



NSAI
Standards

Irish Standard
I.S. EN ISO 4126-7:2013&A1:2016

Safety devices for protection against excessive pressure - Part 7: Common data (ISO 4126-7:2013)

I.S. EN ISO 4126-7:2013&A1:2016

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN ISO 4126-7:2013/A1:2016

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S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

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This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

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National Foreword

I.S. EN ISO 4126-7:2013&A1:2016 is the adopted Irish version of the European Document EN ISO 4126-7:2013, Safety devices for protection against excessive pressure - Part 7: Common data (ISO 4126-7:2013)

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In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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EUROPEAN STANDARD

EN ISO 4126-7:2013/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2016

ICS 13.240

English Version

Safety devices for protection against excessive pressure -
Part 7: Common data - Amendment 1 (ISO 4126-
7:2013/Amd 1:2016)

Dispositifs de sécurité pour protection contre les
pressions excessives - Partie 7: Données communes -
Amendement 1 (ISO 4126-7:2013/Amd 1:2016)

Sicherheitseinrichtungen gegen unzulässigen
Überdruck - Teil 7: Allgemeine Daten - Änderung 1
(ISO 4126-7:2013/Amd 1:2016)

This amendment A1 modifies the European Standard EN ISO 4126-7:2013; it was approved by CEN on 19 May 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 4126-7:2013/A1:2016 (E)

| Contents | Page |
|-------------------------------|-------------|
| European foreword..... | 3 |

European foreword

This document (EN ISO 4126-7:2013/A1:2016) has been prepared by Technical Committee ISO/TC 185 "Safety devices for protection against excessive pressure" in collaboration with Technical Committee CEN/TC 69 "Industrial valves" the secretariat of which is held by AFNOR.

This Amendment to the European Standard EN ISO 4126-7:2013 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive, see informative Annex ZA, which is an integral part of EN ISO 4126-7:2013.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 4126-7:2013/Amd 1:2016 has been approved by CEN as EN ISO 4126-7:2013/A1:2016 without any modification.

EUROPEAN STANDARD
NORME EUROPÉENNE
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EN ISO 4126-7

July 2013

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Supersedes EN ISO 4126-7:2004

English Version

Safety devices for protection against excessive pressure - Part 7: Common data (ISO 4126-7:2013)

Dispositifs de sécurité pour protection contre les pressions
excessives - Partie 7: Données communes (ISO 4126-
7:2013)

Sicherheitseinrichtungen gegen unzulässigen Überdruck -
Teil 7: Allgemeine Daten (ISO 4126-7:2013)

This European Standard was approved by CEN on 25 April 2013.

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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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN ISO 4126-7:2013 (E)

| Contents | Page |
|---|-------------|
| Foreword | 3 |
| Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 97/23/EC (PED) | 4 |

Foreword

This document (EN ISO 4126-7:2013) has been prepared by Technical Committee ISO/TC 185 "Safety devices for protection against excessive pressure" in collaboration with the Technical Committee CEN/TC 69 "Industrial valves" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 4126-7:2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 4126-7:2013 has been approved by CEN as EN ISO 4126-7:2013 without any modification.

Annex ZA
(informative)
Relationship between this European Standard and the Essential Requirements of EU Directive 97/23/EC (PED)

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Directive 97/23/EC (PED).

Once EN ISO 4126-7 is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of EN ISO 4126-7 confers, within the limits of the scope of EN ISO 4126-7, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Directive 97/23/EC (PED)

| Sub-clauses of this EN | Essential Requirements of Directive 97/23/EC (PED) | |
|------------------------|--|----------------|
| | Essential Requirements | Annex I of PED |
| 5 and 6 | Pressure Limitations | 2.11.1 |

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of EN ISO 4126-7.

INTERNATIONAL STANDARD

ISO 4126-7

Second edition
2013-07-15

Safety devices for protection against excessive pressure —

Part 7: Common data

*Dispositifs de sécurité pour protection contre les pressions excessives —
Partie 7: Données communes*



