SLOVENSKI STANDARD
oSIST prEN 50290-2-36:2016

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Komunikacijski kabli - 2-36. del: Komunikacijski kabli - 2-36. del: Skupna pravila za snovanje in konstruiranje - Izolacijska zmes iz zamrežene silikonske gume

Communication cables - Part 2-36: Common design rules and construction - Crosslinked Silicone rubber insulation compound

Câbles de communication - Partie 2-36: Règles de conception communes et construction - Mélange de caoutchouc silicone réticulé pour enveloppes isolantes

Ta slovenski standard je istoveten z: **prEN 50290-2-36:2016**

ICS:

29.035.20	Plastični in gumeni izolacijski materiali	Plastics and rubber insulating materials
33.120.10	Koaksialni kabli. Valovodi	Coaxial cables. Waveguides

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To be completed

This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2016-06-17.

It has been drawn up by CLC/TC 46X.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CENELEC 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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

9 # European foreword

10 This document (prEN 50290-2-36:2016) has been prepared by CLC/TC 46X, "Communication cables".

11 This document is currently submitted to the Enquiry.

12 The following dates are proposed:

• latest date by which the existence of this document has to be announced at national level	(doa)	dor + 6 months
• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	dor + 12 months
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	dor + 36 months (to be confirmed or modified when voting)

1 Scope

This Part 2-36 of EN 50290 gives specific requirements for crosslinked Silicone rubber compound (SiR) to be used for the insulation of fire resistant cables.

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

This part 2-36 of EN 50290 describes the compound type as given in Table 1.

Table 1 – Crosslinked SiR insulation compound

Type	Maximum operating temperature
SiR	180 °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 50290-2-20, *Communication cables - Part 2-20: Common design rules and construction - General*

EN 60754-1, *Test on gases evolved during combustion of materials from cables - Part 1: Determination of the halogen acid gas content (IEC 60754-1)*

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 60684-2, *Flexible insulating sleeving - Part 2: Methods of test (IEC 60684-2)*

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 60811-507, *Electric and optical fibre cables - Test methods for non-metallic materials - Part 507: Mechanical tests - Hot set test for cross-linked materials (IEC 60811-507)*

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)*

3 Compound test 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 Silicone rubber insulation 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.

4 Cable test requirements

The anticipated performance assumes standard cable design and conventional process technology and is specified in Table 3. In case of specific applications, additional requirements could be specified. Relevant test methods and requirements, especially referring to any cable fire performance, shall be included in the detailed specification of the cable.

5 Health, Safety and Environmental (HSE) Regulations

The materials are subject to Health, Safety and Environmental (HSE) requirements as defined in EN 50290-2-20. Any deviations or compliance failures must be identified by the raw material supplier and necessary corrective actions to be undertaken agreed with the cable maker.

Table 2 – Crosslinked Silicone rubber insulation compound – properties on granules[1)]

	Characteristics	Test method	Unit	Values
1	**Corrosivity of gases**	EN 60754-2		
	pH-value		**[-]**	**≥ 4,3**
	conductivity value		**µS/mm**	**≤ 10**
2	Halogen acid content			
	HCl/HBr	EN 60754-1	**%**	≤ 0,5
	HF	EN 60684-2, 45.2	**%**	≤ 0,1
3	**Density**	EN 60811-606	**g/cm^3**	**to be reported by supplier[2)]**
1) All values of Table 2 shall be provided by the compound supplier, see Clause 3				
2) Informative: to be given values are only to characterize the material in order to give a perception whether the material is suitable to meet the cable requirements requested in the relevant product standard/specification				