

საქართველოს სტანდარტი

უსაფრთხოების მოწყობილობები ჭარბი წნევის საწინააღმდეგო დაცვისთვის-
ნაწილი 5: წნევის განტვირთვის მართვადი უსაფრთხოების სისტემები
(CSPRS) (ისო 4126-5:2013)

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

საინფორმაციო მონაცემები

1 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს 2015 წლის 4 მარტის № 14 განკარგულებით

2 მიღებულია თავფურცლის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ ისო 4126-5:2013 „ უსაფრთხოების მოწყობილობები ჭარბი წნევის საწინააღმდეგო დაცვისთვის- ნაწილი 5: წნევის განტვირთვის მართვადი უსაფრთხოების სისტემები (CSPRS) (ისო 4126-5:2013)“

3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2015 წლის 4 მარტი №268-1.3-6675

აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

English Version

Safety devices for protection against excessive pressure - Part
5: Controlled safety pressure relief systems (CSPRS) (ISO
4126-5:2013)

Dispositifs de sécurité pour protection contre les pressions
excessives - Partie 5: Dispositifs de sécurité asservis
(CSPRS) (ISO 4126-5:2013)

Sicherheitseinrichtungen gegen unzulässigen Überdruck -
Teil 5: Gesteuerte Sicherheitsventile (CSPRS) (ISO 4126-
5:2013)

This European Standard was approved by CEN on 28 December 2012.

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 CEN-CENELEC Management Centre 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 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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....3

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 97/23/EC (PED)4

საინფორმაციო ნაწილი. სრული ტექსტის სახასიათოდ შეიძინეთ სტანდარტი.

Foreword

This document (EN ISO 4126-5:2013) 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 4126-5:2004.

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 4126-5:2013 has been approved by CEN as EN ISO 4126-5:2013 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 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 International Standard	Essential Requirements of Directive 97/23/EC (PED)	
	Essential Requirements	Annex I of PED
5,6,7,8,9	Safety accessories	2.11.1
5.1.6	Safety of operation	2.3
5.1.7	Drain and venting	2.5
6.3	Proof test	3.2.2
10	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.

საინფორმაციო ნაწილი. სრული ტექსტის სახსრად შეიძინეთ სტანდარტი.

INTERNATIONAL
STANDARD

ISO
4126-5

Second edition
2013-07-15

**Safety devices for protection against
excessive pressure —**

Part 5:
**Controlled safety pressure relief
systems (CSPRS)**

*Dispositifs de sécurité pour protection contre les pressions excessives —
Partie 5: Dispositifs de sécurité asservis (CSPRS)*



Reference number
ISO 4126-5:2013(E)

© ISO 2013

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and units	7
5 Design	7
5.1 General	7
5.2 Valve end connections	9
5.3 Minimum requirements for springs	10
5.4 Materials	10
6 Production testing	10
6.1 Purpose	10
6.2 General	10
6.3 Hydrostatic testing	11
6.4 Pneumatic testing	11
6.5 Adjustment of set or cold differential test pressure	12
6.6 Seat leakage test	12
6.7 Pressure seals	12
7 Type testing	12
7.1 General	12
7.2 Tests to determine operating characteristics	14
7.3 Tests to determine flow characteristics	15
7.4 Determination of the coefficient of discharge	17
7.5 Certification of coefficient of discharge	17
7.6 Certification of CSPRS	17
8 Determination of CSPRS performance	17
9 Sizing of CSPRS	17
10 Marking and sealing	18
10.1 Marking	18
10.2 Sealing of a CSPRS	19
Bibliography	20

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 4126-5 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 4126-5:2004), which has been technically revised. It also incorporates the Technical Corrigenda ISO 4126-5:2004/Cor 1:2006 and ISO 4126-5:2004/Cor 2:2007.

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 testing*¹⁾

Part 7 contains data that is common to more than one of the parts of ISO 4126 to avoid unnecessary repetition.

1) Under development.

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.