



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 50182:2005

ICS 29.060.10

**CONDUCTORS FOR OVERHEAD LINES -
ROUND WIRE CONCENTRIC LAY STRANDED
CONDUCTORS**

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EUROPEAN STANDARD

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NORME EUROPÉENNE

EUROPÄISCHE NORM

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Incorporates Corrigendum June 2005

English version

Conductors for overhead lines - Round wire concentric lay stranded conductors

Conducteurs pour lignes aériennes -
Conducteurs à brins circulaires,
câblés en couches concentriques

Leiter für Freileitungen -
Leiter aus konzentrisch verseilten
runden Drähten

This European Standard was approved by CENELEC on 2000-11-01. 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 50182 on 2000-11-01.

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) 2001-11-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-11-01

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given for information only. In this standard, annexes A, B, C and E are normative and annexes D and F are informative.

The contents of the corrigendum of June 2005 have been included in this copy.

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1 Scope

This European Standard specifies the electrical and mechanical characteristics of round wire concentric lay bare overhead electrical conductors stranded in alternate directions, with or without grease as per EN 50326, made of one or a combination of any of the following:

- a) Hard drawn Aluminium as per EN 60889 designated AL1
- b) Aluminium alloy as per EN 50183 designated AL2 to AL7
- c) Zinc coated steel wire as per EN 50189 with grade and class designated ST1A, ST2B, ST3D, ST4A, ST5E, and ST6C.
- d) Aluminium-clad steel wire as per EN 61232 with class designation 20SA (grades A and B), 27SA, 30SA and 40SA.

Conductors made of zinc coated steel wires only are not included.

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 issue of the publication referred to applies.

EN 50183	Conductors for overhead lines — Aluminium-magnesium-silicon alloy wires
EN 50189	Conductors for overhead lines — Zinc coated steel wires
EN 50326 ¹⁾	Conductors for overhead lines — Characteristics of greases
EN 60889	Hard-drawn aluminium wire for overhead line conductors.
EN 61232	Aluminium-clad steel wires for electrical purposes.
IEC 60050-466	International Electrotechnical Vocabulary (IEV) - Chapter 466: Overhead Lines.

3 Definitions

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

3.1

aluminium

for the purposes of this standard, aluminium is used as a generic term to mean hard drawn aluminium and aluminium alloy

3.2

direction of lay

the direction of lay is defined as right hand or left hand. With right hand lay, the wires conform to the direction of the central part of the letter Z when the conductor is held vertically. With left hand lay the wires conform to the central part of the letter S when the conductor is held vertically

¹⁾ At draft stage

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