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OHUTUSSEADMETE KOMBINEERITUD KASUTAMINE

Safety devices for protection against excessive pressure
- Part 3: Safety valves and bursting disc safety devices in
combination (ISO 4126-3:2020)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

| | |
|---|--|
| See Eesti standard EVS-EN ISO 4126-3:2020 sisaldab Euroopa standardi EN ISO 4126-3:2020 ingliskeelset teksti. | This Estonian standard EVS-EN ISO 4126-3:2020 consists of the English text of the European standard EN ISO 4126-3:2020. |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 30.09.2020. | Date of Availability of the European standard is 30.09.2020. |
| Standard on kättesaadav Eesti Standardikeskusest. | The standard is available from the Estonian Centre for Standardisation. |

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ICS 13.240

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EUROPEAN STANDARD

EN ISO 4126-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN ISO 4126-3:2006

English Version

Safety devices for protection against excessive pressure -
Part 3: Safety valves and bursting disc safety devices in
combination (ISO 4126-3:2020)

Dispositifs de sécurité pour protection contre les
pressions excessives - Partie 3: Soupapes de sûreté et
dispositifs de sûreté à disque de rupture en
combinaison (ISO 4126-3:2020)

Sicherheitseinrichtungen gegen unzulässigen
Überdruck - Teil 3: Sicherheitsventile und
Berstscheibeneinrichtungen in Kombination (ISO
4126-3:2020)

This European Standard was approved by CEN on 11 July 2020.

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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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 4126-3:2020) 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 March 2021, and conflicting national standards shall be withdrawn at the latest by March 2021.

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 4126-3:2006.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 4126-3:2020 has been approved by CEN as EN ISO 4126-3:2020 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 2.1 | 5, 7, 9 and 12 | General design |
| Clause 2.11.1 and 2.11.2 | 5, 6, 7, 8, 9, 11 and 12 | Safety accessories |
| Clause 3.4 a), 1st indent | 6 | Installation instructions |

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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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.

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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 69, *Industrial valves*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 4126-3:2006), which has been technically revised.

The main changes compared to the previous edition are as follows:

- Eliminated unnecessary references and definitions throughout the document.
- [Clause 5](#): Inlet line and pressure drop requirements from prior 6.2 were moved to [Clause 5](#) and a reference to ISO 4126-9 was also added.
- [Clause 7](#): Deleted specific references to specific EN standards to refer to the applicable pressure vessel standard to reflect the global nature of this document.
- [Clause 9](#): The restrictions for F_d values less than 0,97 were eliminated.
- [Clause 12](#): Clarified the applicable minimum bursting pressure for which the F_d value can be used for sizes larger than those flow tested.
- [Clause 14](#): Added a requirement for the supplier to provide a test certificate if the F_d being used is a certified combination discharge coefficient.

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

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.

Introduction

Bursting disc safety devices can be used upstream of safety valves in the following cases:

- a) to protect the safety valve against corrosion, fouling or operating conditions which could affect the safety valve performance;
- b) to prevent leakage;
- c) to prevent total loss of contents from the protected equipment following the bursting of the bursting disc.

The term *combination* is used to describe the close-coupled (i.e. within 5 pipe diameters) assembly of a bursting disc safety device upstream of a safety valve or controlled safety pressure relief systems (CSPRS), as defined by this document. Requirements for other installation arrangements of bursting discs with safety valves or CSPRS are defined in ISO 4126-9.