



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 50446:2006

ICS 17.200.20

**STRAIGHT THERMOCOUPLE ASSEMBLY
WITH METAL OR CERAMIC PROTECTION
TUBE AND ACCESSORIES**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50446

October 2006

ICS 17.200.20

Supersedes EN 50112:1994 and EN 50113:1994

English version

**Straight thermocouple assembly
with metal or ceramic protection tube
and accessories**

Thermomètres à thermocouple droits
avec tube de protection métallique
ou en céramique, et accessoires

Gerade Thermoelemente
mit Metall- oder Keramik-Schutzrohr
und Zubehör

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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.

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CENELEC

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

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Foreword

This European Standard was prepared by the CENELEC BTWG 109-2, Straight thermocouple thermometers.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50446 on 2006-09-01.

This European Standard supersedes EN 50112:1994 and EN 50113:1994.

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) 2007-09-01
 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2009-09-01
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1 Scope

This standard applies to straight thermocouples for the nominal pressure level PN 1, which are made of standardized components (connection head, protection tube and thermocouple(s)).

Details regarding the operational areas of the thermocouples and the use of protection tubes are part of this standard.

Connection heads as well as stop flanges and threaded bushings for the mounting of the thermocouples are also part of this standard. Special designs are to be agreed upon between manufacturer and user.

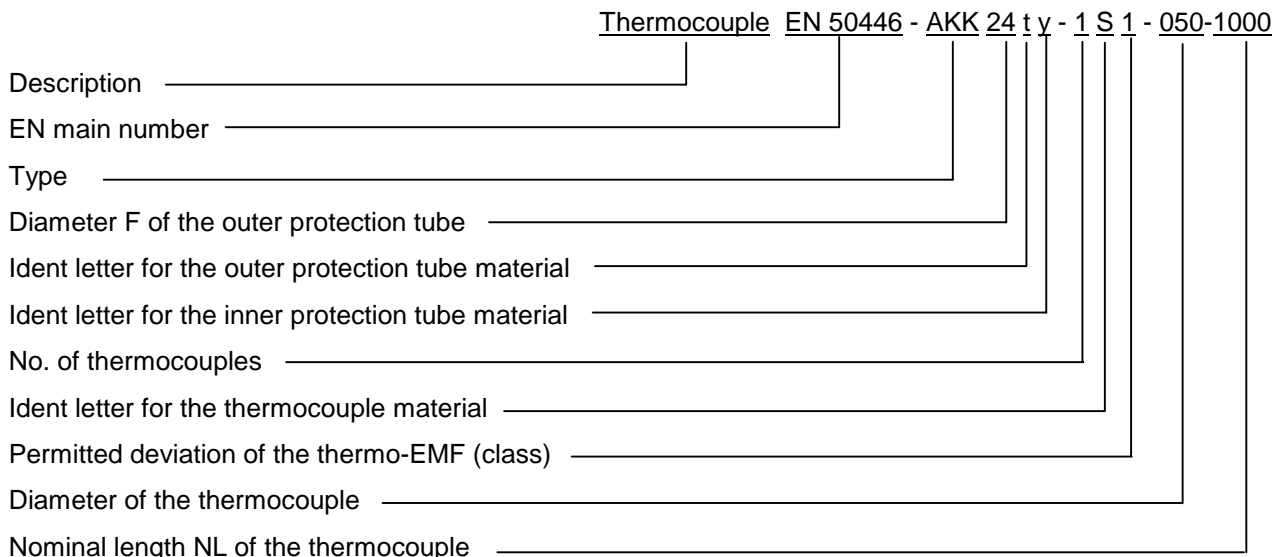
2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- EN 50113 *Measurement, control, regulation - Electrical temperature sensors – Isolating tubes for thermocouples*
- EN 60529 *Degrees of protection provided by enclosures (IP code) (IEC 60529)*
- EN 60584-1 *Thermocouples - Part 1: Reference tables (IEC 60584-1)*
- EN 60672-1 *Ceramic and glass insulating materials - Part 1: Definitions and classification (IEC 60672-1)*
- EN 22768-1 *General tolerances - Part 1: Tolerances for linear and angular dimensions without individual tolerance indications (ISO 2768-1)*
- ISO 2944 *Fluid power systems and components - Nominal pressures*

3 Thermocouples, dimensions and description

All dimensions in this standard are given in mm. If not stated differently the general tolerances according to EN 22768-1 apply. The thermocouples do not have to conform to the illustration, only the indicated dimensions must be adhered to.



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