



**NSAI**  
Standards

Irish Standard  
I.S. EN 50290-2-35:2016

# Communication cables - Part 2-35: Common design rules and construction - Polyamide sheathing compound

**I.S. EN 50290-2-35:2016**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

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*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

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*This document is based on:*

EN 50290-2-35:2016

*Published:*

2016-08-19

*This document was published under the authority of the NSAI and comes into effect on:*

2016-09-06

ICS number:

29.035.20

33.120.10

NOTE: If blank see CEN/CENELEC cover page

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## National Foreword

I.S. EN 50290-2-35:2016 is the adopted Irish version of the European Document EN 50290-2-35:2016, Communication cables - Part 2-35: Common design rules and construction - Polyamide sheathing compound

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EUROPEAN STANDARD

**EN 50290-2-35**

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2016

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ICS 29.035.20; 33.120.10

English Version

## Communication cables - Part 2-35: Common design rules and construction - Polyamide sheathing compound

Câbles de communication - Partie 2-35: Règles de conception communes et construction - Mélange pour le gainage en polyamide

Kommunikationskabel - Teil 2-35: Gemeinsame Regeln für Entwicklung und Konstruktion - Polyamid-Mantelmischung

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Comité Européen de Normalisation Electrotechnique  
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EN 50290-2-35:2016 (E)

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## European foreword

This document (EN 50290-2-35:2016) has been 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) 2017-07-22
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2019-07-22

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.

EN 50290-2-35:2016 (E)

## 1 Scope

This Part 2-35 of EN 50290 gives specific requirements for Polyamide and Polyamide alloys to be used for the inner and outer sheathing of cables.

It is essential to read this European Standard in conjunction with Part 2-20 of EN 50290, the product standards EN 50288-7 and EN 61158 and other applicable product standards.

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

**Table 1 — Polyamide sheathing compound**

Type	Maximum operating temperature
PA	90 °C

## 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 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 60811-404, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 404: Miscellaneous tests — Mineral oil immersion tests for sheaths (IEC 60811-404)*

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 60811-605, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 605: Physical tests — Measurement of carbon black and/or mineral filler in polyethylene compounds (IEC 60811-605)*

EN 60811-606, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 606: Physical tests — Methods for determining the density (IEC 60811-606)*

EN 60811-607, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 607: Physical tests — Test for the assessment of carbon black dispersion in polyethylene and polypropylene (IEC 60811-607)*

EN ISO 62, *Plastics — Determination of water absorption (ISO 62)*

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

## 3 Compound requirements

The tests are to be carried out on granules or moulded plaques (or other suitable forms) produced from granules of the supplied compound. This data shall describe the general performance of Polyamide compounds. The data shall be provided by the compound supplier and therefore can be included in any supply specification of the raw material. Test methods, relevant requirements and limits are shown in Table 2. In the case of special applications, additional requirements could be specified.



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