SLOVENSKI STANDARD
oSIST prEN 50626-2:2017

01-april-2017

Podzemni kanalski sistem za zaščito in upravljanje izoliranih električnih ali komunikacijskih kablov - 2. del: Posebne zahteve za kanale za posebno uporabo

Conduit systems buried underground for the protection and management of insulated electrical cables or communication cables - Part 2: Particular requirements for conduits for special applications

Systèmes de conduits enterrés dans le sol pour la protection et la gestion des câbles électriques isolés ou des câbles de communication - Partie 2: Exigences particulières pour conduits destinés aux applications spéciales

Ta slovenski standard je istoveten z: **prEN 50626-2:2017**

ICS:

29.120.10	Inštalacijske cevi za električne namene	Conduits for electrical purposes

oSIST prEN 50626-2:2017 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 50626-2

January 2017

ICS 29.120.10

English Version

Conduit systems buried underground for the protection and management of insulated electrical cables or communication cables - Part 2: Particular requirements for conduits for special applications

Systèmes de conduits enterrés dans le sol pour la protection et la gestion des câbles électriques isolés ou des câbles de communication - Partie 2: Exigences particulières pour conduits destinés aux applications spéciales

This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2017-04-21.

It has been drawn up by CLC/TC 213.

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.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

CENELEC

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

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Project: 61148 Ref. No. prEN 50626-2:2017 E

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European foreword

This document (prEN 50626-2:2017) has been prepared by CLC/TC 213, "Cable management systems".

This document is currently submitted to the Enquiry.

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)

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).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

A conduit systems buried underground that conforms to this European Standard is deemed to be safe for use.

This is a European Standard for cable management products used for electro-technical purposes. It relates to the Council Directives on the approximation of laws, regulations and administrative provisions of the Member States relating to Low Voltage Directive 2014/35/EU through consideration of the essential requirements of this directive.

This European Standard is supported by separate standards to which references are made.

Introduction

The EN 50626 series specifies requirements for conduit systems buried underground for the protection and management of insulated electrical cables or communication cables. For general applications, requirements of prEN 50626-1 are considered sufficient. For special applications, particular characteristics and tests are required in order to fulfil the expected service time. Therefore, the need to introduce material and lifetime requirements are considered necessary. In most of these special applications, conduits made of thermoplastics materials are used.

For developing these particular characteristics and requirements, members of CEN/TC155 were invited to contribute to the drafting of this Part 2.

In this prEN 50626-2, specific material and lifetime requirements are covered. Some of these requirements are under consideration within CEN/TC155. This is done without interfering with the approach of CLC/TC213 regarding the prescription of type tests for checking the product characteristics.

1 Scope

This clause of part 1 is applicable with the following addition:

This European Standard specifies particular requirements and tests for conduit systems buried underground for the protection and management of insulated conductors and/or power cables or communication cables that are installed by different techniques, for example, blowing (including floating), pulling or pushing directly after installation of the conduit or during its expected performance time.

This standard is applicable to all conduits with circular cross section manufactured individually or manufactured as a part of an assembly

NOTE Reference is made to other documents for additional material requirements where applicable.

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.

This clause of part 1 is applicable.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

This clause of part 1 is applicable with the following additions:

3.101
performance time
predicted service time of the installed conduit

Note 1 to entry: The service time takes into account continuous external loads and occasional internal loads. Both types of loads are to be taken into account when the predicted service time is declared.

4 General requirements

This clause of part 1 is applicable.

5 General conditions for tests

This clause of part 1 is applicable with the following modifications:

In the first paragraph, delete the second sentence.

Replace the second paragraph with the following:

“The detachable conduit fitting shall be capable of being assembled again, after the test, according to the manufacturer's instructions without loss of the declared properties according to Clause 6.”

