

## **Conductors for overhead lines - Zinc coated steel wires**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50189:2002 sisaldab Euroopa standardi EN 50189:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50189:2002 consists of the English text of the European standard EN 50189:2000.</p> <p>This document is endorsed on 18.12.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This standard applies to round zinc-coated steel wires used in the construction and/or reinforcement of conductors for overhead power transmission purposes. It is intended to cover all wires used in constructions where the individual wire diameters, including coating, are in the range of 1.25 mm to 5.50mm. Nine grades of steel are included to reflect the needs of conductor users. Five classes of coating represented by minimum zinc mass per unit area are</p>	<p><b>Scope:</b></p> <p>This standard applies to round zinc-coated steel wires used in the construction and/or reinforcement of conductors for overhead power transmission purposes. It is intended to cover all wires used in constructions where the individual wire diameters, including coating, are in the range of 1.25 mm to 5.50mm. Nine grades of steel are included to reflect the needs of conductor users. Five classes of coating represented by minimum zinc mass per unit area are</p>
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**Võtmesõnad:** electric conductors, measurement, overhea, overhead power lines, specification (approval), specifications, steel cords, steel wires, steels, stranded conductors, strength of materials, zinc coatings, tensile strength, testing, tolerances, tolerances (measurement)

English version

**Conductors for overhead lines  
Zinc coated steel wires**

Conducteurs pour lignes aériennes  
Fils d'acier zingué

Leiter für Freileitungen  
Verzinkte Stahldrähte

This European Standard was approved by CENELEC on 1999-10-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 7, Overhead electrical conductors.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50189 on 1999-10-01.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2000-10-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2002-10-01

Annexes designated "normative" are part of the body of the standard;  
In this standard, annex A is normative.

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## 1 Scope

This standard applies to round zinc-coated steel wires used in the construction and/or reinforcement of conductors for overhead power transmission purposes.

It is intended to cover all wires used in constructions where the individual wire diameters, including coating, are in the range of 1,25 mm to 5,50 mm.

Types of wire are designated STyz, where y represents the grade of steel and z represents the class of zinc coating.

To reflect the needs of conductor users, the only combinations of steel grade and zinc coating covered by this standard are ST1A, ST2B, ST3D, ST4A, ST5E and ST6C.

The properties specified are those before stranding.

## 2 Normative references

This European standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 10002-1	<i>Metallic materials — Tensile testing — Part 1: Method of test at ambient temperature</i>
EN 10021	<i>General technical delivery conditions for steel and steel products</i>
EN 10218-1	<i>Steel wire and wire products — General — Part 1: Test methods</i>
EN 10244-2 <sup>1)</sup>	<i>Steel wire and wire products — Non-ferrous metallic coatings on steel wire Part 2: Zinc or zinc alloy coatings</i>
IEC 60050-466	<i>International Electrotechnical Vocabulary (IEV) — Chapter 466: Overhead Lines</i>
ISO 7801	<i>Metallic materials — Wire — Reverse bend test</i>

## 3 Definitions

In addition to the definitions given in IEC 60050-466, the following definition applies:

### 3.1

#### lot

a group of reels or coils manufactured by the same manufacturer under similar conditions of production

NOTE 1 A lot may consist of part of or all the purchased quantity.

NOTE 2 The constitution of a lot may be agreed between the purchaser and the manufacturer.

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1) In preparation