

**Kommunikatsioonikaablid. Osa 2-29:  
Projekteerimise üldjuhised ja konstruktsioon.  
Põiksidestuspolüeteen-isoleermaterjalid**

Communication cables - Part 2-29: Common design rules and construction - Cross-linked PE insulation compounds

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|  |   |
|--|---|
| <p>Käesolev Eesti standard EVS-EN 50290-2-29:2003 sisaldab Euroopa standardi EN 50290-2-29:2002 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 15.01.2003 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 31.01.2002.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 50290-2-29:2003 consists of the English text of the European standard EN 50290-2-29:2002.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 15.01.2003 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 31.01.2002.</p> <p>The standard is available from Estonian standardisation organisation.</p> |
|--|---|

ICS 29.035.20, 33.120.10

**Võtmesõnad:** cross-linked materials, design, developments, insulating compounds, insulating joints, insulations, make-ups, materials, optical, optical waveguides, pe, production, rules, sheathings, specification (approval), specifications, symmetrical, telecommunication

### Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
Aru 10 Tallinn 10317 Eesti; [www.evs.ee](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

EUROPEAN STANDARD

**EN 50290-2-29**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2002

ICS 29.035.20; 33.120.10

Supersedes HD 624.9 S1:1997

English version

**Communication cables**  
**Part 2-29: Common design rules and construction –**  
**Cross-linked PE insulation compounds**

Câbles de communication  
Partie 2-29: Règles de conception  
communes et construction –  
PE réticulé pour enveloppes isolantes

Kommunikationskabel  
Teil 2-29: Gemeinsame Regeln  
für Entwicklung und Konstruktion -  
Vernetzte PE-Isolier-Mischungen

This European Standard was approved by CENELEC on 2001-11-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

### Foreword

This European Standard was prepared by a joint working group of the Technical Committees CENELEC TC 46X, Communication cables, and CENELEC TC 86A, Optical fibres and optical fibre cables.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50290-2-29 on 2001-11-01.

This European Standard supersedes HD 624.9 S1:1997.

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) 2002-08-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2004-08-01

This European Standard has been prepared under the European Mandate M/212 given to CENELEC by the European Commission and the European Free Trade Association.

---

This document is a preview generated by EVS

## 1 Scope

This Part 2-29 of EN 50290 includes requirements for cross-linked PE insulation compounds used in communication cables.

It is to be read in conjunction with Part 2-20 of EN 50290.

## 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 publications are listed hereafter. For dated references, subsequent amendments to or revisions of any 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 publication referred to applies (including amendments).

|                   |  |
|-------------------|--|
| EN 60811-1-1:1995 | 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 60811-1-1:1993)  |
| EN 60811-1-2:1995 | Insulating and sheathing materials of electric cables - Common test methods Part 1-2: General application -- Thermal ageing methods (IEC 60811-1-2:1985 + corr. May 1986 + A1:1989)  |
| EN 60811-1-3:1995 | 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 60811-1-3:1993)  |
| EN 60811-2-1:1998 | Insulating and sheathing materials of electric and optical cables - Common test methods -- Part 2-1: Methods specific to elastomeric compounds - Ozone resistance, hot set and mineral oil immersion tests (IEC 60811-2-1:1998)  |
| EN 60811-4-2:1999 | Insulating and sheathing materials of electric and optical fibre cables - Common test methods -- Part 4: Methods specific to polyethylene and polypropylene compounds -- Section 2: Tensile strength and elongation at break after pre-conditioning Wrapping test after thermal ageing in air - Measurement of mass increase -- Long - term stability test - Test method for copper - catalysed oxidative degradation (IEC 60811-4-2:1990, mod.) |

## 3 Requirements

In case of specific applications, additional performances could be needed. Relevant test methods and requirements shall be included in the detail specifications of the cables.