

**Ohutusseadmed kaitseks ülerõhu eest. Osa 5:  
Rõhuohutuse heitkaitsesüsteemid (CSPRS)**

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 4126-5:2013 sisaldab Euroopa standardi EN ISO 4126-5:2013 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 4126-5:2013 consists of the English text of the European standard EN ISO 4126-5:2013.
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 17.07.2013.	Date of Availability of the European standard is 17.07.2013.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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EUROPEAN STANDARD

**EN ISO 4126-5**

NORME EUROPÉENNE

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Supersedes EN ISO 4126-5:2004

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.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## 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of an identical text or by endorsement, at the latest by January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.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.

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# Safety devices for protection against excessive pressure —

## Part 5:

# Controlled safety pressure relief systems (CSPRS)

## 1 Scope

This part of ISO 4126 specifies the requirements for controlled safety pressure relief systems (CSPRS) irrespective of the fluid for which they are designed.

It is applicable for main valves having a flow diameter of 4 mm and above which are for use at pressures of 0,1 bar gauge and above. No limitation is placed on temperature.

This is a product standard and is not applicable to applications.

## 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 4126-7:2013, *Safety devices for protection against excessive pressure — Part 7: Common data*

## 3 Terms and definitions

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

### 3.1

#### **controlled safety pressure relief system CSPRS**

system consisting of a main valve in combination with a control unit

Note 1 to entry: See [Figure 1](#) for the components of a CSPRS.

Note 2 to entry: On reaching the set pressure, the operating forces on the main valve are by means of the control unit automatically applied, released or so reduced that a main valve discharges a specified quantity of the fluid so as to prevent the predetermined pressure being exceeded. The system is so designed that the main valve re-closes and prevents a further flow of fluid after normal pressure conditions of service have been restored.

Note 3 to entry: Specific types of CSPRS are installed to protect the downstream system by preventing further fluid input (safety shut-off valve). In this case the closing function shall meet the same requirements as the opening function of the relief valve (see [5.1.5](#)).

### 3.2

#### **main valve**

valve consisting of the parts of a CSPRS through which the discharge capacity is achieved, and the actuator

### 3.3

#### **relieving principle**

principle in which a main valve opens when the operating force is released or reduced, and in which the main valve closes when the operating force is re-applied

Note 1 to entry: See [Figure 2](#), Type 1.