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Contents

Page

| | |
|---|-----------|
| Foreword | iv |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Symbols and units | 3 |
| 5 Determination of safety valve performance | 4 |
| 5.1 Determination of coefficient of discharge..... | 4 |
| 5.2 Critical and subcritical flow..... | 4 |
| 5.3 Discharge capacity at critical flow..... | 4 |
| 5.4 Discharge capacity for any gas at subcritical flow..... | 5 |
| 5.5 Discharge capacity for non-flashing liquid as the test medium in the turbulent zone where the Reynolds number <i>Re</i> is equal to or greater than 80 000..... | 5 |
| 6 Sizing of safety valves | 6 |
| 6.1 General..... | 6 |
| 6.2 Valves for gas or vapour relief..... | 6 |
| 6.3 Calculation of capacity..... | 6 |
| 7 Thermodynamic properties | 8 |
| 7.1 Steam data..... | 8 |
| 7.2 Value of <i>C</i> as a function of <i>k</i> | 8 |
| 7.3 Theoretical capacity correction factors for sub-critical flow (<i>K_b</i>)..... | 8 |
| 7.4 Estimating chart for compressibility factor, <i>Z</i> | 19 |
| 7.5 Capacity correction factor for viscosity, <i>K_v</i> | 21 |
| 7.6 Properties of gases..... | 22 |
| 8 Minimum requirements for helical compression springs | 23 |
| 8.1 General..... | 23 |
| 8.2 Materials..... | 23 |
| 8.3 Marking..... | 23 |
| 8.4 Dimensions..... | 24 |
| 8.5 Spring plates/buttons..... | 24 |
| 8.6 Inspection, testing and tolerances..... | 24 |
| 9 Minimum requirements for safety valve disc springs | 27 |
| 9.1 General..... | 27 |
| 9.2 Materials..... | 27 |
| 9.3 Marking..... | 27 |
| 9.4 Dimensions..... | 27 |
| 9.5 Inspection, testing and tolerances..... | 27 |
| Annex A (informative) Examples of capacity calculations for various media | 28 |
| Bibliography | 33 |

ISO 4126-7:2013(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 4126-7 was prepared by Technical Committee ISO/TC 185, *Safety devices for protection against excessive pressure*.

This second edition cancels and replaces the first edition (ISO 4126-7:2004), which has been technically revised. It also incorporates the Technical Corrigendum ISO 4126-7:2004/Cor.1:2006.

ISO 4126 consists of the following parts, under the general title *Safety devices for protection against excessive pressure*:

- *Part 1: Safety valves*
- *Part 2: Bursting disc safety devices*
- *Part 3: Safety valves and bursting disc safety devices in combination*
- *Part 4: Pilot-operated safety valves*
- *Part 5: Controlled safety pressure relief systems (CSPRS)*
- *Part 6: Application, selection and installation of bursting disc safety devices*
- *Part 7: Common data*
- *Part 9: Application and installation of safety devices excluding stand-alone bursting disc safety devices*
- *Part 10: Sizing of safety valves for gas/liquid two-phase flow*
- *Part 11: Performance testing¹⁾*

1) Under preparation.

Safety devices for protection against excessive pressure —

Part 7: Common data

1 Scope

This part of ISO 4126 specifies requirements for safety valves. It contains information which is common to ISO 4126-1 to ISO 4126-6 to avoid unnecessary repetition.

For flashing liquids or two-phase mixtures, see ISO 4126-10.

The user is cautioned that it is not recommended to use the ideal gas formula presented in 6.3 when the relieving temperature is greater than 90 % of the thermodynamic critical temperature and the relieving pressure is greater than 50 % of the thermodynamic critical pressure. Additionally, condensation is not considered. If condensation occurs, the method presented in 6.3 should not be used.

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.

ISO 4126-1, *Safety devices for protection against excessive pressure — Part 1: Safety valves*

ISO 4126-2, *Safety devices for protection against excessive pressure — Part 2: Bursting disc safety devices*

ISO 4126-4, *Safety devices for protection against excessive pressure — Part 4: Pilot operated safety valves*

ISO 4126-5, *Safety devices for protection against excessive pressure — Part 5: Controlled safety pressure relief systems (CSPRS)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4126-1, ISO 4126-2, ISO 4126-4 ISO 4126-5 and the following apply.

NOTE Pressure unit used in ISO 4126-7 is the bar (1 bar = 10⁵ Pa), quoted as gauge (relative to atmospheric pressure) or absolute as appropriate.

3.1 safety valve

valve which automatically, without the assistance of any energy other than that of the fluid concerned, discharges a quantity of the fluid so as to prevent a predetermined safe pressure being exceeded, and which is designed to re-close and prevent further flow of fluid after normal pressure conditions of service have been restored

Note 1 to entry: The valve can be characterized either by pop action (rapid opening) or by opening in proportion (not necessarily linear) to the increase in pressure over the set pressure. The use of the term safety valve in this part of ISO 4126 applies to other valve types as covered in ISO 4126-1, ISO 4126-4 and ISO 4126-5.

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