Kaitseseadmed kaitseks ülemäärase surve eest. Osa 3: Kaitseklappide ja puruneva membraaniga ohutusseadiste kasutamine kombinatsioonis

Safety devices for protection against excessive pressure - Part 3: Safety valves and bursting disc safety devices in combination

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 4126-3:2006 sisaldab Euroopa standardi EN ISO 4126-3:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 28.04.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 4126-3:2006 consists of the English text of the European standard EN ISO 4126-3:2006. This document is endorsed on 28.04.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This part of ISO 4126 specifies the requirements for a product assembled from the in-series combination of safety valves or CSPRS (controlled safety pressure relief systems) according to ISO 4126-1, ISO 4126-4 and ISO 4126-5, and bursting disc safety devices according to ISO 4126-2 installed within no more than five pipe diameters from the valve inlet.	**Scope:** This part of ISO 4126 specifies the requirements for a product assembled from the in-series combination of safety valves or CSPRS (controlled safety pressure relief systems) according to ISO 4126-1, ISO 4126-4 and ISO 4126-5, and bursting disc safety devices according to ISO 4126-2 installed within no more than five pipe diameters from the valve inlet.

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English Version

Safety devices for protection against excessive pressure - Part 3: Safety valves and bursting disc safety devices in combination (ISO 4126-3:2006)

Dispositifs de sécurité pour protection contre les pressions excessives - Partie 3: Dispositifs de sûreté combinant soupapes de sûreté et disques de rupture (ISO 4126-3:2006)

Sicherheitseinrichtungen gegen unzulässigen Überdruck - Teil 3: Sicherheitsventile und Berstscheibeneinrichtungen in Kombination (ISO 4126-3:2006)

This European Standard was approved by CEN on 27 February 2006.

CEN 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 CEN 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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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

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

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Ref. No. EN ISO 4126-3:2006: E

Foreword

This document (EN ISO 4126-3:2006) has been prepared by Technical Committee CEN/TC 69 "Industrial valves", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 185 "Safety devices for protection against excessive pressure".

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 2006, and conflicting national standards shall be withdrawn at the latest by September 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 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Annex ZA
(informative)
Relationship between this International 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, Pressure Equipment Directive (PED).

Once this standard 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 this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this International 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, 6, 7, 8, 9, 11 and 12	Safety accessories	2.11.1 and 2.11.2
5, 9 and 12	General design	2.1
5	Design for adequate strength	2.2
5, 6 and 7	Safe operation	2.3
8.1, 8.4, 8.5 and 8.6	Performance testing	2.2.4
13	Marking and labelling	3.3

WARNING — Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

INTERNATIONAL STANDARD

ISO 4126-3

First edition
2006-03-01

Safety devices for protection against excessive pressure —

Part 3: Safety valves and bursting disc safety devices in combination

Dispositifs de sécurité pour protection contre les pressions excessives —

Partie 3: Soupapes de sûreté et dispositifs de sûreté à disque de rupture en combinaison

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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.

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 4126-3 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 69, *Industrial valves*, ISO/TC 185, *Safety devices for protection against excessive pressure*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 4126-3 cancels and replaces ISO 6718:1991, of which it constitutes a technical revision.

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 7 contains data which is common to more than one of the parts of this standard to avoid unnecessary repetition.

Introduction

Bursting disc safety devices can be used in conjunction with safety valves in 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 with a safety valve or CSPRS, as defined by this part of ISO 4126. In some cases, the bursting disc safety device and the safety valve or CSPRS are connected together to form the combination by a short length of pipe or a spool piece.

Safety devices for protection against excessive pressure —

Part 3:
Safety valves and bursting disc safety devices in combination

1 Scope

This part of ISO 4126 specifies the requirements for a product assembled from the in-series combination of safety valves or CSPRS (controlled safety pressure relief systems) according to ISO 4126-1, ISO 4126-4 and ISO 4126-5, and bursting disc safety devices according to ISO 4126-2 installed within no more than five pipe diameters from the valve inlet. It specifies the design, application and marking requirements for such products, which are used to protect pressure vessels, piping or other enclosures from excessive pressure, and which comprise the bursting disc safety device, a safety valve or CSPRS and, where applicable, a short length of connecting pipe or spool piece. In addition, it gives a method for establishing the combination discharge factor used in sizing combinations.

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.

ISO 4126-1:2004, *Safety devices for protection against excessive pressure — Part 1: Safety valves*

ISO 4126-2:2003, *Safety devices for protection against excessive pressure — Part 2: Bursting disc safety devices*

ISO 4126-4:2004, *Safety devices for protection against excessive pressure — Part 4: Pilot-operated safety valves*

ISO 4126-5:2004, *Safety devices for protection against excessive pressure — Part 5: Controlled safety pressure relief systems (CSPRS)*

ISO 4126-6:2003, *Safety devices for protection against excessive pressure — Part 6: Application, selection and installation of bursting disc safety devices*

EN 764-7:2002, *Pressure equipment — Part 7: Safety systems for unfired pressure equipment*

EN 13480-1:2002, *Metallic industrial piping — Part 1: General*

EN 13480-2:2002, *Metallic industrial piping — Part 2: Materials*

EN 13480-3:2002, *Metallic industrial piping — Part 3: Design and calculation*

EN 13480-4:2002, *Metallic industrial piping — Part 4: Fabrication and installation*

EN 13480-5:2002, *Metallic industrial piping — Part 5: Inspection and testing*

EN 13480-6:2002, *Metallic industrial piping — Part 6: Additional requirements for buried piping*

CEN/TR 13480-7:2002, *Metallic industrial piping — Part 7: Guidance on the use of conformity assessment procedures*