

STN	Oznamovacie káble. Časť 2-25: Spoločné pravidlá na vývoj a konštrukciu. Polypropylénové izolačné zmesi.	STN EN 50290-2-25 34 7032
------------	--	---

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Obsahuje: EN 50290-2-25:2013

Oznámením tejto normy sa od 16.9.2016 ruší
STN EN 50290-2-25 (34 7032) z augusta 2002

118940

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2014
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy
rozmnžovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50290-2-25

November 2013

ICS 29.035.20; 33.120.10

Supersedes EN 50290-2-25:2002

English version

**Communication cables -
Part 2-25: Common design rules and construction -
Polypropylene insulation compounds**

Câbles de communication -
Partie 2-25: Règles de conception
communes et construction -
Polypropylène pour enveloppes isolantes

Kommunikationskabel -
Teil 2-25: Gemeinsame Regeln für
Entwicklung und Konstruktion -
Polypropylen-Isoliermischungen

This European Standard was approved by CENELEC on 2013-09-16. 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 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Contents

Foreword	3
1 Scope	5
2 Normative references	5
3 Compound test requirements	6
4 Cable test requirements	6
5 Health, Safety and Environmental Regulations	6
Bibliography	9

Foreword

This document (EN 50290-2-25:2013) was prepared by 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) 2014-09-16
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2016-09-16

This document supersedes EN 50290-2-25:2002.

EN 50290-2-25:2013 includes the following significant technical changes with respect to EN 50290-2-25:2002:

- The document has been entirely restructured.
- The main change is the introduction of the new Table 1 for the test to be performed on granules.

This document should be read in conjunction with EN 50290-2-20, the product standard EN 50288 (all parts) and other applicable product standards.

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 document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

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 50290-2, *Communication cables*, is divided into the following sub-parts:

- *Part 2-1: Common design rules and construction;*
- *Part 2-2: Common design rules and construction — Polyethylene insulation for multi element metallic data cables for indoor application [currently at Enquiry stage];*
- *Part 2-3: Common design rules and construction — Polyethylene insulation for coaxial cables [currently at Enquiry stage];*
- *Part 2-4: Common design rules and construction — Polypropylene insulation for coaxial cables [currently at Enquiry stage];*
- *Part 2-20: Common design rules and construction — General;*
- *Part 2-21: Common design rules and construction — PVC insulation compounds;*
- *Part 2-22: Common design rules and construction — PVC sheathing compounds;*
- *Part 2-23: Common design rules and construction — PE insulation;*
- *Part 2-24: Common design rules and construction — PE sheathing;*

- *Part 2-25: Common design rules and construction — Polypropylene insulation for compounds [the present document];*
 - *Part 2-26: Common design rules and construction — Halogen free flame retardant insulation compounds;*
 - *Part 2-27: Common design rules and construction — Halogen free flame retardant thermoplastic sheathing compounds;*
 - *Part 2-28: Common design rules and construction — Filling compounds for filled cables;*
 - *Part 2-29: Common design rules and construction — Cross-linked PE insulation compounds;*
 - *Part 2-30: Common design rules and construction — Poly(tetrafluoroethylene-hexafluoropropylene) (FEP) insulation and sheathing;*
 - *Part 2-32: Common design rules and construction — Halogen free insulation compounds for flame retardant and fire resistant cables [currently at Enquiry stage].*
-

1 Scope

This European Standard gives specific requirements for PP compounds to be used for multi-element metallic data cables for indoor application. Type 1 is typically a copolymer with better low temperature properties. Type 2 is typically a homopolymer with superior hardness giving better crush resistance.

Using compound and type test data as outlined in this standard, the compound supplier will have sufficient data to demonstrate compliance and warrant that the material is suitable for the specified application.

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 50267-2-2, *Common test methods for cables under fire conditions — Tests on gases evolved during combustion of materials from cables — Part 2-2: Procedures — Determination of degree of acidity of gases for materials by measuring pH and conductivity*

EN 50290-2-20, *Communication cables — Part 2-20: Common design rules and construction — General*

EN 60216 (all parts), *Electrical insulating materials — Thermal endurance properties (IEC 60216, all parts)*

EN 60811-401, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 401: Miscellaneous tests — Thermal ageing methods — Ageing in an air oven (IEC 60811-401)*

EN 60811-501, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 501: Mechanical tests — Tests for determining the mechanical properties of insulating and sheathing compounds (IEC 60811-501)*

EN 60811-502, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 502: Mechanical tests - Shrinkage test for insulations (IEC 60811-502)*

EN 60811-504, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 504: Mechanical tests — Bending tests at low temperature for insulation and sheaths (IEC 60811-504)*

EN 60811-510, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 510: Mechanical tests — Methods specific to polyethylene and polypropylene compounds — Wrapping test after thermal ageing in air (IEC 60811-510)*

EN ISO 179-1, *Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test (ISO 179-1)*

EN ISO 527 (all parts), *Plastics — Determination of tensile properties (ISO 527, all parts)*

EN ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868)*

EN ISO 1133 (all parts), *Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics (ISO 1133, all parts)*

EN ISO 1183 (all parts), *Plastics — Methods for determining the density of non-cellular plastics (ISO 1183, all parts)*

EN ISO 5659-2, *Plastics — Smoke generation — Part 2: Determination of optical density by a single-chamber test (ISO 5659-2)*

EN ISO 11357-6, *Plastics — Differential scanning calorimetry (DSC) — Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT) (ISO 11357-6)*

IEC 60250, *Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including metre wavelengths*

ASTM D4565 (section 19), *Standard Test Methods for Physical and Environmental Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable*; Section 19: Insulation adhesion

koniec náhľadu – text ďalej pokračuje v platenej verzii STN