

Analoog- ja digitaalkommunikatsioonis ja -juhtimises kasutatavad mitmeelementilised 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

See Eesti standard EVS-EN 50288-1:2013 sisaldab Euroopa standardi EN 50288-1:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 50288-1:2013 consists of the English text of the European standard EN 50288-1:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kätesaadavaks 24.05.2013.	Date of Availability of the European standard is 24.05.2013.
Standard on kätesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 50288-1**

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Supersedes EN 50288-1:2003

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

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

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European Committee for Electrotechnical Standardization  
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**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

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## Foreword

This document (EN 50288-1:2013) has been prepared by CLC/SC 46XC "Multicore, Multipair and Quad Data communication 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) 2014-03-18
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2016-03-18

This document supersedes EN 50288-1:2003.

EN 50288-1:2013 includes the following significant technical changes with respect to EN 50288-1:2003:

- the addition of the MICE table;
- a number minor corrections and updating of references;
- the re-classification of 'ELFEXT' to 'ACR-F'.

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).

## 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 and the sectional specification standards in the EN 50288 series 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.

Unless otherwise specified, all cables covered by this European 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 as stipulated in Table B.1 unless otherwise specified in the relevant sectional specification. IDCs are only designed for copper or metal coated copper.

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

## 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 50173 series	<i>Information technology — Generic cabling systems</i>
EN 50289 series	<i>Communication Cables — Specifications for tests methods</i>
EN 50290-1-2	<i>Communication cables — Part 1-2: Definitions</i>
EN 50290-2 series	<i>Communication cables — Part 2: Common design rules and construction</i>
EN 50290-4-1	<i>Communication cables — Part 4-1: General considerations for the use of cables – Environmental conditions and safety aspects</i>
EN 60811 series	<i>Electrical and optical fibre cables — Test methods for non-metallic materials.</i>
EN ISO 6892-1	<i>Metallic materials — Tensile testing — Part 1: Method of test at room temperature (ISO 6892-1)</i>
HD 402 S2	<i>Standard colours for insulation for low-frequency cables and wires (IEC 60304)</i>
IEC 60028	<i>International standard of resistance for copper</i>

## 3 Terms and Definitions

For the purposes of this document, the terms and definitions given in EN 50290-1-2 and EN 50173 series and the following apply: