

Irish Standard I.S. EN ISO 4126-2:2019

Safety devices for protection against excessive pressure - Part 2: Bursting disc safety devices (ISO 4126-2:2018)

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I.S. EN ISO 4126-2:2019

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National Foreword

I.S. EN ISO 4126-2:2019 is the adopted Irish version of the European Document EN ISO 4126-2:2019, Safety devices for protection against excessive pressure - Part 2: Bursting disc safety devices (ISO 4126-2:2018)

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EUROPEAN STANDARD

EN ISO 4126-2

NORME EUROPÉENNE

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March 2019

ICS 13.240

Supersedes EN ISO 4126-2:2003

English Version

Safety devices for protection against excessive pressure - Part 2: Bursting disc safety devices (ISO 4126-2:2018)

Dispositifs de sécurité pour protection contre les pressions excessives - Partie 2: Dispositifs de sûreté à disque de rupture (ISO 4126-2:2018)

Sicherheitseinrichtungen gegen unzulässigen Überdruck - Teil 2: Berstscheibeneinrichtungen (ISO 4126-2:2018)

This European Standard was approved by CEN on 3 December 2018.

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EN ISO 4126-2:2019 (E)

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EN ISO 4126-2:2019 (E)

European foreword

This document (EN ISO 4126-2:2019) 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 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of an identical text or by endorsement, at the latest by September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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

This document supersedes EN ISO 4126-2:2003.

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 the relationship with EU Directive(s) 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 4126-2:2018 has been approved by CEN as EN ISO 4126-2:2019 without any modification.

Annex ZA

(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2014/68/EU (PED) aimed to be covered

This European Standard has been prepared under a Commission's standardization request to provide one voluntary means of conforming to Essential Requirements of New Approach Directive 2014/68/EU, Pressure Equipment Directive (PED).

Once this document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this document given in Table ZA.1 confers, within the limits of the scope of this document, 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 Annex I of the Directive 2014/68/EU

Essential Requirements of Directive 2014/68/EU	Clause(s)/sub-clause(s) of this EN	Remarks/Notes	
Clause 1.3 and 3.4	11	Protection against misuse an instructions for the user	
Clause 2.1	5, 6.1.2, 6.2, 7 to 10, 12	General design	
Clause 2.2.2	6.1.1	Design for adequate strength The experimental method limited to PN x DN less than 3 000	
Clause 2.3	6.1.2	Safe operation	
Clause 2.6	4.3	Corrosion	
Clause 3.1.2, paragraphs 2 and 3	11.3	Permanent joining	
Clause 3.3	17	Marking and labelling	

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this document should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this document.

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INTERNATIONAL STANDARD

ISO 4126-2

Second edition 2018-12

Safety devices for protection against excessive pressure —

Part 2: **Bursting disc safety devices**

Dispositifs de sécurité pour protection contre les pressions excessives —

Partie 2: Dispositifs de sûreté à disque de rupture



Reference number ISO 4126-2:2018(E)

ISO 4126-2:2018(E)



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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 185, *Safety devices for protection against excessive pressure*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This second edition cancels and replaces the first edition (ISO 4126-2:2003), which has been technically revised. The main changes compared to the previous edition are as follows:

- non-applicable references have been removed;
- material references (old <u>Annexes A</u> and B) have been removed;
- new Annex A has been added.

A list of all parts in the ISO 4126 series can be found on the ISO website.

ISO 4126-2:2018(E)

Introduction

A bursting disc safety device is a non-reclosing pressure relief device used to protect pressure equipment such as pressure vessels, piping, gas cylinders or other enclosures from excessive pressure and/or excessive vacuum.

A bursting disc safety device typically comprises an assembly of components including a bursting disc, a bursting disc holder and, where necessary, other components such as back pressure supports, stiffening rings, etc.

The bursting disc is the pressure-sensitive part of the bursting disc safety device and is designed to open by bursting at a specified pressure. There are many different types of bursting disc safety devices manufactured in corrosion resistant materials, both metallic and non-metallic, to cover a wide range of nominal sizes, burst pressures and temperatures.

Safety devices for protection against excessive pressure —

Part 2:

Bursting disc safety devices

1 Scope

This document specifies the requirements for bursting disc safety devices.

It includes the requirements for the design, manufacture, inspection, testing, certification, marking, and packaging.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

3.1

bursting disc safety device

non-reclosing pressure relief device actuated by differential pressure and designed to function by the bursting of the $bursting\ disc(s)\ (3.3)$, and which is the complete assembly of installed components including, where appropriate, the $bursting\ disc\ holder\ (3.4)$

3.2

bursting disc assembly

complete assembly of components which are installed in the *bursting disc holder* (3.4) to perform the desired function

3.3

bursting disc

pressure-sensitive component(s) of a bursting disc safety device (3.1), designed to open by bursting at a specified bursting pressure (3.11)

Note 1 to entry: It is not considered a pressure-containing part with respect to 4.2.

3.4

bursting disc holder

part of a bursting disc safety device (3.1) which retains the bursting disc assembly (3.2) in position

Note 1 to entry: It is considered a pressure-containing part with respect to 4.2.



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