6 Classification

This clause of part 1 is applicable, except as follows:

Addition:

6.1 According to mechanical properties

This clause of part 1 is applicable with the following modifications:

6.1.1 Resistance to compression

This subclause of part 1 is applicable with the following addition:

For thermoplastic non-pressure conduits, the following classifications may be used:

6.1.1.101 Nominal Ring Stiffness 2 (SN2)

6.1.1.102 Nominal Ring Stiffness 4 (SN4)

6.1.1.103 Nominal Ring Stiffness 8 (SN8)

6.1.1.104 Nominal Ring Stiffness 16 (SN 16)

6.1.1.105 Nominal Ring Stiffness 32 (SN 32)

6.1.1.106 Nominal Ring Stiffness 64 (SN 64)

6.1.2 Resistance to impact

This subclause of part 1 is applicable with the following addition:

For thermoplastic non-pressure conduits, the following classifications may be used:

6.1.2.101 True Impact Ratio 23 ºC (TIR 23)

6.1.2.102 True Impact Ratio 0 ºC (TIR 0)

6.1.2.103 True Impact Ratio -10 ºC (TIR -10)

6.1.3 Resistance to bending

This subclause of part 1 is applicable with the following exceptions:

For thermoplastics materials, minimum allowed cold bending radius of the conduit in m shall be declared by the manufacturer.

Addition:

6.1.101 Pulling force

Maximum allowed pulling force of the system in N shall be declared by the manufacturer, if applicable.

6.1.102 Short-term resistance to internal pressure

Maximum short-term resistance to internal pressure of the system in bar shall be declared by the manufacturer, if applicable.

6.2 According to resistance to external influences

6.2.1 Protection against ingress of solid objects and ingress of water

This subclause of part 1 is applicable with the following modifications:

Addition:

Additional classifications for thermoplastic materials:

6.2.1.101 Tight

6.2.2 Protection against ingress of water

This subclause of part 1 is not applicable.

6.2.3 Resistance against corrosion

This subclause of part 1 is applicable.

6.3 According to resistance to flame propagation

This subclause of part 1 is applicable.

Addition:

6.101 Performance time

6.101.1 25 years

6.101.2 50 years

6.101.3 100 years

7 Marking and documentation

Replacement:

7.1 Each conduit shall be marked with

— the manufacturer's or responsible vendor's name or trade mark or identification mark;

— a product identification mark, which may be, for example, the code of this standard, a catalogue number, a symbol or the like, in such a way that it can be identified in the manufacturer's or responsible vendor's literature;

— the compression codes according to 6.1.2 shall be marked immediately before the impact codes according to 6.1.1.

7.2 The conduit shall be marked with the following if applicable:

— maximum allowed pulling force according to 6.1.101;

— maximum short term resistance to internal pressure of the system according to 6.1.102;

— performance time according to 6.101;

— abbreviations that identify the type of thermoplastics material used; for example, “PP” for polypropylene, “PE” for polyethylene or “PVC-U” for polyvinyl chloride plasticized.

7.3 All individual conduits manufactured as a part of an assembly shall be marked in accordance with 7.1.

7.4 Conduits shall be marked according to 7.1 at regular intervals along their length of preferably 1 m but not longer than 3 m.

7.5 The manufacturer shall be responsible for indicating the compatibility of parts within a conduit system.

7.6 The manufacturer shall provide in his literature its classification in accordance with Clause 6 and all information necessary for the proper and safe transport, storage, installation and use.

7.7 The conduit fitting shall be marked in accordance with 7.1, on the product wherever possible, but, where this is impractical, then the mark may be on a label attached to the product, or on the smallest supplied package.

7.8 *Compliance with 7.1 to 7.7 is checked by inspection.*

7.9 *Clause 7.5 of part 1 is applicable.*

7.10 *Clause 6.6 of part 1 is applicable.*

8 Dimensions

This subclause of part 1 is applicable with the following addition:

NOTE For thermoplastics conduits, additional requirements for dimensions are under consideration.

9 Construction

This clause of part 1 is applicable.

10 Mechanical properties

This clause of part 1 is applicable with the following modification:

Compliance is checked by the tests of 10.2 to 10.103.

10.2 Compression test

This clause of part 1 is applicable with the following addition:

NOTE For thermoplastic non-pressure conduits, requirements for compression test are under consideration.

10.3 Impact test

This clause of part 1 is applicable with the following addition.

NOTE For thermoplastic non-pressure conduits, requirements for impact test are under consideration.

10.4 Bending test

This clause of part 1 is applicable with the following addition.