of this standard may be incorporated in hybrid construction cables together with coaxial or optical fibre cabling elements.

2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the cited publications are listed hereafter. For dated references, subsequent amendments to or revisions of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the cited publication applies, together with any amendments.

EN 10002-1		Tensile testing of metallic materials - Part 1: Method of test at ambient temperature
EN 50173		Information technology - Generic cabling systems
EN 50289	Series	Communication Cables - Specifications for tests methods
EN 50290-1-2	¹⁾	Communication cables - Part 1-2: Definitions
EN 50290-2	Series	Communication cables - Part 2: Common design rules and construction
EN 60811-1-1		Insulating and sheathing materials of electric and optical cables - Common test methods – Part 1-1: General application - Measurement of thickness and overall dimensions - Tests for determining the mechanical properties (IEC 60811-1-1)

¹⁾ At draft stage.

EN 60811-1-3	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 1-3: General application - Methods for determining the density - Water absorption tests - Shrinkage test (IEC 60811-1-3)
EN 60811-1-4	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 1-4: General application - Tests at low temperature (IEC 60811-1-4)
HD 402 S2	Standard colours for insulation for low-frequency cables and wires (IEC 60304)
IEC 60028	International standard of resistance for copper
IEC 60189-1	Low-frequency cables and wires with PVC insulation and PVC sheath - Part 1: General test and measuring methods

3 Definitions

For the purposes of this European Standard, the definitions given in EN 50290-1-2 and EN 50173 apply in addition to the following:

3.1

horizontal cable

cable suitable for connecting a floor distributor to a telecommunications outlet. It is suitable for horizontal installation in ducts, trunking, suspended floors and ceiling cavities

3.2

building backbone cable

cable suitable for connecting a building distributor to a floor distributor and may also connect floor distributors in the same building. It is suitable for horizontal installation or vertical installation between floors provided the cable has adequate mechanical strength

NOTE Horizontal cable as defined in 3.1 may also be used as building backbone cable provided that it has adequate mechanical strength and fire performance characteristics.

3.3

work area cable

a cable connecting the telecommunications outlet to the terminal equipment

3.4

patch cord cable

flexible cable unit or element with connector(s) used to establish connections on a patch panel

NOTE Work area cables, as defined in 3.3, may be used as patch cord cable in any distributor of a generic building wiring system to interconnect with equipment or to cross-connect between cabling systems.