

Communication cables - Part 2-38: Common design rules and construction - Polypropylene insulation for coaxial cables

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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ICS 29.035.20; 33.120.10

English Version

## Communication cables - Part 2-38: Common design rules and construction - Polypropylene insulation for coaxial cables

Câbles de communication - Partie 2-38: Règles de conception communes et construction - Polypropylène pour enveloppes isolantes pour câbles coaxiaux

Kommunikationskabel - Teil 2-38: Gemeinsame Regeln für Entwicklung und Konstruktion - Polypropylen-Isolermischungen für Koaxialkabel

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## European foreword

This document (EN 50290-2-38:2016) has been prepared by CLC/TC 46X "Communication cables".

The following dates are fixed:

- latest date by which this document has to be (dop) 2017-03-14  
implemented at national level by publication  
of an identical national standard or by  
endorsement
- latest date by which the national standards (dow) 2019-03-14  
conflicting with this document have to  
be withdrawn

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## 1 Scope

This Part 2-38 of EN 50290 gives specific requirements for Polypropylene (PP) compounds to be used for the insulation of coaxial cables. It is to be read in conjunction with EN 50290-2-20, EN 50117 and other applicable product standards.

Grades PP-S1 and PP-F1 correspond to materials specified in the previous version 50290-2-25. These relatively soft Polypropylene compounds have good low temperature properties and are highly stabilized.

Grades PP-S2 and PP-F2 exhibit properties more typical of Polypropylene and are designed for general Coax applications where high crush resistance and superior dielectric properties are needed.

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.

## 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 50289-3-17, *Communication cables - Specifications for test methods - Part 3-17: Mechanical test methods - Adhesion of dielectric and sheath*

EN 50289-3-9, *Communication cables - Specifications for test methods - Part 3-9: Mechanical test methods - Bending tests*

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

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 60754-2, *Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity (IEC 60754-2)*

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

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 the melt volume-flow rate (MVR) of thermoplastics (ISO 1133)*

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

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

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)*